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EVOLVING THE GENRE OF EMPIRE:
GENDER AND PLACE IN WOMEN'S NATURAL HISTORIES OF THE AMERICAS, 1688-1808

by

DIANA L. EPELBAUM

A dissertation submitted to the Graduate Faculty in English in partial fulfillment of the requirements for
the degree of Doctor of Philosophy, The City University of New York

2016

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Gender and Place in Women's Natural Histories of the Americas, 1688-1808

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This manuscript has been read and accepted for the Graduate Faculty in English in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

Evolving the Genre of Empire:
Gender and Place in Women's Natural Histories of the Americas, 1688-1808

by

Diana L. Epelbaum

Advisor: Dr. Duncan Faherty

In the eighteenth century, “natural history” was a capacious genre designation that alluded to conventions as diverse in their cultural and political resonances as they were in their applications within the New Science. My project is a genre study of seventeenth- and eighteenth-century natural history text and art produced by women scientists, explorers, colonists, and early Americans writing the New World; it destabilizes rigid notions of genre that exclude women, suggesting that genre is by nature fluid, inclusionary as well as exclusionary. To this end, I return into conversation understudied naturalists Maria Sybilla Merian, Jane Colden, and Eliza Pinckney, who physically and figuratively toiled on the peripheries of transatlantic institutional science, and reimagine the early republican novels of Leonora Sansay and Susanna Rowson as hybrid natural histories. I explore how women's complicated negotiations and performances of gender and genre (conventions) expose gender and genre's dynamic interplay and this interplay's role in crafting alternate visions of the Americas. I argue that women naturalists evolved the genre by disrupting imperial modes of knowledge production to arrive at these alternate visions.

My first chapter pairs German entomologist Maria Sybilla Merian (1647-1717) with Dutch soldier John Gabriel Stedman (1744-1797), whose natural histories of Surinam underscore the genre's radical transformations over the course of the eighteenth century and expose the fundamentally different investments of female and male naturalists (regeneration/production and

consumption, respectively). I interrogate the gendered lenses through which Merian and Stedman narrate ecologic changes, especially in light of a Surinamese topography that enabled the “stable chaos” of constant slave marronage, a condition that paradoxically preserved parts of the pre-colonization landscape. In Chapter Two, I trace the parallel career trajectories of two colonials, Jane Colden (1724-1766) and William Bartram (1739-1823), who begin as gender-marked objects in their fathers’ transatlantic correspondence, but become subjects through their botanic practice. My chapter probes how Colden and Bartram differently channel ecologic impulses through their depictions of the upstate New York wilderness and the Southeast; I argue that Colden’s ecologic sensibility is more highly developed than Bartram’s, whose proto-nationalism compromises this sensibility. Chapter Three compares republican mother and indigo planter Eliza Lucas Pinckney (1722-1793) with surveyor and statesman William Byrd II (1674-1744). I argue that Pinckney and Byrd engage a “colonial regionalism” to creatively “map” both the regional instability of the South Carolina lowcountry and the Virginia/North Carolina borderlands and their own fluid creole identities. The autobiographical nature of their work enables proto-national readings and marks an evolution of the genre toward narrative, and ultimately, toward even greater hybridity. Chapter Four explores how the early national “novels” of Leonora Sansay and Susanna Rowson, set fully or partly in the West Indies, appropriate the natural history in order to navigate what Sean Goudie calls “the creole complex.” I argue that neither Sansay nor Rowson is able to successfully mark the West Indies as distinct from the new nation; while Rowson attempts to disavow “paracolonial” relations, promoting a narrative of white American “creole regeneracy,” Sansay’s work is more ambivalent, suggesting that U.S.-Caribbean economic relations and the further creolization of whites may be unavoidable, and even necessary for the Republic.

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that I love books and learning, experience and discovery, and I did. You gave and gave and your unconditional love made me strong. My aunt, Vera Porter, lent understanding and a listening ear. Natalie and Paul Koshenkov, continued support. Vadim Koshenkov was by my side for most of this journey, and with me to the end: thank you. And finally, for my four-year-old son, Theodore, I will record here that which I may one day forget: how you entreated me to “go upstairs and finish your chapters,” to “go study and go get smarter,” to “become a doctor of the mind” (which is not quite right, but all the same!). I hope you are proud, little Teddy.

Dedicated to my late, beloved grandparents, Sarra and Mark

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Introduction

Reframing Genre: Women's Evolutions of the Imperial Natural History

When Oroonoko, Aphra Behn's glorious West African prince, lands, in the mid-1600s, "after a tedious Voyage...at the Mouth of the River of Surinam, a colony belonging to the King of England" (Behn 66), he lands in a metaphorical no-place. The eponymous hero of Behn's *Oroonoko* (1688) is sold in the "first lot" along with seventeen others—who were incidentally, his subjects in Coramantien (Ghana)—into the precarious condition of slavery, for which Oroonoko's royal upbringing makes him uniquely unsuited. But we are told nothing of Surinam, its landscape, its peoples, in that first transcultural encounter between slave and place. Instead, Surinam is a void to which enslaved men and women come to meet their masters, then die. Behn compounds this sense of Surinam as site of unregenerative consumption and depletion with female insignificance: "But [Oroonoko's] Mis-fortune was, to fall in an obscure World, that afforded only a Female Pen to celebrate his Fame" (69). The narrator reasons that had Surinam not suffered the fate of Dutch conquest, which came in 1667, "dispers[ing] all those that were capable of giving the World this great Man's Life, much better than I have done" (69)¹, Oroonoko's story could have found its way into the hearts and minds of Europeans, which it did all the same, through Thomas Southerne's famous 1696 play, *Oroonoko*, and through various adaptations thereafter. Behn's performative self-omission from the crafting of *Oroonoko*'s legacy and the restoration of her agency by her contemporaries inverts the pattern that my dissertation explores, of the active erasure of women's pioneering role in natural history generic evolution.

Behn frames her novella as natural history by beginning with a speedy catalogue of several pages consisting of generalized observations on Guianan flora, fauna, and native

¹ This disclaimer, too, is a natural history convention.

traditions. This decontextualized narration, pre-story, serves two simultaneous functions: painting, without matching plates, a picture of the tropics for the physically-distant reader, and invoking the generic convention of the natural history preface to give the reader familiar bearing. Where Behn is not writing a formal natural history volume is equally clear, for her descriptions document mutually-beneficial trade, lack place-specificity, and are unaccompanied by art: “some rare [butter]Flies, of amazing Forms and Colours, presented to ‘em by my self; some as big as my Fist, some less; and all of various Excellencies, such as Art cannot imitate. Then we trade for Feathers, which [the natives] order into all Shapes, make themselves little short Habits of ‘em, and glorious Wreaths for their Heads, Necks, Arms and Legs, whose Tinctures are unconceivable” (38-39). What is conveyed in Behn’s descriptions is the marvel and wonder so central to travel literature of the fifteenth and sixteenth centuries now turning to natural history in the seventeenth century; what is not communicated is Surinam’s uniqueness *as place* in the context of the larger West Indies.² Behn’s emphasis in her opening narration on the relations of “perfect Amity” between colonizer and colonized also renders slaves liminal in these early native-European exchanges, as though the “contact zone”³ itself is not predicated on forced labor. Oroonoko’s exceptionality effectually allows the reader to access sympathy for one slave without stirring sympathy for every slave. His heroic characterization serves to marginalize the severe environmental and cultural implications for Surinam of slavery at large.

Reading *Oroonoko* as natural history—rather than as novella—is representative of this dissertation’s approach. Doing so opens new interpretative lenses through which to explore the tensions between place and the idea of place so central to natural history production, tensions

² Surinam is located on the northeastern coast of the South American continent, but has been historically considered part of the larger West Indies because of its cultural contiguity with the Caribbean islands.

³ Mary Louise Pratt defines the “contact zone” as “the social spaces where disparate cultures meet, clash, and grapple with each other, often in highly asymmetrical relations of domination and subordination—such as colonialism and slavery” (7).

which take such divergent forms (from male-authored natural histories and from each other) in women's writing of the genre. Women's engagements with local ecologies of the Americas do not consolidate into a tradition, but rather, gender informs the practice and performance of the natural history genre. I explore how women navigated an institution that sought to actively exclude them, playing with and through genre to enact their own inclusion, and sometimes to reinforce their exclusion. I use Rhetorical Genre Studies (RGS) as theoretical frame because it foundationally understands genre as dynamic, dialectical, and mutating, validating the recovery of women on the periphery (generic, geographic) of natural history study. Although Susan Scott Parrish, Ann Shteir, and Londa Schiebinger, among others, have researched women in scientific study, mine is the first study that spotlights female agency, rather than mediation or aid, in natural history production of the Americas—framing women as autonomous naturalists rather than as diarists (Eliza Lucas Pinckney, Jane Colden), novelists (Leonora Sansay, Susanna Rowson), or artists (Maria Sybilla Merian).

Within History of Science study, or STS (Science and Technology Studies), scholarly interest in the natural history has grown. The wide array of approaches to the study of this genre speak to its richness: from Andrew Curran, who reads natural histories like Diderot's and Buffon's in the context of French Enlightenment race theories, to Christopher Iannini, who examines the intricate ties between slavery and American nationhood in natural histories of the Americas, to Susan Scott Parrish, who locates the transatlantic culture of "curiosity" in the natural history and its attendant networks of epistolary correspondence. These works have radically re-contextualized the significance of the natural history to the study of the long eighteenth century, and particularly to the study of circumatlantic networks of empire, including slavery. Reading genre as necessarily dynamic, as I do in this project, allows for natural history's

continuously shifting forms and uses in its time, and its continual reconsideration in current scholarship. Definitionally broadening the scope of the eighteenth-century natural history to highlight female participation also deeply enriches our understanding of the genre's critical role in the shaping of the modern world.

I argue that women's complicated negotiations and performances of gender and genre (conventions) expose gender and genre's dynamic interplay and this interplay's role in reimagining the imperial natural history, in crafting alternate visions of the Americas. To support this argument, my dissertation attends to the confluence of eighteenth-century scientific disciplines within the natural history, taking an interdisciplinary approach to locating generic change through the cultural and historical contexts of transatlantic knowledge-making. Women explorers, colonists, and early Americans reshaped early scientific discourses about New World ecologies by tentatively participating in eighteenth-century cultures of natural philosophy, including theoretical discourses around vision, sense perception, experience, the new scientific method, systems of classification, aesthetic and descriptive practices, colonization and conservationism, contact zones in the Caribbean and on the North American continent, race, and pseudoscience. Each chapter pairs a female naturalist with a male counterpart in order to illuminate that naturalist's innovation and the shift in generic discourse effected by this innovation. My project restores Maria Sybilla Merian, Jane Colden, Eliza Lucas Pinckney, and early American novelists Leonora Sansay and Susanna Rowson to the exclusionary scholarly narrative of knowledge production in the natural history genre, and ultimately imagines a feminist lineage for Science and Technology Studies.⁴

⁴ For example, Aphra Behn's collapse of Surinam into a larger New World mythology of the tropics is replicated a century later by John Gabriel Stedman, and employed as a method by William Bartram, whose North American Southeast relies on myths of the tropics to negotiate an incipient nationhood.

It is through local ecologies that women upend imperial aims to chronicle place. In the following sections, then, I frame discussions that will become central to this claim in the individual chapters, beginning with the eighteenth-century natural history and the evolution of its generic standardization as imperial cross-bearer. I also include in this Introduction an extensive discussion on the history of “ecology,” in its progression from early discourse/point-of-view/orientation/sensibility to codified science in the nineteenth century, in order to erect an oppositional construct for the imperial natural history. In *Economy of Nature* (1775), Linnaeus outlines a system by which the existence, destruction, and restitution of all species constitutes a natural, holistic order, a web of nature, designed by God, with the purpose of preserving each species.⁵ Though this system is inherently “ecological,” it is ironically Linnean taxonomy that European naturalists use to impose hegemony and service empire, for it is Linnaeus’s system of botanical classification that functionally sanctions and sponsors imperialism—at least in its practice by transatlantic natural historians. The distortion of the “economy of nature” vision to justify the extreme human intervention in, even complete destruction of, natural processes and organic animal-plant-human relations that imperialism and settler colonialism signify, is a theoretical shift intricately linked with cultures of transatlantic institutional science. When I say, then, that I am conceiving of imperialism and ecology—as social, cultural, political, and economic constructs—as conflictual, I am suggesting that the two are epistemologically opposed, and that the justification for their synchronism in the male-authored natural history is itself part of the imperial agenda. However, imperialism and ecology certainly coexist as orientations, sensibilities, or impulses within the genre, and in fact, I argue that they do so in terrifically nuanced ways in women’s natural histories.

⁵ Charles Darwin would later seize on Linnaeus’s “economy of nature” for his own *On the Origin of Species* (1859).

To clarify, I define the ecologic sensibility as one in which the naturalist privileges organic relations of flora and fauna in their natural environments, minimally disrupted by human presence, with each part of the process or habitat constitutive of the whole. Nature as “God’s work” may or may not explicitly be articulated as part of this vision, but it is often implied. A section on description in the genre, below, treats different models of description as highlighting or obscuring this holism. Although selective descriptive practice was a hallmark of Enlightenment science’s tendency to omission (in the Linnean taxonomic mode), and although this practice achieved holistic goals—stressing nature’s universality rather than uniqueness—women both conveyed holism in the habitats depicted and directed the readers’ attention to the distinctiveness of local and regional ecologies. When I use the term “holism” then, I use it to refer to an organic, ecologic sense of a given habitat as complete, self-sustaining, and auto-reproductive; I argue that this definition, particularly for women naturalists, does not necessarily interfere with a local environment’s singularity. While the (holistic) ecological drive manifests itself as a paradisaical fantasy⁶ in Maria Sybilla Merian’s work, compromising the purity of her ecologic orientation, and feeding imperial knowledges of the New World, in Jane Colden, for example, it contributes to a regional ecology, or a depiction of region for region’s sake. For Eliza Lucas Pinckney, as no such ecologic sensibility registers in her brand of what I call “colonial regionalism,” which I argue is necessitated by her creolism, the South Carolina lowcountry, in her portrayal, becomes unstable, disjointed, and fractured by forces of plantation slavery, Native American conflict, and her own personal tragedies. In Susanna Rowson’s *Reuben and Rachel: Or, Tales of Old Times* (1798) and Leonora Sansay’s *Secret History: Or, The Horrors of St.*

⁶ I use the term “fantasy” throughout the dissertation to denote both imperial wilderness myths of the New World, as well as ecological visions by female naturalists reimagining the purposes of nature study, even while potentially feeding imperial myths. I am indebted to Annette Kolodny’s treatment of nineteenth-century women’s projected “fantasies” of the West, where women reshaped mythologies of conquest into domestic fantasies that allowed them to claim the Western landscape for themselves.

Domingo (1808), this ecologic orientation is even more distant—inaccessible, really—and no sense of the local as holistically operative is conveyed: via the West Indies, both women write of an incipient nation, struggling forth, the Caribbean itself deeply volatile and particularly so in relation to American nationhood.

Of any of the naturalists I treat in this project, Jane Colden's *Botanic Manuscript* (1750s) most clearly articulates a regional ecology, and therefore I call her work proto-ecologic, her orientation "ecological." In Chapter Two, I contrast her with William Bartram, who is frequently read as an early ecologist, but whose sundry agendas in *Travels Through North and South Carolina, Georgia, East and West Florida* (1791) vex this designation. On my imagined imperial-ecologic spectrum, Maria Sybilla Merian, whose *Metamorphosis of the Insects of Surinam* (1705) I closely read in Chapter One, registers an ecologic sensibility that is too intimately tied up in global networks of institutional science to entirely trust. Merian's sensibility I call "glocal," which Felicity Nussbaum defines as an investment in an insular local ecology that still holds global economic purchase; while Merian espouses an ethic of preservation, she likewise profits from the marketability of the Surinamese ecology she so masterfully paints. The unapologetic imperial and masculine politics of John Gabriel Stedman's 1796 *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam* I use as a foil for Merian's complex negotiation of institutional scientific agendas and ecologic sensibility. Eliza Lucas Pinckney's *Letterbook of Eliza Lucas Pinckney, 1739-1762*, the subject of Chapter Three, I argue counterbalances Merian's "glocal" orientation, drawing more from the imperial natural history to paint region as Pinckney lives it as a colonial, as a local, as a creole: a unique point-of-view I call "lobal." I argue that it is Pinckney's creolism, like William Byrd II's in *History of the Dividing Line* (1728-1736), that forces a relation with the local and that funnels the imperial into the

proto-national. There is a kind of “colonial regionalism” in which Pinckney and Byrd creatively “map”⁷ the instability of their regions, navigating regional idiosyncrasies and global networks at once. In Chapter Four, I argue that the appropriation of natural history generic conventions by early republican novelists Leonora Sansay and Susanna Rowson exposes how debates around creole degeneracy in the West Indies are channeled towards, and complicate, nationalist narratives. Included in the Introduction are additional sections on Rhetorical Genre Studies (RGS), gender, and practices of description in the natural history that define and clarify key terms, concepts, and theoretical frames the dissertation employs.

“Seeing” the Natural History

In the eighteenth century, “natural history” was a capacious genre designation that alluded to conventions as diverse in their cultural and political resonances as they were in their applications within the New Science. As Susan Scott Parrish explains in *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (2006), “the term ‘New Science’ indicates the burgeoning of scientific activity beginning around 1650 in England, marked by the founding of the Royal Society, the Society’s adoption of Baconian empiricism and experimentation, and the beginning of its global correspondence and collecting network as well as its use of the mechanical philosophy” (13).⁸ The hallmark of Baconian empiricism was “eyewitnessing,” for which “from life” and “on the spot” were code. Bacon positioned himself,

⁷ I use this term as Edward Watts and Keri Holt, through Denis Cosgrove, define it in their Introduction to *Mapping Region in Early American Writing* (2015). “Mapping” is a place-specific, open-ended, creative endeavor of painting local region that does not operate within predetermined agendas of establishing borders.

⁸ The mechanical philosophy posited that the universe worked like a machine, made up of millions of atoms that acted together according to a preordained natural order. See my “Ecologic, Pastoral, Georgic” section, where I cite Carolyn Merchant, who expounds on the mechanistic model by comparing it to the organic, pre-modern model of the universe. Also, assigning incontrovertible qualities to matter meant that senses like texture, smell, and taste were believed to be experienced because humans filtered those qualities through their sense perception. Nature then had fundamental mechanical order that humans could process, experience, feel, and interpret (jrunk.org). As Joanna Stalnaker points out, Foucault saw description through Linnean taxonomy as based in omission—namely, the omission of the senses of texture, smell, and taste. This model was meant to mechanize nature. See my discussion, “Description and Genre.”

in his seminal work *The New Organon* (1620), between those who thought they could know all of nature and those who thought nothing could be known. His scientific method is not today's, proceeding as he did from the assumption that there were a finite number of natures to investigate, and that better instruments would solve the difficulties inherent to those investigations. Bacon emphasized the invention of new knowledge, rather than the cultivation of existing knowledge, which may have been derived erroneously. The antecedent scientific method Bacon set forth to revise had instructed scientists to begin with the small and sensory, and then move to general axioms, deriving everything in between later; Bacon's method insisted instead on commencing with the small and sensory and gradually testing the truth of everything in between to finally arrive at a general axiom. Whereas the previous method *anticipated* nature, Bacon's method *interpreted* nature. The formula—works/experiments → causes/axioms → new works/experiments = interpretation of nature (section cxvii)—amounted to Bacon's new inductive method. This method became critical for the practice of natural history in particular because in order to formulate hypotheses, scientists now had to interact with nature on its own terms and as individual agents. Bacon cautioned against deductive impositions upon nature, such as searching for human likenesses, a practice that frequently led to misshapen, anthropocentric understandings of natural processes.

Bacon was only one of many natural philosophers debating the roles of vision, sight, sense perception, and experience in the production of scientific truths during the Scientific Revolution. In *Opticks* (1717/1718), Isaac Newton frames sight as passive, rather than active: to see, your eyes must be penetrated by light—the seer and the seen are one. Newton's concept of God's "sensorium" is a sensing and experiencing through intimate presence; so too can humans only truly *see* when subject and object fuse. This holistic, organic understanding of sight—

although it sounds pre-mechanistic—aligns with a mechanical philosophy that positions humans as sensory filter of natural qualities, and also is based in emerging eighteenth-century understandings of how vision works. The context for, and route of, these inquiries, was natural theology. George Berkeley’s 1709 *Essay Towards a New Theory of Vision* defines “vision” as a linking of sight and sense perception, or seeing and feeling. Berkeley argues that experience, embodied in touch, is a perpetual corrective for sight. For example, distance synthesizes sight and sense, and therefore you know how far you have traveled by physically traveling. Your sight informs your sense perception, which informs your brain’s thought, which informs what you finally see—the process is far from immediate (Coppola Class Lecture, 11 March 2011). Robert Hooke’s *Micrographia* (1665) explored perspective—how a fly might look to God, for example, or to another fly. Hooke echoed Bacon’s assessment of science’s failures by reiterating the need for better instruments to rectify human sensory thresholds (Coppola Class Lecture, 18 Feb. 2011). In his dedication to the Royal Society, Hooke emphasizes that his observations must be “understood only as conjectures and queries,” especially those that “may seem more *positive* than YOUR Prescriptions will permit.” In other words, he absolves the institution of any culpability in erroneous hypotheses—since he has taken liberties with their recommended methods, his “conjectures” should not be taken for facts.⁹ Rather than empirically producing fact, Hooke worked to draw connections between the orders of nature, such as how knowledge of crystals might apply to, or elucidate knowledge of, plants; the means of illuminating these connections was through art, which could unveil or de-mystify natural processes (Coppola Class

⁹ “Fact” is a loaded term for the New Science. The late seventeenth century saw men of science debate and theorize the definition of this term, the methodology to arrive at “fact,” why “fact” was needed at all, how to generate public belief of “fact.” Steven Shapin, in *The Scientific Revolution* (1996), argues that “fact” was an ontological and social construct. To produce a “fact,” one needed to engage with matter materially, by executing an experiment, socially, by performing it in public with other witnesses, and in writing, by recording that “fact.” Robert Boyle’s experiments on air pressure—in which he used live birds in pumps—were publicly attended. Joseph Wright’s famous painting “An Experiment on a Bird in the Air Pump” (1768) documents this social event.

Lecture, 18 Feb. 2011). Hooke's approach to "truth," to knowledge production, was like Bacon's: inductive, through the accumulation of "phenomena."

These new understandings of vision lent themselves to "curiosity" as dispositional mode of inquiry. In *Curiosity: A Cultural History of Early Modern Inquiry* (2001), Barbara M. Benedict calls curiosity culture "transgressive." The objects themselves were "examples of categorical transgression in life, art, and nature" and where initially communing with these objects somehow implied "an involuntary slide between species," eventually, the observer achieved distance through disinterestedness, or the construct of (cultural) superiority over the objects viewed: "the deliberate power to transgress limiting social categories" (158). In other words, collection of specimens and artifacts—itsself an inversion of traditional hierarchies (human now in a position of power over nature)—was a method through which to elevate social status. Eventually,

the enterprise of collecting exotica began to signal power and learning instead of monstrous perversion: laudable rather than impertinent ambition. This change was monitored by the increasing prestige of collection as artistry, exemplified in the new British Museum, and by the rise of a new class of cultural monitors. Pressured by consumerism, commercialism, and skepticism, curiosity receded from designating a quality of the external and became a quality of the observer. This is the period that marks a fresh shift in the weighting of the meaning of curiosity from objects to subjects. (158)

The subject-observer is the inherently paradoxical lens through which naturalists chronicled nature. Because power imbalance was culturally built into this lens, this perspective buoyed imperialist practices like collection, transplantation of specimens (including people), and

naturalization, and implicated documentation of nature in the natural history genre in the imperialist project.

Susan Scott Parrish elaborates that “curiosity replaced wonder as the favored elite attitude toward nature...[becoming] the New Science’s key term to define its ideal episteme and to stigmatize knowledge produced outside its bounds...a uniquely capacious term, explaining not just a disposition toward inquiry but the subsequent acts of close and careful investigation” (57). And “curiosity” hinged on the concept of eyewitnessing. As the New Science evolved, “facts” authenticated by “sight” deposed credulity. The cataloguing of empirical facts, within natural history especially, decontextualized science—certainly not what Bacon intended—for the most part doing away with hypotheses, conclusions, rationales, implications, applications, and instead manufacturing fact through observation and method alone. The community of virtuosi and men of science, institutionalized in the body of the Royal Society, founded in 1660, worked to procedurally circumscribe the limits of marvel and wonder. As curiosity became catalyst to knowledge-making and hence to the production of culture, “fact,” or knowledge itself, became defined as marvel and wonder eyewitnessed and recorded for public consumption. For an example of how the New Science’s reliance on “eyewitnessing” mitigates description in the genre, see how Aphra Behn filters Amerindian nudity—“there being nothing to heighten Curiosity, but all you can see, you see at once, and every Moment see; where there is no Novelty, there can be no Curiosity” (39). Veiling is but an entrée to revelation, Behn seems to say. What is new to one’s experience must be unveiled, or seen, to be known. The seer both takes in the object of her vision and gazes on this object at once. The word “curiosity” here signals Behn’s own debut as a woman naturalist, an act that leads, through discovery, to knowledge production.

Her dependence on eyewitnessing as method in observational truth-telling indicates her self-inclusion in institutional scientific discourses.

Where colonial naturalists could directly eyewitness, virtuosi at home were once removed from this eyewitnessing, and by necessity, had to separate out functions of sight from the immediate experience of sense perception. This is why they placed immensely high value on colonial observation, why natural historians took great pains to emphasize the testimony of personal vision. For those at home, simulating growth in transplanted specimens allowed a vicarious eyewitnessing, but was accompanied by the recognition that any knowledge produced was still based on a colonial naturalist's plant selection, usually supplemented by descriptions, and no longer in its natural environment. Within the dissertation, I frequently reference Hans Sloane, a one-time traveling naturalist, but, for the majority of his very long life (1660-1753), a virtuoso working from the metropole. I wish to dwell on Sloane because his work is central to my claims about the imperial natural history and about the generic conventions women naturalists were alternately employing, changing, and disavowing. I use Sloane as a sort of default, a generic (and imperially-oriented) standard against which I read the naturalists treated in this project. Sir Hans Sloane (1660-1753) was perhaps the most celebrated physician, natural historian, and curiosity collector of his day. He was also President of the Royal Society from 1727 to 1741, a uniquely powerful position through which he mediated, rejected, and ratified colonial knowledges imported to the Royal Society. The power of knowledge production embodied in his presidency defined the tenor of his transatlantic correspondence with naturalists abroad.¹⁰ On his famed but dangerous journey to Jamaica (1687-1689), Sloane attended the

¹⁰ Nowhere is the colonial intellectual's position more in evidence than in letters between colonial botanists and Hans Sloane. William Byrd II, whom I treat in Chapter Three, a Virginian elite whose correspondence with Sloane spanned at least forty years, begins an early letter in 1706 with "[I] should be very ambitious to do any thing for you, that might make me worthy of the honour I have of being of that illustrious body, that are ever at work for the good

health of his charge, the new governor of Jamaica, the Duke of Albemarle. The Duke became another European casualty of the colonial enterprise, but Sloane lived to return home and publish his tome, *A Voyage to the Islands of Madera, Barbados, Nieves, S. Christophers, and Jamaica*, in two volumes, eighteen (1707) and thirty-six (1725) years after the voyage was completed, respectively. Despite its publication before the advent of Linnean taxonomy (1735), Sloane's *A Voyage to...Jamaica* is an early text that succeeds in methodically organizing countless curiosities, doing so through a complex system of Latin nomenclature, careful classification, meticulous attention to text and plate placement (meant to be read side by side), and detailed engravings. Sloane's emphasis on accuracy in the illustrations highlights his Baconian understanding of the visual as the basis for knowledge creation. Sloane knew that many of the book's illustrations were *not* accurate, however, and therefore, by punctiliously arranging the plates, he effectively asked the reader to synthesize text and art into a visual representation that would then become knowledge. In his preface to Volume I, Sloane disavows the validity of images drawn from "word of Mouth and Memory," deeming them inappropriate substitutions for copies of real specimens, but if "there were any slips of that kind [inaccurate drawings] in the Prints, they were easily be mended by perusing their Descriptions" (viii).

From the very first page of Sloane's preface, he looks back on his astonishing journey to Jamaica as both naïve and empirical, a Baconian mix that privileges sensory perception and eyewitness testimony as evidence for the wonders about to be related. This tension between

of ungratefull mankind" (Byrd, "The Correspondence," 259). Byrd sends along a plant that functions as an antidote to rattlesnake poison that he "beg[s] the society would please to make some experiments with... because I'm confident it will do great service in many cases" (261). Hans Sloane writes to Byrd in 1709, correcting Byrd's specimen-packing—"pray send their leaves and flowers dried between papers"—and elides Byrd's request for assorted specimens with "there are such vareityts that 'tis next to impossible to send you over the severall sorts, tis much easier to you to send over what you want to be informed of" (273). On at least three occasions, Byrd requests that Sloane send him a copy of *A Voyage to...Jamaica*, but Sloane never obliges (Iannini 116-117). See more on scientific networks of correspondence and their disproportionate power relations in Parrish, 103-135.

personal and empiricist knowledge defines the project, and indeed the genre as a whole. Many of the specimens Sloane collected became “type specimens” for naturalists who used Sloane’s drawings and descriptions to expound on theories Sloane proposed, and to illustrate and describe species in greater detail (Natural History Museum). In his preface, Sloane identifies beginning a lineage of knowledge production as a purpose for his book: “These matters of fact being certainly laid down, may perhaps afford some hints for the more clear Reasonings and Deductions of better Heads” (x). Conversely, he intended to generate a bibliography in which readers could find a “catalogue” that referenced “most of the books wherein [that plant] is spoken of” (ix). Despite Sloane’s unusual care in citing his sources, his humility is a performance eclipsed by eruptions of hubris epitomized by the sheer ambition of the project itself. While simultaneously acknowledging the work of fellow natural historians, he also overrides their conclusions about the “uses of plants, or such particulars wherein I thought they were mistaken” (iv). Staving off accusations of plagiarism directed at him, he instead charges those who have “anticipated me, by either publishing such things as I have shewn them, told them, or communicated” (vii). The vacillation between the two poles, hubris and humility, became a narrative convention replicated by later naturalists in their volumes.

Throughout this project, I claim that the natural history in the eighteenth century is effectively an imperial genre. Sloane’s work typifies the imperialist orientation in the generic conventions delineated above, but in one other, more pernicious convention too: the distorted racializations of indigenous and enslaved peoples. In spite of *A Voyage to...Jamaica*’s authentication of slave botanical observation (ix), Sloane both participates in racialist apologetics and objectifies the African body in order to sustain the pretense of disinterested observation. Slaves are “much given to Venerly” (xlvi), possessed of little clothing, women’s breasts hang

“like those of goats” (lii), “their unskillful cutting the Navel String does occasion that swelling which usually appears in their Navels, and makes their Bellies prominent” (liii), “their little ones are not black, but reddish brown when first born” (liii), and their bodies exhibit “a great many Cicatrices or Scars” (liv). An albino is a source of great curiosity (liii), and Sloane transports us to the slave market, where we can, with the Planters, (not) choose slaves from the East-Indies, who don’t eat meat and therefore cannot survive long, or from Angola, who imagine Heaven home, and who therefore frequently choose to commit suicide (liii). What is buried in the “harvest of bones” (xlvi) eaten by ants that Sloane so memorably observes at a native burial site, is both the slave body as a naturalist curiosity and the picture of mass death in the colonial plantation economy.¹¹ Although the natural history descriptions and plates themselves mediate the presence of slavery, nowhere is Sloane explicit about either Jamaica’s reputation as a death trap for Europeans, natives, and enslaved peoples or about his own complicity in these deaths.

Sloane’s presumption that his book will help the islanders, whether they be “Europeans, Indians, or Blacks,” learn the uses of the plants outlined, suggests that Sloane imagines himself a savior (ix). Sloane compounds his heroism with knowledge creation: he soon discovers that a good many Jamaican plants grow, or at the very least can, after transplantation, be artificially grown, in England, and that in fact, there are few illnesses in England that are not replicated across the Atlantic and that he does not know how to cure (xc-c). Sloane’s work entrenches in the genre the naturalist as heroic producer of knowledge, a narrative that is masculine by default. Only women naturalists can overturn this narrative at its root: gender.

Gender and Genre

¹¹ Kay Dian Kriz reads the resistance of Indians and Africans to Sloane’s neutrality in the face of imperial violence into the illustrations, and finds this resistance especially apparent in “disjunctions among particular images [particularly those that juxtapose plants/animals with human artifacts] and between image and text” which display the “fear of a pervasive violence that is forgotten, but not gone” (46).

In her influential book *Ends of Empire: Women and Ideology in Early Eighteenth-Century English Literature* (1993), Laura Brown posits that representations of women in seventeenth- and eighteenth-century literature should be read through either commodification or difference, both approaches that align women with other liminal peoples, like natives and the enslaved. Brown argues that “women can disturb the coherence of mercantile capitalist ideology either way they come to it, in part because they are so essential to its self-representation” (21). Brown’s causal link between the presence of female subjecthood and its paradoxical troubling of the very imperialism its representation, mostly by men, is so crucial in building, extends to women naturalists, whose own subjectivities, as writers and subjects, rock this ideology twofold. How can a woman, by definition never the colonizer, and always the colonized, be both? How does she embody both roles in the masculine genre of the natural history? Considering the imperial natural history through gender, then, means asking how interloping women, commodified and excluded, used their market value as exemplars *and* their more uncomfortable difference towards both inclusion in, and alteration of, the genre. Often, registering an imperial orientation was necessary to subsequently upset that orientation.

The false dichotomy erected between conquest and specimen collecting opened a small door through which women naturalists could enter scientific practice. In *Imperial Eyes: Travel Writing and Transculturation* (1992), Mary Louise Pratt attends to the gray zone between these two categories of explorers by coining a term for naturalists very much in the service of empire: the “anti-conqueror,” or a “strategy of representation whereby European bourgeois subjects seek to secure their innocence in the same moment as they assert European hegemony” (9). “Naturalists were seen as handmaidens to Europe’s expansive commercial aspirations...[as they] produced commercially exploitable knowledge” (33) that rhetorically cast them androgynous

tools of empire. This paradox—that those exploiting the natural world on the global market were practicing an “innocent amusement” (as women’s gardening was often deemed in eighteenth-century botanic discourses)—could not actually unfasten gender from conquest. But it did allow the exemplary woman to perform “specimen collecting” without symbolically performing “conquest.” Maria Sybilla Merian, in particular, boldly entered this space.

We should remember that only white, elite women were writing natural history, and that the space of “colonizer” was reserved for the odd traveling or colonial female naturalist. Women working from the metropole included curiosity collectors (Margaret Bentinck, Duchess of Portland), botanists (Mary Delany), ornithologists (Pauline De Courcelles, Anna Blackburne, also entomologist), gardeners (Mary Somerset, Duchess of Beaufort), entomologists (Eleanor Glanville, Elizabeth Davy), botanical illustrators (Elizabeth Blackwell), and a range of artists and helpmates, who were themselves gifted naturalists (Eliza Dorville, Jeanne Baret, Clara Maria Pope). Each of these women was producing knowledge, often about the Americas, but they were doubly-limited. First, they were women. And their knowledge was mediated by shipped and transplanted specimens and by tightly-guarded institutional scientific expectation, second. Their contributions were less revolutionary than those of women writing on geographic peripheries. They had less freedom to stretch the boundaries of the genre, for after all, any male naturalist’s observations at home held greater weight than did theirs. The women who traveled, however, like Maria Sybilla Merian, or who lived as colonials outside the metropole, like Jane Colden and Eliza Lucas Pinckney, were privy to local knowledges that could be personally eyewitnessed. They could therefore push a little harder, alter a little more, and still be valued. One of Pinckney’s innovations, for example, was to move the natural history towards autobiography. Although life narrative importantly played into the genre, Pinckney’s privileged status as creole

colonial gave her freedom to experimentally hybridize in ways male naturalists could not: for example, journaling a natural history.

Pratt's term for the textual production of the colonized is "autoethnography," or the process by which "colonized subjects represent themselves in colonizers' terms" (9). Extending this definition to non-indigenous, European women writers, opens the precise site of inquiry I hope my close readings will inhabit: how Merian, Colden, Pinckney, Rowson, and Sansay all dwell in multiple, contradictory spaces, collecting and conquering, being colonized and colonizing (sometimes in their own acts of writing), de-gendering and gendering (by their audience, by themselves). An additional level here is Pratt's notion of the "contact zone," or again, transcultural, unbalanced, relational contact (7). In Chapter One, I discuss how John Gabriel Stedman's depiction of the multivalent contact zones he occupies are visible and familiar to both other traveler-conquerors and to the abetting occupiers that constitute his transatlantic readership. Merian's contact zones are self-reflexive spaces, occupying as she does the roles of both colonizer and colonized. Her portrayals of these spaces are more nuanced: not only *what* is represented in the plates, but the plates themselves, too.¹² And this self-reflexivity is illustrative of the works of the women naturalists I treat in this project. Their depictions of local ecologies are forms of "autoethnography," but also of autobiography.¹³ Female naturalists' nonconforming orientations still reach the standard genre's readership, thereby effecting alterations to the natural history. Institutional emphasis on difference, often framed as exemplarity, makes room for these alterations as well; simultaneously, however, the narrative of exemplarity pushes women further

¹² These plates were assisted heavily by natives, for the astonishment she documents at native skill in paint-mixing (Plate 48 text) can only mean that some of her illustrations were executed with paint mixed by natives or with techniques learned from them, at least in the plates' first iterations in her study journals. (Merian's animal study journals with individual studies on vellum are now in St. Petersburg, Russia; however, her plant study journals have never been recovered) (Etheridge 3-4)

¹³ I unpack autobiography as genre and its role in the natural history more in Chapter Three.

outside the bounds of generic practice and institutional science more broadly. Women's acceptance was provisional, and most crucially, anomalous. The exemplarity narrative justified women's work that appeared to be performing within the parameters of the genre, while simultaneously accounting for shifts in perspective. The threat posed by women's full inclusion was clear—their revision of the genre exposed the precarity of knowledges produced, the unreliability of narrators whose point-of-views were both prescribed by the genre and framed as immutable. If the New World could be seen “glocally,” proto-ecologically, “lobally,” and nationalistically—just a few in a wide range of perspectival shifts women could enact—how then could empire be sustained and justified by the natural history?

No “Genreless Text”; No “Belonging” Either

The commodification of rarity and strangeness in a culture of rampant curiosity suggested that the more peculiar an individual text, the less, in Jacques Derrida's language, it “belonged” to any one genre, and paradoxically, the more credible its claims of scientific truth became. Natural history seized upon this contradiction, forming as a genre of mixed genres¹⁴ that generated “fact” by convincing its readership to believe the unbelievable. A synthesis of common generic features in various combinations made for ever-evolving hybridizations of the natural history corpus. Both empiricism and literary art, including embellished rhetoric, sensory description, verisimilitude, and “romantic” storytelling, were carefully performed within and by these features. To summarize briefly what I outlined earlier, generic features included, among others, truth claims verified through a Baconian mix of sense perception and eyewitness testimony, an authorial posture of humility and the simultaneous assumption of authority, elaborate illustrations in conversation with literary descriptions, a self-conscious entrance into the generic

¹⁴ Including genres as diverse as the novel, autobiography, epistolary correspondence, flora, itinerarium, art, diary/journal, survey, and many more.

discourse community, accounts of fraught cross-cultural contacts, the privileging of commercial interests, and the justification and elision of colonial violence. Naturalists mapped European imperial powers and the Americas side by side within the text and outside it, as their specimens, words, and diseases traveled circum-Atlantically; as natural historians became colonizers of knowledge, too, this knowledge gained both symbolic resonances and actuated the liminality of indigenous peoples in the story of settlement in the Americas.¹⁵

When I speak of genre, however, I speak of more than features and conventions. I speak of a “theory of genre that must be a dialectical theory of genre” (1), as Michael McKeon frames it in *The Origins of the English Novel, 1600-1740* (1987). I draw on a rich tradition of genre theory work beginning with the Romantic theorization of genre in the eighteenth century through to the Russian Formalists and Deconstructionists and culminating in Rhetorical Genre Studies (RGS), a complex network of critical thought on genre that eschews the notion of genre as taxonomy. David Duff, in *Modern Genre Theory* (2000), believes we have moved through “the anti-generic tendencies of Romanticism and Modernism...to an aesthetic stance which is more hospitable to notions of genre, and which no longer sees as incompatible the pursuit of individuality and the espousal of ‘generic’ identities” (1-2). Genre is, in other words, an opening, rather than a closing, a complex system of negotiations and hybridity through which to consider tensions between the originality and prescriptiveness of a text marked as operating within a

¹⁵ Tellingly, Hans Sloane’s celebrated tome, *A Voyage to the Islands of...Jamaica* (1707-1725), gives an account of a natural history text written by a Jesuit, transcribed by an Englishman, that fell into the hands of the Dutch, a text that is literalized as international commodity—as prisoner of war—bought, sold, stolen, transferred, itself a curiosity and tool of cultural misappropriation. As various critics, like Christopher Iannini and Laura Brown, respectively, have found, the natural histories were not only operating metonymically, but emblematically—Richard Ligon’s banana peel falls in the shape of a cross and “natural history is revelation,” and Oroonoko the slave’s dismembered body metaphorically bespeaks Britain’s dispersed colonies. While acknowledging natural history’s broad symbolic reach as cultural influencer, these emblematic readings highlight the blurred line between stated scientific purpose and literary form.

genre, as well as the tensions between writerly “autonomy” (1) and dependence on social norms that regulate individuality within the practice of that particular genre.

Jacques Derrida’s seminal article on genre, “The Law of Genre” (1980), develops this paradox further by declaring that a text must both belong to a genre, thereby exposing something of its nature, and not belong, thereby at once hiding, in order to fully embody its own truth. Each text chooses to “re-mark,” or identify itself through or by or with genre, but even this marker does not necessarily belong to a certain genre or class. Vitaly, ultimately,

a text cannot belong to no genre, it cannot be without or less a genre. Every text participates in one or several genres, there is no genreless text; there is always a genre and genres, yet such participation never amounts to belonging. And not because of an abundant overflowing or a free, anarchic and unclassifiable productivity, but because of the *trait* of participation itself, because of the effect of the code and of the generic mark. Making genre its mark, a text demarcates itself. If remarks of belonging belong without belonging, participate without belonging, then genre-designations cannot be simply part of the corpus...Nor is [a generic designation] simply extraneous to the corpus. But this singular topos places within and without the work, along its boundary, an inclusion and exclusion with regard to genre in general, as to an identifiable class in general. It gathers together the corpus and, at the same time, in the same blinking of an eye, keeps it from closing, from identifying itself with itself. This axiom of non-closure or non-fulfillment enfolds within itself the condition for the possibility and the impossibility of taxonomy. This inclusion and this exclusion do not remain exterior to one another; they do not exclude each other. But neither are they immanent or identical to each other. (212)

So very crucial are the images of opening and closing, marking and erasing, stretching and tightening of generic boundaries to an understanding of how the natural history “corpus” can, for example, contain both a Merian and a Stedman, can make space for both their carefully constructed and their radically individualistic subjectivities, that without these symbolic images, there is almost no capacious way to imagine these actors’ participation in this complex generic discourse, or to trace the generic evolution from one to the other over the course of a century, as I do in Chapter One.

Drawing on Gerard Genette, Derrida suggests that genre is a historicized construct, “naturalized,” or claimed as “natural,” when those “natural structures or typical forms” have a history that is “hardly natural, but rather, quite to the contrary, complex and heterogeneous” (207). There can never be, then, a natural system of genre—one that evolves naturally—but rather all systems of genre are crafted, imposed, necessitated, constructed through social and cultural means and contexts. The Russian Formalists agreed that generic forms and their societal functions are in constant flux, that the “hierarchy of genres”—or the privileging of one genre over another—is likewise mutable, allowing for “minor or marginal” genres to seize prominence in a given cultural moment. To this “*revolutionary* as well as *evolutionary* model of genre” (Duff 7-8) can be attributed natural history’s rapid rise to canonicity in the seventeenth century and its radical generic transformation(s) throughout the eighteenth, nineteenth, and twentieth centuries.¹⁶ “Genre has become part of the very metalanguage of interdisciplinarity” (Duff 16); hybridization is its only real mode of self-ordering.

In his discussion of speech acts in “The Origins of Genres” (1976), Tzvetan Todorov asks why all speech acts do not result in literary genres (since all “literary genres have their origins,

¹⁶ Including, but not limited to, garden diaries, like Susan Fenimore Cooper’s, nature writing, like Emerson’s and Theoreau’s, Western settler narratives, local color, and regionalist work.

quite simply, in human discourse” (169)). “The answer is that a society chooses and codifies the acts that most closely correspond to its ideology; this is why the existence of certain genres in a society and their absence in another reveal a central ideology” (163): although the eighteenth-century natural history’s “central ideology” was imperialism, I ask how and why natural history is never *only* the imperial narrative, how and why each natural history holds and releases that narrative innumerable times, and how and why gender becomes a significant variable in the challenge of that “central ideology” within the genre.¹⁷ Duff calls on Ireneusz Opacki’s terminology of “royal genres,” to describe the “dominant genres” of a given period as a form of “extending the quasi-political metaphor of the hierarchy of genres” and to suggest that their “analysis...can provide the key to the poetics of the given literary trend or period” (14), the answers to “how the cultural assumptions and aspirations of an era are reflected,” “how they cross-fertilize, or impoverish, or conflict with, neighboring genres” (18-19). Equally interesting to me, however, is how flourishing natural history discourses of the eighteenth century, through generic revolution and evolution, shaped cultural understandings of the subjects of that discourse—for my dissertation, flora, fauna, and peoples of the Americas—and how women’s engagement of, and with, these discourses refreshed, altered, and complicated male imperial narratives. The importance of this converse relationship is recognized as central in RGS, where “interplay and interaction,” means how “genres respond to contexts, [but] also shape those contexts” (Freedman and Medway 10).

Another critical focus for RGS is the genre user—this includes writer and reader—and begs the questions “what does participating in a genre do to, and for, an individual or group? What opportunities do the relationships reflected in and structured by a genre afford for humane

¹⁷ Summarizing Peter Hitchcock, Bawarshi and Reiff, in *Genre—An Introduction to History, Research, Theory, and Pedagogy*, find that so too is “the urge to classify genres...is itself a historical and socio-cultural impulse connected to colonialism and nationalism” (25).

creative action or, alternatively, for the domination of others?” (Freedman and Medway 12). How genres are shaped by their users, then, is at the heart of addressing these concerns. This word, “use,” is key, too. How texts “use” genre(s), rather than how they belong to genre(s), call forth richer verbs, such as “perform.” How texts then perform genre(s) supports John Frow’s resonant definition that “genre...is a universal dimension of textuality...a form of symbolic action” (1-2). And yet genre is never abstract, and neither is the text that performs it concrete.

In “The Law of Genre,” Derrida complicates the binary between theoretical and literary notions of genre by drawing attention to the conflation of the terms genre and gender in French: “the semantic scale of *genre* is much larger and more expansive than in English, and thus always includes within its reach the gender” (221). This linguistic synthesis of genre/gender is further made nuanced through German, where we see “the relationship between genre (*Gattung*) and marriage, as well as...the intricate bonds of serial connections begotten by *gattieren* (to mix, to classify), *gatten* (to couple), *Gatte/Gattin* (husband/wife)” (221). Derrida uses the sexual metaphor of the “hymen” to stand for the “marriage-bond,” between the genre/gender that identifies as masculine and that which identifies as feminine (221-222). The genre/gender fusion has powerful implications for natural history scholarship. First, while nature—particularly exoticized nature—was largely feminized by writers of travel narratives, natural history, religious tracts, and later, novels,¹⁸ hence creating space for the narrative of conquest/rape/penetration of land within the context of empire, the texts themselves were largely masculine forms, and finally masculine genres, by virtue of both their authorship and imperial investments. Second, no study of genre, or of *a* genre, can be done richly without the layering in of gender; gender shapes (that) genre and negotiates itself through the writing of (that) genre.

¹⁸ See Parrish’s chapter, “Lavinia’s Nature,” in *American Curiosity*, for a strong treatment of feminized nature’s role in natural history discourses.

Finally, although gender is at the very heart of writing, reading, and thinking in and through a genre, it is often neglected in scholarship of the natural history. My project aims to intervene in this neglect.

Description and the Natural History Genre

I want to add another layer to this discussion of gender in genre, and to rhetorical genre more broadly, by attending to description in the natural history. Critical work around Enlightenment descriptive practice is instructive in illuminating the hybridization of the literary and the scientific in the natural history genre. In her book, *The Unfinished Enlightenment* (2010), Joanna Stalaker posits that description was at the heart of Enlightenment discourse(s) (xii), and even its own discipline derived from the natural history and encyclopedic genres (3). She traces the growing, and opposing, epistemological and poetic discourses around description, particularly in the later half of the eighteenth century, that propelled descriptive practice and ultimately “resolve[d] themselves in our modern distinction between literature and science” (6). Citing Foucault’s definition of description, as one of “omission,” particularly within the practice of natural history, Stalaker calls Foucault’s analysis “the classical episteme,” in which Linnaeus was the “prototypical describer” (8). Description in Foucault’s definition was a formal “system” of sorts (and hence, a discipline) in which every naturalist, every describer, followed the same set of rules that “stripped nature of most of its qualities—notably taste, smell, and texture—and imposed a taxonomic structure that transformed nature into a language even before describing it” (8). In this understanding, the individual describer need not “wrestle with the incommensurability between language and nature” (9), because the language needed is generically provided. While in theory, then, a taxonomy like Linnaeus’s supports this definition of description, in practice, this definition becomes wholly unsupportable, as I show in my close

readings of Jane Colden in Chapter Two. Earlier in the Introduction, I mention that the effect of omission in taxonomy is holistic, or the representation of a universal nature. Jane Colden's restoration of the senses of taste, smell, and texture, however, expands the limits of taxonomic language and redirects taxonomy towards an individual local ecology: this is her innovation.

The move away from the detailed description of the Renaissance, which conveyed nature's unpredictability and heterogeneity, and evoked the response of marvel and wonder, towards "omission," which conveyed nature's universality, and evoked the response of classification and ordering, began with a shift from the study of botany to the study of other sciences, like zoology (Stalnaker 12-13). This fascinating shift in the descriptive tradition did not constitute a clean break, and particularly when we speak of natural history as genre, we need to keep in mind the mutually constitutive influences of both descriptive approaches. For the female naturalists especially, a return to the evoked response of marvel and wonder meant a participation in the Edenic fantasy of the New World—even if they came to it a little late—and thereby implicated them in imperialist discourses at the same time as it emboldened their innovations and sometimes, like for Merian, their burgeoning ecologic claims. The sense that some women were writing in a more scientific vein suggests that they were firmly participating in the institutional trajectories of both (description as discipline and natural history as genre), though this claim depends upon the assumption that we can easily parse the scientific from the literary in natural history writing. Stalnaker poses the problem of separating these descriptive systems as the tension between the individual, in all his/her/its detailed particularity (full description illuminates nature's randomness) and the holistic, with all the individual pieces cohering into an overall picture (selective description illuminates nature's universality). Though it would appear to be the contrary, wherein each piece of empirical data stands alone and

decontextualized, description by omission then paradoxically serves the view of a universal nature. The critical divide of science and literature, then, Stalnaker finds, is a false one.

The advent of this divide coincides with that of the epistemological problem of description in natural history and in aesthetics and poetry throughout the eighteenth century. Natural history's descriptions, in Stalnaker's understanding, were meant to help readers concretely envision faraway worlds, while poetry wanted to represent abstract ideas (20). As a constantly-evolving genre, natural history description served concrete and abstract ends at different points, and even within the same text. Both poetic and scientific descriptive methods, then, are implicated in the sometimes overlapping interests of imperialism and early ecologic discourses—the two poles I erect here as a heuristic—and often themselves overlap, especially in female naturalists' texts. In light of the division Stalnaker highlights between detailed and selective descriptive practices, I define the term “literary” or the quality of “literariness” where it appears in this dissertation to mean a range of features employed by the naturalist that underscore not only nature's idiosyncrasy (full description) and universality (selective description), but also the naturalist's own individuality *and* his or her generalizability as institutional scientist. These features include experimentation in generic hybridity, moments of deep and prolonged narration, belletristic rather than informational passages, goals to entertain, use of literary elements and devices like dialogue, metaphor, and anthropomorphism, embellished style and/or rhetoric, “romantic” or “poetic” storytelling, sensory description, and verisimilitude over eyewitnessed “fact.”¹⁹

Competing beliefs about the role of description in science and art governed theoretical conversations about description as discipline in the eighteenth century. Stalnaker cites the earlier

¹⁹ I treat verisimilitude in greater length through Michael McKeon in Chapter Four's discussion of the early American novel.

camp of Diderot, who believed description could not “communicate the essence of its object...only a vague idea” and therefore offered only an “imperfect definition”—in opposition to the camp of Buffon and Daubenton, who believed precise description in natural history was definitional (36-37). Buffon and Daubenton believed that description should be complete, but not exhaustive or obscuring of the larger natural history genre’s purpose within which it was operating, “which was to uncover the underlying natural economy” of a specimen or environment, or that specimen’s or ecology’s idiosyncratic functioning *and* its place in the larger web of nature.²⁰ In other words, the description should be full, but not so lengthy that it resulted in “representational incoherence and distortion.” The description should give an accurate, empirical picture of the specimen, without excluding, as Linnean taxonomy did, potentially important pieces of the specimen’s environmental context—while at the same time convey the natural order the specimen represented (38-39). Description, for Buffon and Daubenton, was two-parted, consisting of form and function (51). What Stalnaker calls the “history” part of Buffon’s *Histoire Naturelle* (1749-1804) ultimately took precedence over the more specialized description involving scientific measurements and comparative anatomy executed in the first volumes of quadrupeds by Daubenton (57-58).

As Brian Ogilvie notes in his book *The Science of Describing* (2006), Bacon coined the term “history” in relation to natural history as genre, “subdivided into three kinds: history of ‘nature in course, of nature erring or varying, and of nature altered or wrought; that is, history of Creatures, history of Marvels, and history of Arts’” (4). At the mid-seventeenth century mark, Bacon did not believe any of these subdivisions of the “history” of natural history to be, as yet, properly developed or adequately scientific as a foundation for his new inductive method (4).

²⁰ Again, Linnaeus defined an “economy of nature” as providential design for the natural order of species, whose roles and characteristics contributed to this harmonious design and order (natural order was then extrapolated to cultural and social order).

Ogilvie contends that Bacon began to see natural history as a “discipline,” rather than simply nature writing, and that the knowledges encapsulated by this field of study were both produced by it and inherent to its methodology (5). Ogilvie does not use the term “genre,” preferring to call natural history in the sixteenth and seventeenth centuries an emerging discipline, or alternately, a “cultural form” (5).²¹ How Ogilvie distinguishes Renaissance natural history from natural history of the later seventeenth and eighteenth centuries, the period of concern in my project, is through the practice of description. During the Renaissance, from the 1490s to the 1630s, description was at the heart of natural history writing, at its height as practice, discourse, and epistemology. Ogilvie finds that later natural history work “routinized and systematized” description (7): Stalnaker extends this argument when she details the evolution of Buffon’s exemplary text as part of the conversation around description that once more gained importance in the eighteenth century with the advent of Linnean taxonomy. This vexed problem of description, which ultimately fed into the problem of classification—as the world was so varied and the knowledge produced was voluminous—Ogilvie calls the “novel empiricism of the Renaissance” (8). The question of how empiricism began to take shape, or through twists and turns, fight its way to prominence in the natural history genre, is one intimately tied up with the equally nonlinear problem of description in the genre. As Ogilvie stresses, the narrative of empiricism within natural history or of natural history itself as a “discipline” was not linear and

²¹ “What does it mean to call natural history a cultural form? One aspect of culture is giving meaning to experience. Natural history explained the world—or rather, a certain set of the world’s phenomena. But that is only one sense of culture: the sense of belief. Culture goes deeper because it includes practices that implicitly (rather than explicitly) grant meaning and pattern social reproduction. Natural history was a cultural form in this sense as well. In the late Renaissance, becoming a naturalist meant mastering not only a set of concepts but also a specific set of techniques that granted meaning to interactions with the world. Naturalists also granted meaning to natural history as an activity; natural history was implicated in broader cultural forms and social formations, and participated in the reproduction of those forms. The term ‘discipline’ seems especially appropriate for natural history: its Renaissance sense of a field of inquiry with accepted principles reflects the emergence of natural history as a recognized field, while its connotation in the twenty-first century suggests the processes of socialization and self-control that were required to make a serious naturalist” (Ogilvie 5).

continuous, but rather constitutive of phases (10), and I would argue, subject to countless microevolutions within these larger phases.

This narrative of empiricism contained as an integral part the illustrations that accompanied the text. Ogilvie uses botany in particular as a case in point of how description operated within illustrations in Renaissance natural histories. Woodcuts often told a story of fragmentation that became synonymous with empirical observation. Rather than drawing plants “true to life,” as was the generic standard in the eighteenth century, Renaissance naturalists “in both text and image served to emphasize a focus on description of particular elements of a plant rather than its overall habit,” or physical appearance (202). This meant the proliferation of the decontextualized specimen, with naturalist as stager; the illustrations would “eliminate[.]...superfluous vegetative parts...and enlarge[.]...certain characteristic elements” (202). This focus was a different kind of “omission” from Linnaeus’s, which emphasized universality rather than particularity, as here. Illustrations were meant to be studied by an exclusive community of botanists and gardeners, who were familiar with the real plants and who could mentor neophytes in comparative analysis of the real plant and its artistic portrayal and textual description (202). The images and text, then, did not do the work of plant identification in the way we are used to seeing in eighteenth-century natural histories. What inspired the shift to the more elaborate natural history illustrations of the eighteenth century was ironically the herbarium, which relied on the same method of comparative analysis and on making the “mediated representation of the illustration less important than the unmediated observation of the plant itself, even dried” (203).²² No longer reliant on textual description and incompletely-rendered artistic representation, seventeenth- and eighteenth-century naturalists worked to

²²An example of which is from a small volume, now at the New-York Historical Society, called “Specimens Pressed by Rufus King (?), from Marshall, Humphry Arbustrum Americanum 1785.”

produce true-to-life illustrations of plants they had observed through the new forms of copperplate engraving and etching. Despite the Renaissance naturalists' creation of local knowledges, their practice, too, was never fully within the governing organic, pre-mechanistic model of the universe prevalent in their time (and that I outline in my "Ecologic, Pastoral, Georgic" section below). Their work was "anthropocentric," since even the intense focus on aestheticism, as Ogilvie argues, centered around human pleasure in the aesthetic characteristics of plants (270-271): hence the presiding goals of marvel and wonder for human-nature interactions.

Some practitioners moved further towards the aesthetic, while others towards the drily classificatory, while others towards both simultaneously—but almost all moved uniformly away from the local. Why they did so becomes clearer when we consider that the natural history evolved from a discipline within the study of nature, distinct from medicine, agriculture, and natural philosophy, to the encapsulating genre of all of these disciplines in the eighteenth century. Botany's unique place in this story highlights the trajectory of this evolution—from local knowledge, aesthetic preoccupation, and budding empiricism (through piecemeal illustrative practice) to globalism in the transatlantic exchange of seeds and plants, systemic classification as its own form of aestheticism (and certainly visualization), and science defined as the eyewitnessing and depiction of specimens "from life," whether this included environmental/habitat context or not.²³

²³ On this last point, it's clear that many naturalists, long into the nineteenth century even, retained techniques of observation and illustration prevalent in the Renaissance. For a late eighteenth-century example, see Stedman's image of the pineapple, fully decontextualized, and displaying both seed and fruit in a single frame, that I've included in Chapter One.

Ecologic, Pastoral, Georgic

In light of nature study's movement away from localized knowledge creation to global knowledge production and the natural history's subsequent instantiation as genre of empire, I hope the following discussion will serve to further clarify my recurrent use of "local ecologies," "ecologic vision," "ecologic orientation," and other related terms that bear on my argument for women naturalists as parameter shifters in the imperial natural history. To reiterate, I define an ecologic orientation as one that documents localized, organic, natural processes towards a vision of holism that registers human interference as minimally as possible. The term "ecology" did not exist in the seventeenth and eighteenth centuries. A fairly modern word (late nineteenth century), "ecology" has come to be aligned with land politics and efforts of conservation for human benefit, and also with the movement of environmentalism for nature's preservation for its own sake. The definition of the term that is strictly biological, as in how organisms interact in their natural environments, is the major facet of Maria Sybilla Merian's and Jane Colden's orientations, I argue. To add to this definition the human sense of unity with nature transforms earlier iterations of the ecologic sensibility, which did not necessarily register this sense, into what we would now read as ecological, the beginnings of which in American literature are often, with some contention, traced to Henry David Thoreau and Gilbert White (along with other Transcendentalists, as well as to Susan Fenimore Cooper).²⁴

Ecology as an orientation, however, does not take root in the nineteenth century, but a good deal earlier. In her important 1980 work, *The Death of Nature*, Carolyn Merchant points to ecology as the model for the pre-modern universe; it was the rise of modern science and the advent of the Enlightenment that precipitated a transformative shift, "when our cosmos ceased to

²⁴ Dana Phillips concurs with Robert McIntosh that "retrospective views of ecology" don't stand and that "the great majority of ecologists did not and do not read either White's or Thoreau's work as being ecological, if they read it at all" (59).

be viewed as an organism and became instead a machine” (xvi). Though Merchant’s book is not concerned with New World nature per se, colonialism’s impact on European understandings of nature in the sixteenth through eighteenth centuries is critical. What Merchant calls the development of the “mechanistic” model that superceded the “organic” model could not have been possible without the colonial enterprise, or without the natural history genre, whose central role was the justification of the alteration and exploitation of New World environments, including peoples. The “mechanistic model,” which emphasized the need to control nature through machinery, methodically eroded the notion of Europe as “ecosystem,” the implications of which Merchant describes this way:

An ecosystem model of historical change looks at the relationships between the resources associated with a given natural ecosystem (a forest, marsh, ocean, stream, etc) and the human factors affecting its stability or disruption over historical time periods. Historical change becomes ecological change, emphasizing human impact on the system as a whole. Conversely, ecological change is the history of ecosystem maintenance and disruption. Only an ecosystem approach to early modern Europe can deal adequately with the question of how changes arising within human culture affected and were affected by the natural environment. (42-43)

An “ecosystem approach” necessitates in turn a search for ecological perspectives in seventeenth- and eighteenth-century works. We must look back to the Scientific Revolution, to the New Science, to the Enlightenment. We must investigate natural history’s part in the transformation from a holistic to a piecemeal understanding of the human/nature bond, and ask where that change is not so clear-cut, where naturalists may be holding onto an ecosystemic

model, and why. From an ecosystemic model various systems of taxonomy emerged, and colonization, abetted by these systems, found justification.

By the seventeenth century, when the mechanistic model firmly took hold, “order was redefined to mean the predictable behavior of each part within a rationally determined system of laws, while power derived from active and immediate intervention in a secularized world” (Merchant 193). Merchant goes on to say that “order and power together constituted control. Rational control over nature, society, and the self was achieved by redefining reality itself through the new machine metaphor” (193). While naturalists actively appropriated this metaphor, they also challenged it, enlisting the earlier fifteenth- and sixteenth- century tropes of marvel and wonder to contrarily pull against the “predictability” of natural law, invoking God’s masterful handiwork as the basis for this wonder. Though their volumes were in and of themselves the “active and immediate intervention” Merchant describes, naturalists operating within the generic standard believed themselves to be in the active employ of a God who oversaw the production of their volumes and destined the colonial enterprise, their role in it, and finally, the natural history text as a generic mandate. God then made possible and sanctioned this “rational control over nature.” Merchant elaborates on the organic, pre-mechanistic model like so: “In the organic world, order meant the function of each part within the larger whole, as determined by its nature, while power was diffused from the top downward through the social or cosmic hierarchies” (193). Merchant’s definition of order in an organic universe essentially describes Linnaeus’s web of nature theory in *The Economy of Nature* (1775). In other words, early ecologic theories were never eradicated, but rather variably recycled in eighteenth-century nature discourses. If we are to use Merchant’s definition (also Linnaeus’s), we can see why female naturalists like Maria Sybilla Merian and Jane Colden deserve to be called “ecologically-

oriented”: their works emphasize organic natural processes that are “cosmically” controlled, and that suffer minimal interference.

As a genre, natural history automatically presupposes interference, whether through plate staging or taxonomy, the governing, most obvious interferences of Merian and Colden, respectively. And this is ultimately the difference between conservationism and environmentalism. As Richard Grove argues in *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism* (1995), early ecologic discourses were largely anthropocentric, centered as they were in conservation, or how nature could be best preserved for human use, rather than environmentalism, which stipulates that nature should be preserved for its own sake. I would argue that not even Colden could move entirely into an environmentalist mentality: after all, she chooses to write a flora, a subgenre of the natural history, and she cultivates many of her described plants in a personal garden. Nevertheless, the approach for both Colden and Merian is not to ask, “how can humans make nature better?” which is the ontological inquiry of the natural history genre, but rather, “how can humans make the least impact?” which is very much an ecologic inquiry. Grove locates the tropics at the core of “modern conservationism,” for it was the European contact with that landscape that influenced—most often through natural history writing—European management of nature (3). He avers that from the fifteenth century on, we cannot reliably separate out the influence of the tropics, including the environmental ideologies and knowledges of indigenous peoples, from European environmental theories, which existed as conservation and ecologic theories almost as soon as the colonial enterprise began. The search for Eden, both to the West and East, in the fifteenth century, led to a conflation of images from both zones, though the “visual symbols were frequently located in the tropics” (4).

Grove's argument that imperialism allowed for environmental discourses to circulate does not contradict the fundamental premise of my argument—that imperialism and ecology are opposed as *orientations*, and that women, although innovating all along this spectrum, invest more deeply in ecologic visions, when they do at all. In fact, the imperial orientation is the default for the generically-standard natural history, and yet, as we see with male naturalists like William Bartram, William Byrd II, and John Gabriel Stedman, environmental concerns are still engaged in varying degrees. Only they are often sublimated, or pushed aside, by the imperial or national agenda. The system of empire could admit environmental discourses, and even ecologic impulses, which should not be equated. Though Europe could not have absorbed land management initiatives, what Grove calls “the colonial state,” could. The geographically peripheral colonies exponentially grew European economies, and therefore admitting even the “radical agendas of the contemporary scientific lobby” became yet another source of critical information about ecologic change and land management crucial to the livelihood of the empire (7). After all, what was in the best interest of the colonial enterprise was always the maximum exploitation of *knowledges* about nature, even moreso than of nature itself. Grove documents the process of admitting ecologic theories in Europe from first contact through modern society, but identifies the mid-seventeenth to eighteenth centuries as most invested in these knowledges, particularly about the tropics, which came to symbolize the new and global world (9). The colonial scientist gave this symbolism political and economic purchase in the natural history. The scientists' on-site work of eyewitnessing and reporting as “anti-conquerors” paradoxically promoted both the proliferation of colonial states and also “a sophisticated environmental critique” (480). That natural history as genre disseminated globally places it at the forefront of

early environmentalist thought, and also, of early ecologic discourses, the potentiality of which is often ignored in readings of the genre centered only in structural imperialism.

In her groundbreaking study of Alexander von Humboldt entitled *The Passage to Cosmos* (2009), Laura Dassow Walls positions Humboldt (1769-1859) and his exhaustive natural history (as well as his other writings) at the start of what could be called “environmental studies, just prior to the era of scientific specialization, when scientific discourses were fluid” (9). Eventually, this study would be named “ecology”:²⁵ “the new name designated a science, one more subspecialty in the widening panorama of natural knowledges. But before it was a science, before it could be a science, ‘ecology’ was a discourse” (10-11). Though she makes no such claim, for me, the implication of Walls’s argument is clear: natural history is the incipient genre of environmentalism and ecology, at the same time as it is genre of empire. Reading for an ecosystemic model in the imperial natural history necessitates the inclusion of women, for women rarely wrote for empire alone.²⁶

Just as Merian can write “glocally,” just as different naturalists can evolve the genre towards or away from ecological purposes, or land anywhere on the imperialism/ecology spectrum, so too can early natural history itself serve both functions at once, and so too can slightly later natural histories, like Bartram’s, absorb both impulses to generate an emergent nationalism. Walls lays out the stakes of her project by arguing that “recovering Humboldt positions the first wave of environmental thinking not within a nationalistic debate over resource

²⁵ Humboldt “could have been tied to the foundation of ecology, which could have carried considerable cachet, except that the field was not named until German disciple Ernst Haeckel coined the word for Humboldt’s connective science” (313).

²⁶ This point resonates with Kolodny’s argument that women settling the West in the nineteenth century mythologized the landscape through cultivation of personal spaces like the home and garden, rather than through conquest.

exploitation but within a global debate over capitalism and imperial power” (9).²⁷ Humboldt’s “connective science,” Walls claims, was revolutionary, and entailed “a planetary interactive causal network operating across multiple scale levels, temporal and spatial, individual to social to natural, scientific to aesthetic to spiritual” (10-11), that inspired everyone from Darwin to the Transcendentalists, to reconfigure humans together with nature, to launch American environmental thought. Astonishingly, Humboldt’s uncommon vision of the human/nature relation as free of conflict and binding systems formed at a time when imperial violence against nature was the order of this relation. Walls feels that Humboldt’s goal was the transformation of human interaction with the natural world, but surmises that this vision failed to be realized (10).

Perhaps Humboldt’s most radical contribution, Walls argues, is his linking of natural ecology with social ecology, his understanding that the denigration and destruction of nature in turn denigrated and destroyed social structures and human life (10). For Humboldt, a secular philosopher looking for material causes, discovery of the New World had catalyzed modernity by turning all the globe into a contact zone. From Columbus on, all histories were mingled, all worlds interlinked, all peoples cosmopolitan. For him, ‘America as Nature’ meant nature as an equal partner with human purpose, expressed through science, art, technology, and commerce in cosmic exchange. (21)

This globalist and simultaneously ecologic impulse was best expressed in natural history, itself the vessel for these impulses, in varying degrees, for centuries before. The natural history as its own geographic site, its own contact zone, is central to Humboldt’s philosophy of an “ecology of knowledge,” what Dometa Wiegand alternately terms “phenomenological ecology,” or a scientific perspective ““seeking to retain empirical physical data but also considering emotional

²⁷ I argue in Chapters Three and Four that proto-national and nationalist thinking through nature mirrored imperialist attitudes.

and aesthetic effects of the world to be *data* about the world and its objects” (qtd. in Walls 261). Making contact with indigenous peoples and new and wondrous landscapes alone did not constitute the entirety of the contact zone, then; rather, interconnecting these contacts with other contacts made all over the world by other scientists, explorers, travelers, writers, and illustrators, as well as the contacts made with the self through private experience, whether faithfully recorded or shaped to fit generic mandates, filled the world with innumerable, interpretive contacts to make sense of. That alone is an early ecologic understanding, one based in a holistic knowledge exchange and production; simultaneously, it is an imperial understanding, based in a burgeoning globalism that would ultimately constitute globalization.

Dana Phillips, in *The Truth of Ecology* (2003), would perhaps agree in calling ecology a discourse, rather than a science, from the time it was codified as such in the late nineteenth century through today. One of Phillips’s criticisms of the ecology movement is that it functioned for some time as though substantiated by science, but that in reality its key tenets, of “balance, harmony, unity and economy—are now seen as more or less unscientific, and hence as ‘utopian’ in the pejorative sense of the term” (42). Ecology, then, carried (and still does) mythological resonances; many natural history texts participated in this myth-making by portraying the New World as idyllic landscape, whose intrinsic chaos was overridden by nature’s harmony. But this generic feature alone, though argument for natural history’s role in testing ecologic theories, as Walls would argue, or still indebted to “pre-modern” organic theories, as Merchant might say, does not acknowledge the full definition of ecology that I wish to invoke when I speak of the female naturalists as negotiating ecological visions. Phillips attributes the inability to settle on a definition for ecology to ecologists’ difficulty in finding a distinct language and experimental methodology of its own; she finds this difficulty divides ecologists between those operating

within a “point of view” and those attempting science, and believes that ecocriticism, too, as one step further removed from the human experience of nature, suffers this same crisis of identity (43). Ecology, Phillips asserts, is not the science of the universe ecocriticism purports it to be, not “the binding force holding together not only all of the sciences, but nature and culture as well.” Rather, “ecology sparks debates about environmental issues, it doesn’t settle them; and it also sparks debates both about what should and shouldn’t count as science, and still more fundamentally, about what should and shouldn’t count as nature” (45). Each of these debates is registered in, through, and by the eighteenth-century natural history and moreso in texts that do not adhere to, or that play with, generic standards. Women naturalists’ participation in these debates comes closer to capturing a definitional sense of “ecology” I wish to draw on when speaking of ecologic negotiation.

In female-authored natural histories, ecology, clearly as point-of-view, rather than as codified scientific practice, problematizes neat, generically-sanctioned resolutions of these same debates. Whether in Merian’s entomology or Colden’s botany, women recalibrate New World nature as boundlessly new and open to discovery, rather than prescribing the purposes engagement with nature could serve. Merian’s spider plate (Plate 18), which I closely read in Chapter One, for example, is not meant to define that species’s entire existence, but rather to suggest a range of possibilities for that existence within its natural habitat—after all, in just one plate, the spiders are laying eggs, catching prey, eating a hummingbird, and weaving an elaborate web. The plate asks us, “what else can be imagined for this species as it acts in its natural environment?” Merian’s tableau is just that: one tableau. Similarly, Colden’s bare and pretty descriptions, precise but often accompanied by only rudimentary pictures, serve to again leave

open an imagined world *not* depicted within the text.²⁸ These elisions are not accidental. Merian and Colden, by rejecting the exhaustive model of the natural history, and instead focusing on the particular, seem to be leaving room, not just for other naturalists to speak, but for the specimens and organisms to do so, and for them to change, and for their natural environments to change, and for both to change together—but, critically, with the caveat, that they change within limits a scientist could imagine, rather than infinitely or by nature’s dictates alone. This caveat explains why it is most precise, then, to say that women like Merian and Colden were innovating within early ecologic discourses, rather than imagining a cosmic or global ecosystemic ecology, as is Walls’s claim for Humboldt’s work.

Neither are taxonomy and ecology, as I argue in Chapter One, at odds. Phillips posits that ecology’s move towards “mechanistic reductiveness” is a route towards firmer disciplinary and definitional boundaries. This reductiveness, prevalent in physics and molecular biology, for example, allows ecologists to make more specific claims, with the effect of the science’s “increased modesty” and the “mut[ing]” of “its utopian impulse” (46). The reductive, or the taxonomic in natural history, does not preclude a holistic approach to natural processes, and in fact, may actually open up to an ecological point-of-view. We see this in the flexibility applied by Jane Colden to the Linnean model, and even in Linnaeus’s works *Systema Naturae* (1735) and *The Economy of Nature* (1775), through which we perceive that Linnaeus does not see a system of natural economy as opposed to one of classification. Originally “inspired by misgivings about reduction as a central tenet of scientific theory and methodology,” scientific

²⁸ Different sorts of elisions that do not constitute an ecologic sensibility are enacted by Eliza Lucas Pinckney, Susanna Rowson, and Leonora Sansay, but what remains is the sense of possibility, openness rather than closure. The conditions of colonial creolism, an identity as fluid and unstable as the landscape Pinckney wrote, throws into coexistent confusion agendas that first begin to express incipient proto-nationalism. Rowson’s elisions of lineage and Sansay’s tense relationship with processes of creolization likewise pose more questions than they answer about the viability of nationalist narratives.

ecologists revealed in fieldwork, though other scientists believed this form of study to be more primitive, rather than advancing of new natural knowledge, and it appears that contemporary ecologists have come to this same conclusion (52). Fieldwork was of course fundamental practice in seventeenth- and eighteenth-century nature study.

Ecology for a long time looked to the universe's harmony as a way of explaining its order, and this was certainly a notion propagated by natural history. For example, William Bartram, I argue in Chapter Two, saw both natural and human moments of chaos and destruction as anomalous and disturbing. However, as Phillips notes, "we don't need holism and stability in order to have arrangement and coherence" (65). Taxonomy, or the description of order, and ecology, or the description of the unity that governs order, have historically relied upon each other, rather than opposed each other. One purpose of taxonomy is to codify genre, but of course there are holes, as there are no perfect, or complete taxonomies. Taxonomies are therefore not opposed to ecologies, or dynamic, holistic approaches, as it is in genre's very nature to perpetually change. Users change—dismantle, rebuild—genre, and often users erect ecologies from taxonomies in this way. It is my assertion that the most genre-altering, ground-up work of building new visions of local ecologies is borne by the women naturalists of this period, engaging, like Colden, what appear to be strict taxonomies.

It was botany that first used ecology as science in the 1890s as a way to understand plant communities, and to identify plant habitats based on "dominant vegetation" that had not undergone catastrophic events. Botanist-ecologists felt that "each of these habitats could and should be treated with all possible rigor by researchers as a single entity: as an organism, and even as a species" (Phillips 53). This organism was at climax when a particular species of plant had successfully dominated that habitat. However, Frederic Clements's climax theory which

garnered such popularity into the twentieth century, did not admit of human development as antithetical (56). Phillips calls Clements's theory and other early ecologic theories²⁹ "analogies" and "metaphors."³⁰ She argues that "any scientific hypothesis that conceals an analogy tends to devolve into a metaphor and to wind up as a myth, at which point it can be said to have come full circle: it has returned to science's point of departure" (58).³¹ If myth is "science's point of departure," then myth is where ecology, when defined as a point-of view laden with metaphors, begins and ends. Women writing and participating in budding ecological discourses, extrapolated individual organisms to larger organic processes as a way to define place, even as they chronicled localized, individual flora, fauna, and habitats. This extrapolation functioned as analogy (in the description of likenesses between New World and European, or known, specimens) and metaphor (in the implication that these small-scale organic processes represented colonial processes which openly included human intervention), and hence sometimes became complicit in the myth-making of the larger natural history project, as in the case of Merian.

The way women's myth-making in the context of the natural history genre differed from men's was the purpose the myth was to serve; in Henry Nash Smith's "virgin land" myth, the purpose was imperial, ultimately in the service of a cultivation ethic, while in the myth erected by female naturalists like Merian and Colden, the purpose was ecologic, ultimately in the service of a preservation ethic. As ecology evolved as a science, it "struggle[d] to divest itself of analogical, metaphorical, and mythological thinking, and of literary means of suasion (including narrative)" (Phillips 58), all means actively used by the natural history engaging ecologic point-

²⁹ For a full treatment, see Phillips's second chapter, "Ecology Then and Now," and especially pages 52-60.

³⁰ Ecologists "hoped to discover the broader categories in terms of which nature was organized and structured biologically, and to devise practical ways of demonstrating the functional reality of those categories experimentally. In attempting that discovery and demonstration, ecologists tended to emphasize the similarities between things, and between different orders of things, more than their differences. Analogies helped them do so" (57). Analogy and metaphor are also natural history generic conventions.

³¹ Or, quoting Mary Hesse, by "'taking a metaphor literally we turn it into myth'" (Phillips 58).

of-views. Hence, the understanding that Merian's and Colden's texts were not operating as scientific ecology, but rather as early iterations of an ecological orientation. These female naturalists shaped the tools available at their disposal—literary elements and narrative techniques part and parcel of generic convention—towards profoundly different ends than did their male counterparts. Finally, in a rejection of “climax theory,” contemporary ecologists have arrived at “patchiness, random variation, patten, or grain...us[ing] these words interchangeably,” which means that “the idea that habitats are composed as all-encompassing ‘environments’ is false,” that these habitats are subject at any time to “random change” that can be “intrinsic,” rather than caused by disturbing external forces (Phillips 79). This relatively new ecologic theorization poses a contradiction that eighteenth-century naturalists were also unknowingly working through, but ultimately discarding. Merian could not envision her habitats, for example, as “random”; though they were auto-reproductive, they could not transform beyond the limits of scientific knowledge.

No discussion of the ecologic is complete without an engagement with the long literary traditions of pastoral and georgic, so very much influences in natural history throughout the eighteenth century. In fact, there may not be a clear way to separate out these two strains from the ecologic. The pastoral and georgic literary modes were appropriated in colonial and early republican writing, including in later nature writing, to create a new national pastoral. Lawrence Buell, in *The Environmental Imagination* (1995), sees the pastoral mode historically as a contradiction, “sometimes activat[ing] green consciousness, sometimes euphemiz[ing] land appropriation. It may direct us toward the realm of physical nature, or it may abstract us from it” (31). Pastoral tradition has changed so radically since its first appearance as mode in Greco-Roman literature, that it no longer always demarcates rural and urban as distinct spheres. What

comes to represent colonial and early republican natural histories working through the pastoral mode is its “enlistment...in the service of local, regional, and national particularism.” The pastoral, from the seventeenth century on, became “an article of cultural nationalism” (32).

Natural history as genre was no exception when

the tendency to identify nation with countryside promoted by the English squirearchy became, in time, accentuated in England’s colonies. This identification had an ambiguous impact on pastoral representation, opening up the possibility of a more densely imaged, environmentally responsive art yet also the possibility of reducing the land to a highly selective ideological construct. (32)

Quite significantly, these two narrative processes—of regional acuity and ideological construction, sometimes as a negotiation of region within a global market, as in the case of Eliza Lucas Pinckney and William Byrd II, and often, as in the case of William Bartram and Susanna Rowson, towards a national vision—worked in chorus. It was the pastoral mode itself, then, that embodied this contradiction.

In its most common form, the pastoral mode simply strove to “civilize” nature; as Buell scans the scholarly criticism around pastoralism, he locates revisionists who mostly, post 1970, began conceiving of pastoralism as “conservatively hegemonic,” more interested in what is left out of these narratives than in what is included (35). This revisionism is interested in how the idealization of nature forges its exploitation, an idealization that, as Thomas Hallock notes in *From the Fallen Tree: Frontier Narratives, Environmental Politics, and the Roots of a National Pastoral, 1749-1826* (2003), often means an erasure of native populations. Pastoralism’s imperialistic taint is why those like Dana Phillips argue that the pastoral is not a mode ecocritics

or environmentalists should employ.³² In his chapter on Timothy Dwight and Anne Grant, Hallock suggests that the nostalgia for social and class hierarchy ironically led Dwight and Grant to the pastoral ideal—only untouched nature was pure, for the frontier settlements had been marred by “savages” (195). To resolve this contradiction, European travelers often attempted a kind of naturalization through tentative “adoptions” and rejections of “indigenous ecologies” in order to “establish their own colonial culture as native to the place,” and as an extension of this practice, William Bartram’s “argument for scientific authority also suggests terms by which the republic might occupy the continent” (170). Natural history as genre, because it was a “scientific” genre, was crucial in erecting a New World pastoral Buell articulates as potentially “more than ideological theater: [in] its capacity, in particular, to measure actual physical environments as against idealized abstractions of those” (54). Still, natural history often stages this “ideological theater” *through* its “measures” and descriptions of the terrain, and therefore cannot be absolved of building these abstractions. In fact, so much of the practice of interpretive eyewitnessing purposefully erases markers of specific place, as I note in Chapter One’s discussion of Surinam as generalized tropical locale in the work of John Gabriel Stedman, in Chapter Four’s discussion of Susanna Rowson’s misleading application of Caribbean climatological characteristics onto South America, and in Leonora Sansay’s glossing of diverse island particularities in order to circulate familiar sensory experiences of the tropics.

³² Dana Phillips argues that the word “pastoral” ought to be more carefully used by ecocritics, who neglect to see the mode as an “ideologically compromised form because of its deployment, especially in British literature, in service of class and imperial or metropolitan interests” (16). As the pastoral mode does not in actuality equate to an ideal, untouched landscape, “it follows that the pastoral process is one in which ecocritics (and environmentalists) ought not to engage if they want to assert the importance of understanding the untamed natural world” (18).

The elision of the labor that makes possible the early modern and modern pastoral mode, especially the labor of slavery, is the province of the georgic, a sub-mode of pastoralism.³³ In Timothy Sweet's *American Georgics* (2002), he traces the distinction between pastoral and georgic back to Virgil who defined the pastoral as site of leisure, and the georgic as site of labor. Again, the georgic does not necessarily demarcate "rural," but is rather a cultural orientation towards the environment (5). New World geography made it impossible to separate economy, represented by the Old World, and environment, represented by the New World, so the "medium of exchange" on site became labor (7). In the earliest promotional literature of the sixteenth century, Sweet finds, agrarianism fell short of embodying the potential of the American landscape, and therefore "a new mode of political economy, one that theorized economics in terms of environmental capacity" emerged (13). Eventually, a theory of natural economy took hold, here a system in which nature had real and symbolic economic value, and thus nature itself became commodity, "an interrelated system of production, consumption, and exchange" (27-28). This Sweet calls the "American georgic tradition."³⁴ In the pastoral tradition, the labor that shapes the beauty of the landscape is hidden from view (89), Sweet explains, while in the georgic tradition, Iannini expounds, "colonial farming [is] the quintessential imperial act" (122). In William Bartram's *Travels*, for example, land is site of wealth and "social harmony," rather than the slave labor Iannini calls the "subtext" of *Travels* (209). Myra Jehlen locates the georgic as rooted in the American farmer-cultivator persona and in the political rhetoric surrounding the cultivation of the American landscape. The land necessitated action—this was the basis of "agrarian policy" in the eighteenth and nineteenth centuries—and therefore the farmer was

³³ Buell notes that in African-American writings, "white injustice is dramatized by the scene of exclusion from pastoral gratification" (42). Parrish finds that African slaves were astonished by the moral investment placed in idealized images of undisturbed nature when nature itself was the site, for them, of grotesque suffering (289-290).

³⁴ The oft-cited, quintessential georgic poem is James Grainger's 1784 "The Sugar-Cane."

“nature’s agent, creating nature’s kind of civilization” based on “not so much [a] reclam[ation] [of] the landscape as implementing in it the natural harmony of the wild and the cultivated; [but instead] cultivation here meaning development, nurturance” (72-73). The agrarian ideal became a dominant narrative of nationalism in this way.

By the mid-nineteenth century, William Bartram’s South as emblem of nationhood had projected itself West; the tropic empire myth long in play by Bartram’s time (and that natural history had helped erect) was superceded by what Henry Nash Smith, in his influential book, *Virgin Land* (1950), calls the “myth of the garden of the world which expressed the goals of free-soil expansion” (154). The “garden of the world” myth is prominent in *Travels*, and was in fact Jefferson’s agrarian ideal. Although the plantation myth fed the garden myth and although the two intersected, particularly in works produced on the cusp between the colonial and early republican periods, ultimately, they dealt with a different set of concerns (in the myth of the garden, nature and labor as romantic, not economic). My discussion above regarding how the georgic folds into the pastoral literary mode, as well as Chapter Two’s treatment of Bartram’s reconciliation of pastoral visions of the wilderness with political ideals about American civilization, should help illuminate how the tropic empire myth buttressed that of the cultivated garden.

In pastoral texts that border on or become “ecological,” like William Bartram’s, what Buell defines as an “aesthetics of relinquishment” dominates—in its more radical form, this means “to give up individual autonomy itself, to forgo the illusion of mental and even bodily apartness from one’s environment” (144). To put it even more strongly, it is not only autonomy that must be relinquished, but also all egotism (82). In Bartram’s case, the Acadian and imperial strains of pastoralism in natural history intersect when the conscious removal of the self allows

for the cultivated land to magically appear (206). Paradoxically, then, Bartram “serve[s] imperial interests through a relinquishment to ecological processes” (164). The disavowal of the naturalist as individual is of course antithetical to the natural history convention of dancing between hubris and humility, with the “I” central and non-extractable from the landscape. Nevertheless, the pastoral as idyll, with its attendant inclusion and exclusion of the self, resonates deeply with my reading of Merian, for example, as writing a form of ecological fantasy, or a vision of self-sustaining habitats unchanged by human intervention or “random” internal processes inexplicable by science. By crafting an ecologic space focused on the minute specimens before her, Merian was erecting a fantasy she knew to be imperfect even as such; the conscious, alternating presence and absence of their own subjectivity as scientist and discoverer was central to the construction of this precarious fantasy, and of course, to the larger natural history itself. More often than their male counterparts, Merian and Colden both subscribed to this “aesthetics of relinquishment.” More often than the men, they eschewed both their autonomy and their self-interest, opening themselves and their work to a more ecologic vision. Though of course, not always, and not perfectly.³⁵

To clarify, the female focus on specimens is ecologic only insofar as it eschews a *certain principle* of taxonomy, that is the fixed in space, place, and time, and decontextualized specimen—I argue otherwise that a taxonomic focus can cohabitate with an ecological one—in favor of a vision of organisms in relation. As Rochelle Johnson and Daniel Patterson say in the introduction to their 1998 edition of Susan Fenimore Cooper’s *Rural Hours* (1830), Cooper’s move towards ecology is evidenced in a greater focus on the “causes of phenomena and on natural processes occurring in time” in lieu of the “static object—the named and categorized

³⁵ For later female nature writers, this relinquishment became a more conscientious, politically-motivated act. Susan Fenimore Cooper, for example, had an “instinct...to valorize the natural by incorporating it into a vision of society brought closer to nature, not to set society and individual free expression at odds” (Buell 48).

flora, fauna, and minerals” (xxi). Merian and Colden are pioneering this focus, a century or more before Cooper, astonishingly while working within the confines of certain taxonomic conventions. As ecology was not yet a discipline in the seventeenth and eighteenth centuries, women naturalists practiced their own respective sciences with great effect (and it is no accident that botany, Colden’s field, was the science that a century and a half later codified ecology as such). However, I claim, Merian and Colden were early participants in ecological discourses that had not yet emerged as distinct even as discourses. As the organic, holistic approach to the cosmos had been duly superceded, as Merchant argues, by the mechanistic, imperial approach by Merian’s time, it would have been unlikely for contemporaries to read her work for organic impulses, rather than through the redefined practices of the New Science. In other words, female naturalists straddled yet another boundary, this one across space and time—that between the pre-modern world’s fascination with marvelous discovery and later American nature writing that at the very least informed and was influenced by the emergence of ecology as science. Phillips’s division of ecological point-of-view and ecological science is useful here. While for Phillips, ecology becomes in time its own genre, I am speaking of ecology as a point-of-view whose roots as budding science we can begin to see in the work of female naturalists. This point-of-view’s central role is agent of change in the natural history genre, the avenue by which an oppositional construct to that of imperialism is erected, and through which women can enact generic evolution along the spectrum, imperialism to ecology.

Where scientific ecology has evolved so that ecologists no longer see the universe as fixed in its harmony, but rather in constant shift (51), Merian and Colden, in their early ecologic discursive practice, drew nature’s perfection, unity, and stability, a “utopianism” that later discredited ecology as science. The crucial piece to hold onto is that their “utopian” drawing of

the natural world, as though foreshadowing ecology's own internal paradoxes and journey towards validation as science, was riddled with contradictions and complexities, many of which they were likely themselves aware. In *The Letterbook of Eliza Lucas Pinckney, 1739-1762*, Eliza Lucas Pinckney harnesses both imperial and ecologic orientations, and melds them in a unique record of the colonial South Carolina lowcountry. Her contribution is a "mapping" of colonial region that unapologetically and participatorily admitted external changes to the landscape; and yet, her creole identity lends her a special perspective on the particularities of that landscape. Though she does not see nature as holistically operative, her region is certainly so, as each piece she documents—from the slave girl she teaches to read to the Mohawk tribe whose movements she chronicles to the turtles she ships as delicacies to England—is part of a localized ecology that forces the relation of each of these pieces. Susanna Rowson's *Reuben and Rachel: Or, Tales of Old Times* (1798) channels pastoralism to cast off English class systems and Native-American heritage; this pastoralism she uses as imperial natural historians did, except towards an exclusionary nationalist narrative based in white "creole regeneracy."³⁶ In Leonora Sansay's *Secret History: Or, The Horrors of St. Domingo* (1808), tropical island hopping, the Haitian Revolution, and creolization of the white female American body make both imperial and ecologic orientations unsustainable. Neither is there a neat resolution of nationalism in this early American novel. In short, women naturalists writing the Americas moved between institutional imperialism (which later funneled into the narrative of U.S. nation as empire) and place-based ecology—and their concomitant orientations—in greatly heterogeneous ways, ultimately pioneering evolutions of the natural history as genre.

³⁶ Sean Goudie's term in *Creole America: The West Indies and the Formation of Literature and Culture in the New Republic* (2006), which I discuss in Chapter Four.

Chapter One

At Opposite Ends of a Century: Maria Sybilla Merian, John Gabriel Stedman, and the (Re)Production of Surinam as Gendered Natural History Discourse

It is the critical work of this chapter to probe how Maria Sybilla Merian (1647-1717), pioneering German entomologist, evolved the natural history genre in the context of narrativizing the Americas. This chapter envisions a deeper influence for Merian's oeuvre, and in so doing, explores how gender informs generic practice in the century during which natural history most transformed as genre: 1700-1800. I read *The Metamorphosis of The Insects of Surinam*, first published in 1705, side by side with John Gabriel Stedman's *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam*, published in 1796, in order to ask how Merian's "glocal" vision of Surinam challenges then-extant imperial modes of New World knowledge production that continued to proliferate in male-authored works, like Stedman's, throughout the eighteenth century. Deriving the term "glocal" from Felicity Nussbaum's definition in *The Global Eighteenth Century* (2003)—writing that "aimed to retain a self-sufficient and self-contained regional insularity without forfeiting economic growth" (10-11)—I take "glocal" to mean the inextricability of the local from the global, the tension between the desire to record local ecologic processes and the institutional pressure to impact, and then market, these ecologies. I argue that in Merian's case, the "glocal" manifests as an ethic of preservation, an ecologic "point-of-view" (Phillips 43)³⁷ marked by an investment in reproduction that is disrupted by her very presence as European, by her self-sought inclusion in transatlantic institutional science. Her ecologic orientation often extends to what I call ecological fantasy, or the idea that individual habitats are self-sustaining/auto-reproductive and remain

³⁷ Rather than "ecology," I use Dana Phillips's term "point-of-view" and the phrase "ecological orientation" interchangeably. Until the late nineteenth century, "ecology" was neither scientific discipline nor concept—though it was part of the discourse around what Carolyn Merchant calls the "ecosystem model of historical change" (42-43) in pre-modern conceptualizations of nature. See my full discussion in the Introduction.

untouched by “random changes” (Phillips 79), or external pressures on the local, including human encroachments like settlement, plantation zones, and slave marronage. Most crucially, it is Merian’s astonishing art and its accompanying text—and their interplay—within which I read an uneasy and imperfect negotiation between imperialism and this very early environmentalism.³⁸ Finally, I maintain that no lineage of the genre can be considered complete without attention to Maria Sybilla Merian’s groundbreaking work.

Place is an entry point for genre theory. In the Introduction, I make the claim that though deeply entrenched in cultural contexts, genre does not exist as a historical category. This means that no genre can be said to belong to one time period; genres have an “afterlife...[a] continued presence...in diminished or displaced forms” (Duff 23). Even when thought to be distinct in a given time period, genres are often illusory, defined by hybridity and impermanence rather than by fixity. Genres then move across space and time and place and while shaped, are not circumscribed, by the social constructs of gender and race. In turn, genres have the power to enact changes in culture- and place-specific societal representations of these categories. To locate Surinam in a dialectical theory of genre is to ask how this place in particular—the paradoxically stable locus and emblem of racial disturbance and revolution in the New World until the Haitian Revolution at the turn of the century—shaped the genre of natural history. I am concerned with how it did so during the course of the century, 1700-1800, from Merian to Stedman, the period in which the genre itself exploded, and the outer limits of my project. The close readings in this chapter aim to take up this question and ask, in parallel, how gender and place can be read as mutually constitutive categories in approaching the study of genre.

³⁸ In distinction to conservationism, which is technically what the majority of early European environmental theories (fifteenth century on) espoused. Conservationism orients the preservation of nature around human use, while environmentalism does so for nature’s sake. This latter understanding is part of Merian’s ecological vision. Richard Grove locates the origins of conservationism and environmentalism in colonial ideology, with the tropics at the heart of colonization environmental discourses; see my brief discussion in the Introduction.

Likewise, my close readings probe how the intersection of gender and genre becomes a site of genesis for a dynamic representation of genre potentiality.

Surinam—the place—facilitated Merian’s “glocal” orientation, itself a byproduct of her gender. Its unique topography and the landscape’s absorption of slave marronage beginning in the seventeenth century and throughout the eighteenth century embodied the contradiction that constituted Merian’s straddling of the global and local. On the one hand, the dense forest hinterland within the plantation zone remained largely unaltered by colonization, though it was naturally disturbed by tribes of marooning slaves. Simultaneously, by mid- to late eighteenth century, Surinam’s African to European ratio, 25:1, and in plantation zones, sometimes 65:1 (Price and Price xii), was the most severe of any West Indian colony, signifying an ongoing process of alteration to a deeply impacted landscape. Merian channels this paradox through her own project, which scholars like Natalie Zemon Davis see as part imperialist and part proto-ecologic, the latter especially expressed in her depiction of specimens “flourish[ing] in local terms and relations” (181). Merian’s open inclusion of indigenous “testimony” and “instruction” (184-5), as for example when she learns to mix water-resistant paints from the natives of Surinam—“The Indians press out the juice [of plants] and then put it in the sun, where it turns black. They use it to paint their naked bodies with all sorts of figures. The decoration on the skin keeps for nine days and cannot be washed off with any soap” (Merian Plate 48 qtd. in Schmidt-Loske 9)—bespeaks both an othering that belongs to the enterprise of institutional knowledge production and a validation of native knowledges that keeps the naturalist grounded in the local.

In other moments, the taxonomic and the ecologic impulses, working together, come to represent Merian’s “glocal” orientation. The synthesis of these impulses, which, as I discuss in the Introduction, tend to universalize (taxonomy) and particularize (local ecologies), signals the

natural history genre's construction of wilderness myths of the New World which largely serve imperialist agendas. While Merian does engage in this myth-making, I read her investment in local ecosystems as preservationist. Though ultimately Merian's depictions of these local ecologies travel globally and contribute to European fetishization of the New World, which in turn leads to further exploration and colonization, Merian's purpose in feeding this myth is not exploitation, but preservation.

It is Stedman's much less scientific account of flora and fauna, and their renderings alongside plates of slave torture, portraits of colonials, slaves, and natives, including the heroic rebel-killer Stedman himself, as well as scenes of military incursions and colonial life³⁹ in Surinam that, despite Merian's early intervention, becomes the authoritative natural history of that colony. As a sign of the work's popularity, various unauthorized editions appeared, including, in 1809, a highly abbreviated version that featured only the most dramatic sections of the narrative, excising the natural history completely. Aptly entitled "Curious Adventures of Captain Stedman, During an Expedition to Surinam in 1773; Including The Struggles of the Negroes, and the Barbarities of the Planters, Dreadful Executions, The Manner of Selling Slaves, Mutiny of Sailors, Soldiers, & c. and various other Interesting Articles," this version also begins with a shocking two-page foldout of two slaves whipping a white woman tied to a tree as planters look on. The critical privileging of Stedman's volume as the master narrative of Surinam over Aphra Behn's and Maria Sybilla Merian's, and its diverse reinventions (as abolitionist tract in the example just given), attest to the broadening of scope in the genre that I outline in my

³⁹ As I discuss in Chapter Three, a similar effect is accomplished in William Byrd II's *History of the Dividing Line* through what Kevin Berland calls "natural history digressions." Byrd's early composition date of 1728-1736 once more reaffirms how deeply interwoven literary modes of narration and science were in the natural history throughout the eighteenth century.

Introduction as well as to the ways in which the gendering of imperialism by necessity codes legitimized natural history productions as male.

The tropes of marvel and wonder first imprinted imperialism onto the natural history. While wonder “does not inherently legitimate a claim to possession” (Greenblatt 74), “the early discourse of the New World is...a record of colonizing the marvelous” (25). The word “marvelous” itself is “pregnant with what is imagined, desired, promised” (73). Merian channels Stephen Greenblatt’s definition of the marvelous and wondrous as “the decisive emotional and intellectual experience in the presence of radical difference” (14). She makes legible for her readers an “imagined, desired, promised” Surinam, a European frontier through which the marvelous is “colonized.” This dual act of “colonizing the marvelous” and propagating an Edenic fantasy of the New World is inherently imperial, but it is not only so in Merian’s work. Just so her methodology: a reliance on institutional generic conventions, including taxonomy. Merian’s imagined Surinam is her own—like the western women settlers Annette Kolodny researches in *The Land Before Her: Fantasy and Experience of the American Frontiers* (1984), Merian too “projected resonant symbolic contents onto otherwise unknown terrains” (xii), “contents” that were necessarily gendered female. I argue that these “contents” belong to her ecologic orientation, through which Merian reframes imperial myths in order to imagine a different New World from that of her male contemporaries and successors.

Merian’s privileging of local ecologies and the symbiotic relationships between flowers and insects strategically magnifies her reader’s sense of wonder by complicating, but not eschewing, the impulse to taxonomy prevalent in her day.⁴⁰ In other words, where the rhetorics of marvel and wonder prevailed in the fifteenth and sixteenth centuries, giving way in the

⁴⁰ In 1705, there was no standard system of classification. That came in 1735 with the publication of Linnaeus’s *Systema Naturae*.

seventeenth and eighteenth centuries to rhetorics of “Curiosity,” a term conveying a pretense of scientific disinterestedness where wonder and marvel certainly did not, Merian returns her readers to a time when a more personal connection, an “emotional and intellectual experience” (Greenblatt 14) in one, allowed for a purer encounter with place. What is brilliant and complicated about Merian’s work is that she does so by inhabiting the roles of both disinterested scientist and invisible illustrator. Each of these roles suggests both absence and presence; as Merian records the intricacy of natural processes “from life,” she insists that these processes, and their larger ecosystems, are unaffected by her physical presence, and yet, she simultaneously admits that her plates are staged. Her glorious artwork symbolically contains the promise of a Surinamese ecology that still exists intact, undisturbed by cultivation and slavery: in 1705, an ecological fantasy of a landscape significantly transforming because of these external forces. Her magnifications and shrinkages, then, in both art and textual narrative, cannot be cleanly parsed along imperial/ecologic lines. Rather, *Metamorphosis* operates on both planes, at once, “glocally.”

The decline of marvel/wonder as the governing mode of cross-cultural communication both within the text of the individual natural history and across the genre meant its redirection into other narrative modes throughout the eighteenth century. Mary Louise Pratt finds, for example, that it is the sentimental mode that enters into late eighteenth century natural histories like Stedman’s, along with science “cod[ing] the imperial frontier in the two eternally clashing and complementary languages of bourgeois subjectivity” (38), a natural combination since, in travel narratives of conquest, the sentimental and scientific subject share “innocence and passivity” (77). Pratt claims that this introduction of sentimentality is what allows for newly narratable forms of exploitation—namely, the sexual exploitation of Joanna—to enter into

Stedman's work. This sentimental mode substitutes what would have been the experience of beauty through wonder: in fact, Stedman sees little beauty in that which inspires wonder, like his first vision of the bound female slave. Even the interspersed passages and plates that concern Surinam's vegetation serve only to interrupt *Narrative's* larger story, and hence slow or delay the greater wonder the reader experiences through the more dramatic elements of the plot—such as Stedman's interracial love affair and his torturous forays into the jungle—which instead inspire pathos. Surinam is narrated as a full picture, big to small, nonlinearly, as a physical eye might see it in life. Through this literary mode of eyewitnessing which does not subscribe to a taxonomic methodology of any kind, Stedman complicates the very generic convention of experiencing wonder and suggests that the blend of literary and scientific embodied by wonder must reside in the realm of feeling.

Stedman claims in his preface that his portrayal of Surinam is “totally unembellished by the marvellous,” and “TRUTH is the chief ornament” (1796 Preface xvii). This “TRUTH” is manipulated by sentimentality even as it belongs firmly to revised eighteenth-century modes of imperial knowledge production—namely, to “curiosity.” The revision from marvel and wonder to curiosity extends to Surinam itself. To lay claim to place, Stedman tells his reader that his natural history of Surinam will produce new knowledge. In order to make this claim, however, he must acknowledge his forebears: although “the Colony of Surinam not appearing as yet to have been very much explored by any British subject” (1790 Preface, 8), had already been written by “Linnaeus himself” and “the celebrated Miss Merian” (9). Pairing Maria Sybilla Merian and John Gabriel Stedman, who compose their natural histories at opposite ends of the eighteenth century, illuminates the complex negotiations of gender, genre, and place that

determine global framings of the Americas. Stedman's role as "anti-conqueror" (Pratt 9),⁴¹ is oriented by imperialism; neither sentimentality nor the vivid literary descriptions of violence that inspire feeling moves *Narrative* out of the imperial mode. Within *Metamorphosis*, however, an ethic of preservation and an investment in local ecologies coexists with the imperialist structures and agendas of institutional science, generating a "glocal" perspective. Though Stedman's Surinam, and not Merian's, was inherited by the genre, I argue that recouping Merian's earlier imaginary of Surinam validates the integral importance of her vision to the natural history's evolution over the course of the eighteenth century. By placing this vision in conversation with Stedman's, I trace some of the ways in which Merian both challenges and feeds imperial modes of knowledge production.

Maria Sybilla Merian, 1647-1717

In a letter dated March 14th, 1703 to apothecary and Royal Society Fellow James Petiver, Maria Sybilla Merian, pioneering entomologist, artist, and explorer writes:

I perceive you have light of a great many persons who are willing to subscribe to my work concerning Surinam Insects, that is very acceptable news. I am & always shall be obliged to you both for your trouble & kindnesse above half of it is ready & the remainder shall shortly follow but my desire was neither to be obliged to Monsieur Vincent nor to any other person whatsoever, either by directing Letters to them, nor by giving them commissions for books that shall be designed by any person, for otherwise I must give ten p cent; for their providing, at that same time. I lose more than I gain by this piece of insects wherefore...that nobody may question or be solicitous about his money, I

⁴¹ In my Introduction, I discuss Mary Louise Pratt's term "anti-conqueror," which she uses for naturalists in the service of empire, defining this orientation as a "strategy of representation whereby European bourgeois subjects seek to secure their innocence in the same moment as they assert European hegemony" (9). We cannot call Merian an "anti-conqueror" because her trip was neither commissioned nor institutionally-sanctioned, and her work was only endorsed after it had been composed.

shall immediately give half of the book to the one moyty of the mony, and the other half afterward for the rest of the mony, so that nobody can be deceived or suffer any damage thereby. The whole work will cost 6 Ryx Dollars, or 3 ducats, but if any one desi[g]nse to have it varnish, or coloured, pray acquaint me therewith that I may [...] them in kind, I desire withal shal you would afford your advice whether or not it might not be convenient to dedicate one copy curiously painted, or varnish, accompanied with an epistle dedicatory, to the Queen of England, pray do so much as inform me if it will be as acceptable, as it is rationall, as comeing from a woman to a personage of the same sex; and in what language the dedication ought to be writ in. (Maria Sybilla Merian to James Petiver, March 14, 1703)

This exemplary letter plays in many registers as an entrée into identifying the ways in which eighteenth-century women naturalists worked within and without scientific circuits. Unusual in its tone, Merian's letter hovers between the obligatory obsequiousness to a sponsor and supporter—a convention for both sexes—and a hardliner, business-like approach to entering the marketplace of natural history publication. Concisely and expertly, Merian's letter shrewdly addresses issues of economic self-sufficiency and scholarly integrity. The 1705 first edition of *The Metamorphosis of the Insects of Surinam*, about which the above letter is written, proudly announces on its title page that this work was printed “at the expense of the author, residing on Kerk-de-straat, tussen de Leydse, en Spiegel-Straat, where impressed & color printed.” Merian was very much operating, as Ann Shteir puts it in her influential book *Cultivating Women, Cultivating Science* (1996), “beyond the boundaries of polite [science]” (194) for her day, wherein women who produced natural history in one form or another for public consumption did so in highly restricted, delimited, culturally gendered ways. Merian was an anomaly. Her

magisterial tome was presented by James Petiver to the Royal Society of London on October 27, 1703, and this record was left by then-President Isaac Newton: “Mr. Pettiver shewed some Materials & Draughts, for an History of Insects, by Sibylla Mariana Graffen, of which she intend’s to print many Copies. Divers present said they would take of Copies of it, when printed in English or Latin” (32-33). From there, the volume took on a life of its own.

In 1699, at the age of fifty-two, and at a time when women rarely left the confines of their homes or gardens, German-born entomologist Maria Sybilla Merian, an engraver’s daughter and artist’s stepdaughter, traveled, at her own expense, and with one of her daughters, across the ocean to Surinam on a collecting expedition. For two years, she observed Surinamese insects in their natural habitats, composing most of her illustrations “from life,”⁴² a critical practice that, as I discuss in the Introduction, grounded her work in the New Science. When she returned to Amsterdam, she composed her masterpiece, possibly herself engraving up to three of the images, personally hand coloring, and finally securing funds and subscriptions for her work (Schmidt-Loske 18). Eventually, her volume would come to be published in five different languages, and become a staple of natural history libraries all over Europe and the colonies. Merian corresponded with many a scientist and was read, referenced, acknowledged, and discussed by the likes of Hans Sloane⁴³ (1660-1753), James Petiver⁴⁴ (1663-1718), Mark Catesby⁴⁵ (1683-

⁴² An exact number is unavailable here. In fact, it is unclear how many of Merian’s plates were executed (or sketched) “on the spot,” and how many from some combination of insect specimens in her possession and observation of insects in their working habitats. She did not, as far as I know, draw plants from dried specimens. Nor did she, as a general rule, impose plants or insects onto her plates artificially—though she does so in Plate 23, Blue Lizard and Banana, that I closely read in this chapter.

⁴³ President of The Royal Society from 1727 to 1741, and the most famous naturalist of his day. His massive, highly influential *A Voyage to the Islands Madera, Barbados, Nieves, S. Christophers and Jamaica*, printed between 1707 and 1725, became the generic standard for the early part of the eighteenth century. I discuss Sloane in the Introduction.

⁴⁴ London apothecary, fellow of The Royal Society and London’s informal Temple Coffee House Botany Club, famous for his study of botany and entomology.

⁴⁵ Author and artist of the gloriously illustrated *The Natural History of Carolina, Florida and the Bahama Islands* (1731-1743).

1749), and Richard Mead⁴⁶ (1673-1742). Her work was cited in a paper given by George Edwards⁴⁷ (1694-1773) at the Royal Society in 1760, and her artwork was purchased by Peter the Great on his travels to Amsterdam. Linnaeus (1707-1778) relied heavily on Merian's meticulous work to name at least one hundred plant species and to help form his tropical plant taxonomy (Etheridge 5), and referenced five of her plates in his influential *Species Plantarum* (1753) (Schmidt-Loske 12). Merian's artwork thoroughly reimagined the parameters of public scientific knowledge, itself doing the work of classification (half a century before the Linnean system) for the first time.

“Merian's career [was] a milestone of female self-actualisation in the early modern era” (Schmidt-Loske 7), and her import and influence proved great. Kay Etheridge, in her article entitled “Maria Sybilla Merian: The First Ecologist?” claims that Merian was the first to “include diverse taxa within one image” (7), and that this “innovation of pairing insect with host plant and collapsing the life cycle [“a time-lapse of life cycles” (10)] of each organism into one plate was used by many who followed her” (12). Merian's insects, rather than plants, were at the heart of her compositions; these insects were painted life-size, and plants were then scaled to fit the plate. The giant folio-sized plates literally and symbolically magnified the life cycles of the creatures she studied (10). Merian's focus on interactions between insects and their host plants would form “the very foundation of the study of ecology” (1), not itself a scientific discipline until the late nineteenth century. This strategy was a reversal from her earlier work, *The Wondrous Transformation of Caterpillars and their Curious Floral Alimentation (Der Raupen)* (1679), which placed the food source of the caterpillar at the center of the plate, but ultimately, achieved the same purpose: “to link the developmental stages of a moth with the food plant of its

⁴⁶ Physician famous for his work with contagious diseases. He was also a collector of Merian's drawings, now part of the Royal Collection in London (Attenborough 186).

⁴⁷ English naturalist and father of British ornithology.

caterpillar” (Schmidt-Loske 10). Etheridge further suggests that Mark Catesby looked to Merian for inspiration when he composed his own folio-sized volume of artwork (1731, 1743),⁴⁸ and that ornithologists like John James Audubon (1785-1851)⁴⁹ did the same, emphasizing, like Merian, symbiosis, rather than collection and classification of dead, decontextualized specimens.

Merian’s ecological orientation was intimately tied to her aesthetic. Inspired by her family’s predilection for gloriously adorned artwork, and schooled in the Dutch still life tradition,⁵⁰ Merian “sacrificed verisimilitude (the way things may look to an observer) for a decorative portrayal of the stripes and spikes and legs the caterpillar actually had (what a nature lover must know about an insect)” (Zemon Davis 149) in her first book on caterpillars, *Der Raupen* (1679) and “revealed an unrelenting drive for perfection in art” (Schmidt-Loske 9) in her first publication, *The New Book of Flowers (Neues Blumenbuch)* (1675-77) that did not abate for the tenure of her career. Perhaps indeed this disparity between superficial observation of the insect world and scientific observation—with the occasional aid of a magnifying glass—and the attendant opportunity for original, vibrant artwork, is what drew Merian to the study of lepidoptery and entomology more broadly. The accuracy of her “decorative portrayal” serves both taxonomic and ecologic purposes at once, making her at once scientist and “nature lover.” Zemon Davis, however, insists that Merian’s ecological focus, defining ecology here through Carolyn Merchant as the chronicling of “transformative organic processes” that lead to a

⁴⁸ Merian was a direct influence on Catesby: “After the publication of *The Metamorphosis*, the next seminal book to picture New World organisms was Catesby’s (1683-1749)...the size and layout of his book closely follow that of Merian’s and his images frequently echo her compositions” (Meyers qtd. in Etheridge 13). Compositional echoes include “images such as a sea turtle with her eggs, and a tree frog eyeing a spider as prey, in the same way that Merian showed reptiles with their eggs and animals in various acts of predation.” Linnaeus preferred Merian over Catesby, perhaps because Catesby’s plates sometimes portrayed flora and fauna that did not belong together in the same habitat (Etheridge 13).

⁴⁹ Author and artist of *The Birds of America* (1827-1838).

⁵⁰ While I don’t have the space here to explore the connections between still life drawings and Merian’s final plates, there could be fruitful links here. Often, Merian’s plates are reminiscent of the still life, which is, after all, painted “from life” in various stages of bloom, decay, and death, just as are the flora and fauna in the plates.

“peacable” vision of “human peace within nature” (151-2),⁵¹ is at the expense of scientific taxonomy. She argues that the conflation of numerous insect life cycles into one plate in *Der Raupen* (1679), belies “boundary classifications,” rather focusing her work around a story of sorts, in a “set of events—‘you’ll find in this volume more than a hundred transformations’” (155). In *Metamorphosis*, Zemon Davis sees the same lack of a governing organization; she admits, nevertheless, that Merian conscientiously asks the European reader to shift between the known and the unknown, which constitutes its own formal structure (180). I do not believe that Merian sacrifices taxonomy, but rather plays it against, and incorporates it within, her ecological point-of-view. As I discuss in the Introduction, taxonomy and ecology need not be at odds. I hope that my later discussion will illuminate a strong taxonomic focus within Merian’s ecologic vision, one that squarely positions Merian inside scientific discourses of her day, as well as revolutionizes the function of natural history art—in her case, propagating classification and organic local processes at once—within the genre.

When Kay Etheridge calls Merian “the first ecologist,” what she means is that Merian’s symbiotic tableaux presaged a strain of ecological work in natural history and beyond, but a more accurate reading of Merian’s influence in this regard would be that Merian’s ecological sense played into and repurposed pastoral visions. Merian *does* obfuscate slave labor that destabilizes Surinam and changes its ecology and that obfuscation *does* create a pastoral vision that buttresses, structures, and erects her natural history. But the specimens continue to stand in ecological relation. If the georgic—where the labor that produces the pastoral vision becomes visible—is obscured or strategically elided in texts like William Bartram’s *Travels Through*

⁵¹ See my discussion of Merchant in the Introduction. Merchant traces the transformation of the ecologic model of the pre-modern universe into the “mechanistic” model, as colonization altered European understandings of nature. I define an ecologic orientation in this dissertation as one that presupposes minimal human interference rather than centers on “human peace within nature.”

North and South Carolina, Georgia, East and West Florida (1791) and Susanna Rowson's *Reuben and Rachel: Or, Tales of Old Times* (1798), which I discuss in Chapters Two and Four, respectively, it must be acknowledged that Merian discloses native aid, and otherwise, is the primary laborer of her own work. Certainly Merian collects, stages, and describes her specimens, projecting onto her illustrations a vision of Surinamese ecology that admits her role as the primary manipulator of this ecology, even as it performs the fiction of an invisible, non-disruptive observer. Her vision, however, is based on a laser-like focus on the specimens rather than on the interruptive narratives of imperialism, which are finally the goal of pastoral and georgic influences in the natural history genre.

Merian, like Jane Colden, whom I treat in Chapter Two, is the subject molding her objects, her specimens, into a vision that effectively tunes out the songs of labor and exploitation that line the pastoral and the georgic. Through this elision, she builds an unstable ecologic fantasy. While Merian admits native, local knowledges into their work, these knowledges are generally not *imported* by slave labor, though we know Merian did employ the aid of enslaved peoples. Merian makes no attempt to relate knowledge of any kind—medicinal, curious—that is not firsthand, that is not through the lens of her individual subject position. Even as she plays with her own invisibility for the sake of exhibiting a habitat's autonomy, she is the conscious arbiter of self-relinquishment, which is why the ecologic fantasy can never be pure. Slave guides *personally* work in Merian's service, as they likely do in Jane Colden's, whom I treat in Chapter Two, and while they do for male "anti-conquerors" like John Gabriel Stedman, William Bartram, and William Byrd II too, the men I pair throughout my chapters with female naturalists, their expansive volumes objectify slaves as specimens and curiosities in equal measure.

As Etheridge laments, for a long time Merian's masterly drawings kept her from her rightful acknowledgement as scientist as well as artist (17). Merian-as-gifted-artist has perpetuated largely because her text continues to be dwarfed by her images, particularly when editions of her work have been made available either without the accompanying text (and instead with commentary by the editors) or with only textual snippets available. One of the many ways in which Merian flouted gender boundaries was by placing herself in direct conversation with entomological theorists of her day: in *Metamorphosis*, for example, she explicitly takes up van Leeuwenhoek's theory that insects had many eyes (Schmidt-Loske 18). Merian did not compose or publish her treatise in a vacuum, but rather had intimate familiarity with the theories of prominent entomologists like John Ray, Johannes Goedaert, Francesco Redi, and Jan Swammerdam, and was in turn read by some of these scientists.⁵² She also enjoyed privileged access to New World specimens in her visits to cabinets of curiosity⁵³ (viewings that ultimately inspired her ambitious, self-financed scientific expedition to Surinam).⁵⁴ Merian's presence in these circuits sets up a fascinating comparison with European women naturalists who, in varying degrees, practiced scientific inquiry through avenues largely open to women.⁵⁵ Writing about a subset of women naturalists, cultural historian Ann Shteir finds that the majority of eighteenth-

⁵² All of these entomologists had disproven spontaneous generation and turned instead to metamorphosis to explain the life cycles of insects. In addition to their major works, Ray maintained a voluminous correspondence with Henry Oldenburg, first Secretary of the Royal Society; these letters appear in the Royal Society Manuscript Archives. In turn, Eleazer Albin's *The Natural History of British Insects* (1720), and Moses Harris's *The Aurelian: Or, Natural History of English Insects, Namely Moths and Butterflies* (1766), draw on Merian's work. Plates from her volumes appeared in manuscripts sent to the Royal Society (by Petiver, for example, before and after her death), in anthologies compiled by the Linnean Society like *A genuine and universal system of natural history; comprising the three kingdoms of animals....the amphibious animals, reptiles, insects, etc. in the costly works of Seba, Merian* (1794) (where she was placed alongside and in conversation with Albertus Seba, and in the title), in other women naturalists' work like Noel Antoine Pluche's *Spectacle de la nature* (1732-1748) (Parrish 186), and in biographical sketches, like *The Lives of Eminent Naturalists* (1840).

⁵³ Including cabinets of physician Frederick Ruysch and damask dealer Levinus Vincent (Schmidt-Loske 16).

⁵⁴ In order to make this journey, she sold illustrations and natural history specimens she had collected (Schmidt-Loske 16). She was also inspired to travel to Surinam in particular by the Labidists, a religious group she belonged to that had failed at establishing a sustainable colony there.

⁵⁵ These women included Margaret Bentinck, Mary Delaney, Anna Blackburne, Elizabeth Blackwell, and Pauline De Courcelles, among others.

and nineteenth-century botanical writers rarely experimented in genre, often writing within what she calls “familiar formats.” Though British women adopted and reinvented this rhetorical tradition, they were still largely mediators and brokers, rather than producers, of knowledge, like their male counterparts.⁵⁶ Merian, in contrast to early female naturalists and later female botanists, pursued a highly anomalous career in natural history that rejected gender-based circumscription.

Ironically, seventeenth- and early eighteenth-century women naturalists working on geographical peripheries, including explorers, like Merian, were working within a small window of time that allowed them a greater freedom to practice “science,” both as defined institutionally, hence enabling entrance into male discourses, and on their own terms; a small window of time in which the categories of scientific knowledge creation and dissemination were not yet so rigidly demarcated. Susan Scott Parrish finds that “knowledge making about American nature took place across inchoate and, hence, permeable boundary lines”; in return, “empiricism...gave authority where political empire took it away” (22). In other words, the New Science, in its early years, and out of necessity, gave leeway to colonial practitioners. The unintended effect of European demand for American specimens was a reluctant inclusion of “such a range of people in the colonies” (Parrish 15)—and even the odd woman⁵⁷—that a long tradition of voluminous

⁵⁶ Shteir locates a strict gender demarcation in scientific study in the early nineteenth century, when botanical science truly came to be understood as science, rather than as leisure, or “polite botany.” As Parrish notes, leisurely science and natural history “overlapped” in the early eighteenth century (177). Separate spheres calcified around 1830 and “women were pushed to the margins of an increasingly masculinized science culture. Some women writers of botany books updated and diversified their narrative forms, but others cultivated careers on the margins” (Shteir, 103). In *The Mind Has No Sex*, Londa Schiebinger adds that by the nineteenth century, “changes both in the structure of science and in the family served to distance female assistants from the world of science. A scientific wife became an increasingly private assistant, hidden from view within the domestic sanctuary” (261).

⁵⁷ As the century progressed, colonial women “were not to be institutionally included in that ‘American philosophy’ emerging alongside colonial agitation. As institutional opportunities for American men increased in the 1760s, curiosity became more fraught for women owing to the new national insistence on ‘female virtue’” (Parrish 17).

transatlantic exchange was launched.⁵⁸ Remarkably, Merian operated both within and without these institutional railways, finally falling back on her independent scholarship and the private execution of her science to occupy spaces of both colonist/native supplier and European/institutional recipient of this exchange. We can almost picture Merian and her daughter, exuberantly escorting hundreds of specimens and illustrations across the ocean,⁵⁹ for the final purpose of further examination, compilation, and publication. As her letter to James Petiver exemplifies, Merian, as a talented illustrator, color specialist, and even engraver, occupied a privileged position that authorized her to publish and sell her work as she saw fit. She was not immune, however, from the desire for recognition—"I perceive you have light of a great many persons who are willing to subscribe to my work concerning Surinam Insects, that is very acceptable news"—nor from the grip of ego—"I desire withal shal you would afford your advice whether or not it might not be convenient to dedicate one copy curiously painted, or varnish, accompanied with an epistle dedicatory, to the Queen of England."

The archives on Merian, including entries about the presentation of her work to the Royal Society in that institution's Journal Books and the British Library's collection of her epistolary exchanges with prominent scientists and Royal Society Fellows, demonstrate an active pursuit of this inclusion. This inclusion was tentatively granted for the cultural-historical reasons delineated above, and partly too because Merian was an older woman with elite artistic connections, both through her father and former husband. Merian's extant portraits, with the exception of one, enact her inclusion by staging a formidable woman of advanced years, surrounded by books and

⁵⁸ Although natural history practices in relation to the Americas could be argued to have begun as soon as Columbus landed, the late seventeenth and early eighteenth centuries launched a generic practice.

⁵⁹ "She and Dorothea departed on June 18, 1701, loaded with rolled vellum paintings, brandied butterflies, bottles with crocodiles and snakes, lizards' eggs, bulbs, chrysalises that had not yet opened, and many round boxes full of pressed insects for sale. Before leaving she arranged with a local man to send her specimens to market in the future...[she took] her 'Indian woman.' This nameless woman from Suriname would be part of the creation of her new book on America" (Zemon Davis 177).

specimens. Merian's age mitigates the threat her work posed, and even cultural ruptures, including a divorce, are overshadowed by her institutional rhetorical framing as exceptional. Of course, gender is here both its own cultural rupture and the basis of her exceptionality. Although Merian did emerge from the margins, in time, she still suffered (and continues to suffer) the same professional effacement as her stationary European counterparts.

John Gabriel Stedman, 1744-1797

Almost a century later, in 1796, John Gabriel Stedman published a popular history of the first Boni-Maroon War in Surinam (1773-1777). His *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam* is alternately a highly studied self-portrait, a stylized romantic tragedy of interracial love, a moderate argument for abolition, an eyewitness accounting of slavery's horrors, a tale of military in-workings, a description of Surinam's flora, fauna, and African and Amerindian peoples, and through the synthesis of all of these pieces, a natural history. Stedman began his life as the first surviving son of a Scotsman and Dutch woman. His father was a Captain in the Scots Brigade stationed in Holland, the very position that sent Stedman, in 1772, at the age of twenty-eight, and after years of desultory military life, to Surinam as part of an eight hundred volunteer rebel-fighting troupe (Collis 12). Guiana,

stretching from the Orinoco to the Amazon, had been a place of dream and legend since the days of the Spanish conquistadors in the sixteenth century. Somewhere among these impenetrable forests, mountain ranges and cascading rivers lay the mysterious Lake Parima; and on those shores was built the magic city of Manoa, inhabited by golden people, ruled by El Dorado, the Golden King. Here were gathered riches far exceeding anything discovered by Cortes in Mexico, or Pizarro in Peru. It was better than paradise:

one might hope to find and to enjoy it in this world, without waiting for the next. (Collis 56)

This area was also called “The Wild Coast” (62), and it certainly lent itself to adventure, if one could call it that. “The Wild Coast” was a landscape of heavy jungle, swampland, aggressive heat, merciless bugs, communicable diseases, and deadly skirmishes with marooning slaves—conditions so treacherous, that ninety percent of the Dutch forces did not return home (van Lier xiv). By 1772, slave desertion was rampant, and maroon communities were damaging and devastating plantations as well as securing colonial army outposts. Because it was clear that “the entire Cottica-Commewijne plantation economy was grinding to a halt,” the government began assembling a corps of trustworthy slaves, “The Black Rangers,” henceforth to be made free, who would join the struggle against the rebels (Price and Price xx). Stedman miraculously made it home in 1777, and a year later began the almost twenty year project of seeing his *Narrative* to publication.

In their critical edition of Stedman’s original 1790 manuscript—then heavily edited by his publisher (and editor) for the final 1796 publication—Richard and Sally Price detail the revisions between his original Journals of the expedition, the 1790 manuscript, and the final 1796 version. Through the revisions Stedman both made and grudgingly authorized, it becomes apparent that Stedman identified as a naturalist, who, like others who wrote before him in the generic tradition, was invested in a careful self-fashioning. The portrait painted downplays his sexual escapades while playing up his *honorable*, romantic interest in the slave woman to become his wife through “Suriname marriage,” a term used to describe non-binding “marriage” open to already-married white men (Price and Price xxxii-xxxiii). The greatest transformation wrought between Stedman’s Journals and his 1790 manuscript, then, was to evade discussion of

Surinam's normalized and "depersonalized sex between European men and slave women," instead drawing on the romance of Aphra Behn's *Oroonoko* (1688): painting an "exotic setting for a deeply romantic and appropriately tragic love affair" (Price and Price xxxii). While the 1796 final publication retained the important element of Stedman's youthful adventurousness, Stedman complained that the revisions made him seem too stereotypically bawdy (xlvi). In other ways, the final manuscript played it safe, particularly regarding Stedman's more radical pronouncements against slavery, which were either excluded altogether or tempered with sentiments like this one in the final preface: "it must be observed that Liberty, nay even too much lenity, when *suddenly* granted to illiterate and unprincipled men, must be to *all* parties dangerous, if not pernicious" (1796 xvii). Stedman's editor, William Thomson, was an apologist, but his publisher, Joseph Johnson, simply saw fit to allow the depictions of planter cruelty to provide the appropriate level of shock value, though these scenes were also carefully culled (l), and he remained careful about sidestepping the new sedition laws as well as moderating views that could lead to fewer sales (lxi). Text that matched Stedman's drawings, at least in its broad outlines, seems to have been left in.

What interests me is how and which of the revisions give clues about Stedman's project as natural history, specifically. Stedman's original manuscript, for example, used Latin quotations, a standard natural history generic convention, particularly in the early part of the century when Merian was working, meant to appeal to a readership of academicians and scientists. The elimination of the Latin in the 1796 version bespeaks a popularizing impulse, a shift in natural history consumption that deliberately opened *certain kinds* of science—in *certain doses*—to the general public. The fact that Stedman addresses himself directly to a female readership in his 1790 preface, while simultaneously titling his book, "With some Elucidation

on the History of that Country & the description of its Production viz Quadrupedes—Birds—Fishes—Reptiles, trees, Shrubs—Fruits & Roots besides an Account of the Indians of Guiana & Negroes of Guinea,” speaks to this paradox, too—natural history, as long as it is bound up with the personal, is accessible to all. In a second example, Stedman’s 1796 dedication was changed to now honor the Prince of Wales (his own revision), reminiscent of Merian’s dedication to the Queen, and again in line with the generic convention that saw natural history expeditions and commissioned works as the pet projects of royalty.

Though Stedman’s rank by the time of publication was that of Lieutenant Colonel, as he is listed in the 1790 manuscript, the 1796 version, for unknown reasons, lists him as Captain, two ranks lower (lii). This designation was likely meant to preserve a certain authenticity, to create a kairotic illusion, to make readers feel as though the narrative was both experienced and retold by the very same Captain Stedman. Simultaneously, while the text is heavily concerned with military in-workings and incursions, the lower rank listed tempers the significance of Stedman’s military career, giving greater latitude for his character to inhabit other roles, like that of naturalist, with authority. Regarding Stedman’s romance with Joanna, his mulatto “wife,” “descriptions of [their] deep emotional bonds...were in general either deleted or elevated to a purely literary plane, and the text was repeatedly rewritten to stress the inequality of their respective positions in society” (lvi). Price and Price cite a scene reminiscent of *The Odyssey*⁶⁰ in which Stedman stumbles upon Joanna, naked, bathing in a garden with female companions; Stedman’s gaze sends modest Joanna running off (lvii). This scene, drawing on pastoral traditions that frequently made their way into natural history writing about exotic, paradisaical, American locales, was edited out in the 1796 version. Finally, the over eighty engravings,

⁶⁰ Athena conspires to have Odysseus wake to find beautiful Princess Nausicaa bathing and frolicking naked with her maids. Nausicaa, like Joanna for Stedman, will become Odysseus’s ally and aide.

executed by eight known engravers, including William Blake, are, as Price and Price call them, “translation.” While all of Stedman’s drawings but one are lost,⁶¹ Price and Price speculate that, based on Blake’s other known engravings, at least part of the translation effected was the transformation of the drawings’ African and Amerindian subjects into “noble savages” (xxxvii).⁶² When we consider Blake’s “translations” alongside those of the other engravers’, the editor’s, and the publisher’s, as well as Stedman’s own body of contradictions within the work, we come to understand what a playground of competing agendas, interests, and considerations natural history as genre can be.

“From my youth, I applied myself to the study of Insects”: The Preface as Convention

Because defining genre, or the nature of a genre, or in this case, the natural history genre, is such a fraught enterprise, I look to Rhetorical Genre Studies (RGS), which I discuss in depth in the Introduction, and which stresses genre dynamism, to frame my discussion of natural history texts. The prefaces of Stedman’s 1790 and 1796 versions alongside Merian’s 1705 preface open a discussion of genre evolution and revolution, as inflected and infused by gender. Merian’s preface [**Appendix A**] reads quite differently from other narrative, natural history prefaces, which work to establish authority and credibility more aggressively. Merian, consistent with the letter to James Petiver that I cite earlier in this chapter, does not heed the convention of giving deference to those sponsoring the work, leading her reader to believe that she either self-published or had too many sponsors to count. Her vague proclamation that she “finally overcame this difficulty” of “expenditures” further lends itself to this mystery. Once more, her desire to be seen as a virtuoso, tied up in, and impassioned by, her work, rather than driven by financial

⁶¹ See Price and Price’s side-by-side comparison in *Stedman’s Surinam* of this watercolour with the final published engraving, xl-xlii.

⁶² This trope had wide appeal in natural history discourses. In Chapter Four, I discuss how Susanna Rowson redirects the “noble savage” trope from imperialist discourses to nationalist ones in the context of natural history.

concerns, induces her to claim that “it is not interest which made me undertake this work; I do not seek to recoup my cost; I have not spared either for the engraving of this paper, in order to please the connoisseurs, and those who study the nature of Insects and Plants and if I have met their expectations, I shall be happy.”

Merian’s preface summarizes her volume’s creation and publication in the context of a carefully crafted professional narrative. She participates in the tradition of designating the publication part of a larger natural history project, and duly notes that her work builds on that of other scientists. Where Hans Sloane, President of the Royal Society and the most illustrious naturalist of Merian’s day, references in his preface a Mr. Plumier whose Fern engravings alleviate the need to include certain Ferns in his *A Voyage to...Jamaica* (1707), likewise, Merian acknowledges Goedart, Swammerdam, and others as predecessors who had already contradicted the widespread theory of spontaneous generation. Including her own work alongside theirs, she “call[s] *with Mouffet* nocturnal Butterflies those who fly only at night” [emphasis mine]. The notion of science as cumulative—except in the rare case of requiring a corrective for erroneous knowledge—is prominent here. Though her work is entitled *The Metamorphosis of the Insects of Surinam*, Merian does not use the word “metamorphosis” anywhere in her preface, instead curiously settling on more generalized descriptors: collectors whose cabinets she visited, for example, “did not know [the insects’] origin or generation, that is to say, how the Caterpillars transformed in beans, or other changes,” and her seventy-two plates illustrated “in what manner, after changing shape, they change color and form and transform finally into Butterflies, nocturnal Butterflies, Bees in Buds and Flies.” The simultaneous ownership of, and retreat from, the exact nature of her scientific contribution was a condition of her marginal status as a woman who also provisionally occupied the liminal space of colonial.

While delicately navigating these conceptual categories of difference, Merian at the same time turns them in such a way as to elevate her contribution beyond that of fellow naturalists to whom she rhetorically gives deference. She does not neglect to tell her readers that she is literally painting her way into a new tradition, a new version of this genre, if not a new genre entirely. After all, hers is “the most beautiful work that had ever been painted in America.” Though she identifies the aesthetic aspect of her project as her innovation, she is making a case for herself as scientist, too, for she is both gifted artist and practiced entomologist: “I carefully painted these seventy-two plates on parchment on the scene in their natural grandeur, as well as they can be seen at home with the Insects dry.” In one breath, Merian tells her readers that she is both painting “from life,” and staging her plates. The Baconian inductive method, then, is key to both her artistry and her “examination of Insects,” wherein the staging itself constitutes conclusions (of a sort) derived from hypotheses derived from meticulous, daily “examination.” Otherwise, towards the end of the preface, Merian abjures the practice of arriving at definitive conclusions, and even hypotheses (of course her text still does both), claiming to leave these sometimes “delicate” debates to “others” (read, “men”). Again, Merian enacts her own inclusion in the New Science, and then withdraws this enactment, leaving the final endorsement of her inclusion to fellow naturalists. This generic performance—in which she swings on the pendulum between hubris and humility—(cleverly) rhetorically positions her as practicing naturalist.

Further, her rhetorical privileging of “observations” over “conclusions” signals her investment in Baconian eyewitnessing as the foundational mode of the scientific method and in the eighteenth-century model of revisable and collective knowledge production. Merian says that she could have “easily have extended [her] descriptions” to include conclusions drawn, but as a natural historian, “I am required to hold simply to what I observed, I am just giving *matter* to the

reflections of others” [emphasis mine]. The matter she is lending to the scholarly debate is that which is observed “on the spot,” “from life,” “after nature”; in other words, *new* matter, *privileged* matter from a firsthand observer-traveler-artist. With his publication of *Principles of Philosophy* in 1644, Rene Descartes ignited discourses around “matter” that continued throughout the Enlightenment. He defined matter as “extension” and “motion,” the implications of which for Merian’s usage of the term “matter” here are enormous. Descartes explains that motion can only be defined as that which moves in comparison to that which is stationary (as in, two moving objects are not actually moving) (Part II 51).⁶³ The substance, then, that Merian claims to be giving to “the reflections of others” are “extensions,” or lengthenings, widenings, and “motions,” or movement in a field of knowledge (on Surinam, on metamorphosis) which has, up until this moment, stood still.

The inclusion of *Metamorphosis* in natural history’s larger body of work hinges on its acceptance despite Merian’s sex, and yet the volume is executed without this full acceptance. A reliance on generic conventions like the interplay between hubris and humility clearly became a carefully chosen route of self-inclusion. Still, Merian was simultaneously—deliberately and cautiously—attempting to alter the tenor of the genre, to claim a space as woman to create something separate, better, new. That male naturalists, like Mark Catesby, later emulated her⁶⁴ suggests that this performance was convincing, and that ironically, the pushback against the novelty of her method, or in this case, its generic normalization, narrowed the space between male and female authored natural history writing, ultimately making room for Merian within this tightly guarded institution. Merian illustrates that science can be self-willed, and often must be in

⁶³ See Barbour, Chapter 8, for a full treatment of Descartes on motion.

⁶⁴ Aside from Catesby’s method of composition and folio-sized illustrations, Catesby’s preface echoes Merian’s: “the Expence of Graving would make it too burthensome an Undertaking , this Opinion, from such good Judges, discourage me from attempting it any further...At length...I undertook and was initiated in the way of Etching them myself, which tho’ I may not have done in a Graver-like manner.”

circumstances of exclusion. Conditions such as sponsorship and concerns over professional reputation did not apply in the same ways to women as they did to men. Writing from without ironically allowed Merian, as woman, the freedom to stretch the boundaries of the genre.

One such boundary stretching is Merian's unqualified native knowledge validation. In contrast, in Hans Sloane's preface, his relation of colonial remedies—a seemingly stunning act of native knowledge validation—is tainted by their simultaneous dismissal (“they think themselves relieved...,” “I...could never find them any way reasonable”) (liv). Merian's calculated act of reading nature through a native lens, giving the “Plants the names given them by the inhabitants of that country and the Indians,” heightens authenticity, conveying Merian, and hence her audience, as close to the ecology of that locale as any European body can be conveyed. Likewise, “narratives made me by the Indians” become an integral part of her larger “remarks” and “drawings.” The curious use of the word “narratives,” or stories in the form of medicinal recipes, plant uses, and native lore, that in this case double as scientific description, suggests a tension between personal and empiricist knowledge that defines the natural history project more broadly. These narratives, so interwoven with Merian's own, of her journey and “glocal” vision of Surinam, are transplanted across the Atlantic, then naturalized in Europe into “footnotes and nicknames given to them in Latin.”⁶⁵ What is lost and what is gained in this process of transplantation and naturalization is what a genre study like mine aims to probe.

* * *

Stedman's 1796 preface provides a fascinating comparison with Merian's, particularly when we consider how thoroughly it was edited and pared down from the 1790 version to conform to natural history generic conventions. Stedman authenticates his volume by calling it “a real history, totally unembellished with the marvelous...and ON THE SPOT, a circumstance

⁶⁵ Caspar Commelin completed the Latin translations for her 1705 first edition.

but very seldom met with.” Stedman implies that his narrative subjects, more often African and Amerindian peoples than flora and fauna, are drawn “from life.” Blurring the distinction between text and plate, a practice common in the natural history genre, Stedman indicates that his textual descriptions—originally notes in his Journal—are accurately depicted by the commissioned engravings (based on his personal sketches). Text and plate are meant to be read in unison, and together in Stedman’s work, they generate “perhaps one of the most singular productions ever offered to the Public,” echoing Merian’s “most beautiful work that had ever been painted in America.”

“Where TRUTH is the chief ornament,” a Baconian understanding of the visual as central to knowledge production is the foundation. Ethos is principally created by both Merian and Stedman in their reliance on visual “proof.” Stedman’s assertion of scientific authority through eyewitnessing, which presumably generates “on the spot” descriptions and artwork “totally unembellished by the marvelous,” coexists with narration that luxuriates in sensory description. Both visual modes—the scientific and the literary—transport the reader to the tropics. In the elaborate, literary metaphor of the garden that opens Stedman’s 1796 preface, Stedman depends on both modes. While the reader is the visitor, Stedman is the gardener, cultivating certain plants and not others, naturalizing the narrative, or the information that he has gathered from Surinam, returned to England, and grown there. As the purveyor of the garden, Stedman takes you on a tour: here is a plant, an animal, the commander, the rebel, here the atrocities, here Joanna, that “lovely slave,” remarkably equating all. The garden as empire metaphor figures prominently in natural histories, and Stedman’s impenitent “I,” though exposing the empire’s sins, likewise upholds, even cultivates, them.

Stedman's "I," his self-fashioning as a writer, explorer, politician, soldier, is as a "man" giving the "manly truth." So central to *Narrative* is Stedman's maleness, that he deliberately draws attention to a gender demarcation that is of course, already a given; Merian, on the other hand, makes no mention of her difference, instead working to assert a scientific persona. What this tells us is that gender predetermines scientific value, and hence truth. Where Stedman can take liberties with the genre itself—writing one of the most literary and imaginative natural histories of his time—and still call his work natural history, Merian must strictly abide by generic conventions in order to be included within the institutionalized space of natural history, and of course, allowed its privileged readership. Where Stedman can openly appeal to the "British Public" and rhetorically introduce the genre to a wider audience without the expectation of generic exclusion, Merian must fight for her inclusion and struggle for her book to reach a small number of subscribers.

In Stedman's 1790 preface, he reiterates, as Merian does, that "fact" and "truth" rely on sight. As I discuss in the Introduction, George Berkeley's 1709 *Essay Towards a New Theory of Vision*, defines sight as a process through which the brain filters sense perception and continually uses experience to arrive at an interpretation of what is seen. Though Merian claims she is simply giving "matter to the reflections of others," she is very much relying on the synthesis of her observational and sensory capacities in order to sort information, or draw tentative conclusions, which manifests in her plate staging and textual descriptions. Stedman claims that he is giving the "simple truth unmask'd," which are again *his* observations filtered through *his* senses. The illusion of a spontaneous "unmasking" of truth is conveyed through a visual "mess"⁶⁶ offered to all Ranks Capacities ages & Sexes without Distinction" (9), the originary

⁶⁶ "Mess" has dual meaning here—food and disorder—and is, by virtue of its military connotation, a masculine metaphor.

sentiment of the appeal to a “British Public” in the published preface of 1796 that bespeaks an impulse, through the New Science’s understanding of sight, towards the democratization of natural history discourses. In other words, in this highly mediated volume, in an intensely mediated genre, Stedman means for *Narrative* to supplant place itself.

Stedman’s emphasis on the “truth,” however, is also egocentric performance. He is simultaneously *not* “a writer *alamode*,” but an Officer tethered to truth-telling, “a man of Courage” who expects criticism but will not consent to its validity without arguing his case, and then “like the dying Indian Submit to my doom without a Shrink or Complaint” (7). And his heightened masculinity dictates that he not be beholden to public opinion, as many naturalists had been: “& now for my defence—D—n order, D—n matter of fact, D—n ev’rything I am above you all—” (7). Stedman’s self-conscious, rash intrusion into the natural history genre, he fully expects to be condemned, and yet this intrusion must be justified with the pretense of evolving the genre. It necessarily commits him to the body of cumulative knowledge making that characterizes the natural history: “the Colony of Surinam not appearing as yet to have been very much explored by any British Subject” (8), “my vanity will not permit me to pass by in Silence that I have Corrected many authors...Linnaeus himself has also been Guilty of imperfections—& in the Celebrated Miss Merians Surinam Drawings I pledge my Honour to point out many Faults—“(9). It is fascinating that Stedman traces the ancestry of the genre back to Linnaeus *and* Merian, that he feels the need to overwrite Merian’s contributions to European knowledge about Surinam. What is even more fascinating is Stedman’s fallback on gender as the cornerstone of his rightful inclusion in this generic discourse. As a “man of Courage” who appeals to young officers, as he once was, to use their “manliness” and “machless Valour” (11) to continue their imperial missions all over the world, Stedman draws on the trope of bravery and masculinity as

honesty incarnate. Truth through eyewitnessing, in other words, depends directly on this trope. Except when a woman uses it too—and, successfully. By citing Merian, Stedman reveals a deep-seated anxiety that gender alone does not by default earn him credibility and authority. Casting doubt on the scientific accuracy of Merian's work, serves the dual purposes of reinstating the ethical equation of man and truth, and of pulling back the limits of the genre to exclude women, thereby making his own volume once more credible science. If Merian's work on Surinam can be dismissed, so too can Aphra Behn's, and then really, so can Linnaeus's, since he relied mostly on Merian, and then the field narrows tremendously, and genre boundaries stretch tremendously.

If Merian includes herself by taking seriously that which makes natural history science, Stedman does the reverse, shunning method and organization, accuracy in dates, "from life" drawings in favor of "on the spot" cruelties, and even careful ocular examination of specimens:

My Narrative...has neither stile, orthography, order, or Connection—Patcht up with superfluous Quotations—Descriptions of Animals without so much as proper names—Trifles—Cruelties—...some of my Paintings are rather unfinish'd—That my plants fully prove I am nothing of a Botanist—And that the History of Joana deserves no place at all in this Narrative—Guilty...while as to an Oversight in the dates it Can matter but little if she makes her first appearance on a Friday or if I first landed in Guiana upon a Monday...[my Drawings] were Generally taken from Nature yet most of the Animals having been dead when they were brought to me...And in regard to my being no Botanist, I answer...the delicate investigation of Plants with Spectacles is not the work of one reader in one Hundred. (7-8)

Instead, Stedman is primarily concerned with his readership, and in turn, with a different kind of reading and narration. He expects that reading "Plants with Spectacles" would only be of interest

to one out of one hundred readers. Though he may in fact be that one curious observer, he gladly enfolds himself, and hence his narrative, into an imagined populace who demands story, not science. “The Linaen names may be easily added by the Connoisseurs...while the Cruelties ought to serve in deterring others from putting them in practice” (8): the focal point of his text is the “facts,” the very Cruelties, and these can only be accurately described by one who has witnessed them. While others “saw much & Encountered great Hardships...[their] Narrow Escapes & Wretchedness Comes no more in Competition with the fatalities that I have Experience’d than a trip o’er the Channel ought to be compar’d to the Adventures of Alexander Selkirk” (8).⁶⁷ In light of his terrific experience, Stedman claims, the science is trivial. It can be added later.

The literary metaphor of the garden as empire, then, so prominent in the 1796 preface, is fully developed here, with the role of the garden’s purveyor and cultivator clear and crucial. The “I” cannot be removed from this cultivation, nor is it in Merian’s work, nor in any other natural history. Stedman simply embraces the full promise of the genre’s literariness, complete with the admission of authorial anxieties surrounding generic inclusion:

But S’wounds I feel I am Stooping to Low—the native petulancy of my temper almost witholds my pen—I who present mankind with no less than 30 Laboreous Chapters in which natural History is promoted—the Olive Indian admir’d—the sable negro slave Supported—& the black European expos’d to the naked eye, while the whole is Variegated with the most beautiful Landscapes, & the Account of my military wanderings through an unbounded forrest—I who excibit alone a small Muuseum of above one Hundred Original paintings & who dare to Censure most other works of the kind in which eyther the writer of the painter have never seen the spot which they

⁶⁷ Alexander Selkirk was the prototype for Robinson Crusoe.

describe—while here both the first & the last are the works of my own hands—while even the ingenious Cowley has with satisfaction perus'd the one, & the immortal Reynolds with pleasure Contemplated the other—no—To see my work damn'd without Redemption—I Spurn the thought—And at all Hazards for the Laudableness of my motive do I think myself entitled to thanks from the publick, as well as to Reproaches for the Defects in the Execution—(10).

Stable Chaos: Surinam in the 18th Century

In the early seventeenth century, the Spanish laid claim to the land on the northeast coast of South America called Guiana, or as the Portuguese called it, “The Wild Coast.” Guiana’s landscapes of thick forestland and rough rivers made for difficult terrain, and neither Spain nor Portugal was able to seize the colony. The French, Irish, Dutch, and English all made attempts to colonize, but in particular “the British enterprises on the Guiana rivers...were...modest and hesitant” as James I expressly “discouraged...aggressive colonization of the region,” which would make enemies with the Spanish (Gallagher 328-329). Guiana was the stuff of legend, the El Dorado in Spanish lore. Sir Walter Raleigh propagated this legend in his natural history, *The Discovery of the Large, Rich, and Beautiful Empire of Guiana* (1596); two of his voyages to the region failed to recover treasure, presumably because the interior remained impassable. It wasn’t until mid-century that Francis Willoughby, who had already established a settlement in Barbados, settled Guiana. The first three hundred settlers came in 1651-1652, and a decade later there were some two thousand five hundred riverside plantations, “spread out...in a relaxed manner that reflected the confidence the settlers had in their compact with the Caribs...[and that] made overland traffic largely unnecessary” (329). Surinam was a small colony in comparison to

Barbados, but it worked quickly to import slaves and export sugar, and continued to do so when it switched hands in 1667, and the Dutch occupied it.⁶⁸

In total, over three hundred thousand slaves were imported to Surinam between 1668 and 1826 (Hoogbergen 1), all from the Gold Coast, the Slave Coast, and Angola until 1735, and additionally, thereafter, until 1795, from Sierra Leone.⁶⁹ Surinam's plantation economy grew rapidly, and "by the mid-eighteenth century...[Surinam was] producing more revenue and consuming more imported manufactured goods, per capita, than any other Caribbean colony" (Price and Price xii). Price and Price offer this brief statistical history of Surinam at this time:

an average sugar estate had a slave force of 228, more than seventeen times as large as contemporary plantations in Virginia or Maryland (R. Price, 1976 16). Likewise, Suriname's slave population, which came from a variety of West and Central African societies, contained an unusually high ratio of Africans to Creoles, and of recently arrived Africans to seasoned slaves. The colony's ratio of Africans to Europeans was also extreme—more than 25:1, and as high as 65:1 in the plantation districts. (For comparison, Jamaica's ratio in 1780, 'the highest in the British West Indies,' was 10:1 [Craton, 1975 254])...by 1773, heavy speculation, planter absenteeism, and rapid changes in plantation ownership were posing a serious threat to the colony's viability. In short, this was a maximally polarized society—some three thousand European whites, who must have sensed that their world was coming unglued, living in grotesque luxury off the forced labor of some fifty thousand brutally exploited African slaves. (xii)

⁶⁸ See Catherine Gallagher's "The Caribbean in the Triangular Trade," in *Oroonoko*, 326-334, for a summary of Surinam's early colonial history.

⁶⁹ For a detailed breakdown of the African peoples sold into Surinamese slavery, see Hoogbergen, 2-4.

This incredible rate of consumption, both of goods and slaves, ignited marronage,⁷⁰ with marooning tribes continuing to battle colonists and commissioned European troops, such as Stedman's brigade. Maroon life was at best precarious, a constant struggle against famine, particularly in the interior, swamps and swarms of insects in the coastal areas, Amerindian hostility, and the threat of capture and death (Hoogbergen 22). Two bands of maroons—the Ndjuka and the Saramaka—negotiated treaties (1760 and 1762, respectively) with the colonists that recognized their right to settle on the upper Marowijne and Suriname rivers, but that stipulated their cooperation in returning new marooning slaves back to their plantations. The Ndjuka's agreement specified that the government would provide goods and allow trade in Paramaribo, as the moratorium on the raids of nearby plantations would jeopardize the group's survival in the interior (Hoogbergen 21). By the late 1760s, however, newly active raiding groups had emerged past the Cottica and Commewijne River plantations, and though these groups were relatively small, their ability to disperse quickly, retreat, attack, and navigate the terrain gave them the advantage against European troops who were untrained in guerrilla warfare (Price and Price xix-xxiv). The Europeans did send guides and armed slaves ahead, but often warned the maroons of their advances by blowing horns—Wim Hoogbergen speculates that “after all, they were only mercenary soldiers who had let themselves be recruited in Europe in a moment of desperation” (16).

The First Boni War (1765-1777) pitted the colonial government against bands of escaped slaves, and turned decisively for the government with its victory at Buku in April 1772; the rebel leader Boni was finally defeated after five months holding siege to that swampland-surrounded encampment (Price and Price xx). Swamps carried racialized symbolic resonances in the

⁷⁰ For a short but comprehensive treatment of marronage in Surinam, see Hoogbergen, Chapter One. *The Boni-Maroon Wars in Suriname* comprehensively treats marronage in Surinam.

eighteenth century, as whites “increasingly associated the runaway slave with the tangled botanical skein, unstable ground, and mysterious impenetrability of the *pocoson*, or swamp” (Parrish 270).⁷¹ The Black Rangers, or a group of former slaves hired by the government to lead incursions on the rebel groups in Surinam, proved effective, and when Stedman arrived in February of 1773 with his volunteer corps, the swamps, for the moment, didn’t appear impenetrable (Price and Price xxii).

The obstructive forest and swampland that Stedman and his corps confronted in Surinam were however prohibitive, and were even moreso for Merian, who made attempts to travel and collect in uncultivated zones outside the more developed Paramaribo a century prior. Stedman and Merian describe the difficulty of this attempt at penetration—Stedman in pursuit of rebels, Merian in pursuit of specimens—similarly, and the attendant difficulty serves as a metaphor for the hunting of genre, the pursuit of recognition as naturalists in institutional byways. To achieve this recognition required, over the course of the eighteenth century, great personal risk-taking, a literal crossing into uncharted territory, with the hope of emerging sanctioned. For Merian, the collection of specimens required expert assistance in navigating the thick forests of Surinam: “one might find many more things in the jungle if it were penetrable. But the forest is so densely overgrown with thistles and thorns that I had to send my slaves ahead with axes in hand so that they could hack an opening for me to be able to get through in some way or other, which, however, was quite difficult notwithstanding” (Merian Plate 36 qtd. in Schmidt-Loske 17). For Stedman, the forests could not be penetrated without the aid of slaves and the hired “Black Rangers”:

⁷¹ For astute discussions on these resonances, see Parrish, 259-306, as well as M. Allewaert, “Swamp Sublime: Ecologies of Resistance in the American Plantation Zone.”

The foremost are generally two negroes, with bill-hooks to cut a way, so as to make a practicable path, with one corporal and two men to reconnoitre the front, and, in case of necessity, to give the alarm... when we arrived at the Society post Soribo, in Perica, in a most shocking condition, having waded through water and mire above our hips, climbed over heaps of fallen trees, and crept underneath on our bellies. This, however, was not the worst, for our flesh was terribly mangled and torn by the thorns, and stung by the Patat lice, ants, and wassy-wassy, or wild bees...The worst of our sufferings, however, was the fatigue of marching in a burning sun, and the last two hours in total darkness, holding each other by the hand; and having left ten men behind, some with agues, some stung blind, and some with their feet full of chigoes. (1796 105)⁷²

* * *

Stedman echoes Aphra Behn's erasure of Surinam as particularized geography in his dismal first description of the landscape, which is site of horror above beauty, emptiness above fecundity. On the first page of his 1796 publication, Stedman notes the "impenetrable thickness of the woods" (3), and his initial impression is "damped by the first object which presented itself after my landing...a young female slave, whose only covering was a rag tied round her loins, which like her skin, was lacerated in several places by the stroke of the whip...[a] miserable victim of tyranny" (12). It is only after his ship docks at Paramaribo, and the soldiers are welcomed like royalty by the Governor, that the gloom is momentarily obscured and Stedman observes the lush paradise he has been promised—"woods adorned with the most luxuriant verdure, the air perfumed with the utmost fragrance, and the whole scene gilded by the rays of an unclouded sun" (14). This moment tells us almost nothing about Surinam itself—it could be, really, anywhere—but reveals much of the author's (or editor's) desire to propagate a fantasy of

⁷² Stedman's Plate 20 (1796) offers a highly precise overview of the "Order of March thro' the Woods of Surinam."

the tropics in print for over two centuries. Stedman's original 1790 manuscript reverses the order of these impressions, telling us that on first landing, the "Air was perfumed with the most odoriferous Smell in Nature by the many Lemons, Oranges, Shaddocks &c with which this country abounds" (38), and then proceeding, "when stepping on Land" (39), to dispel this pleasant smell with the sight of the bound and tortured female slave. While the initial depiction of this citrusy paradise is more specific than is 1796's version, it is no more referential to Surinam in all its particularity than Behn's West Indian catalogue.

For Stedman, Surinam is imagined in recycled and recirculated ideas of the tropics and at the same time as a death trap. Each of these imaginings is filtered through an imperialist lens and neither allows for a conceptualization of Surinam as site of reproduction and life. Merian's Surinam, however, embodies a reproductive capacity that neither Behn's nor Stedman's slave societies do. Merian's "Surinam toad," Plate 59 in her volume, evokes fertility to an almost parodical extreme. As the grotesque toad swims under the water's surface, with a larger tadpole tailing it, Merian exposes the toad's innards by omitting from the image the exterior epidermis. Her text for Plate 59 tells us that

the female carries its young on its back; because it has the Uterus along the back, and that's where she conceives & nourishes the embryos, until they have received life, then they open a passage through its skin, and they come out as an egg, one after another. Once I had taken note of this, I threw the mother in ethanol with the little ones whose heads or bodies were already cut off. The Negroes eat these toads and find them delicate; they are a blackish brown, their meat to resemble those of Frogs, and those from behind to those of the Ducks. (1726 59) [Appendix A]

In the image and accompanying textual description, the toad's "uterus" stretches all across its back, and within the plate sprout, in various stages of development, about sixty-five offspring. The text, however, tells us that eggs emerge through a "passage" in the skin. Not all of the baby toads are eggs—some are tadpoles. Though this plate does not represent insects, Merian follows her project's frame by condensing the life cycle—here of the toad—into one image. The overarching sense of Surinam's productiveness, the sense that every crevice of that country unearths life, rather than death, is prevalent, and ironically, critical to a European conception of the Americas as ripe for exploitation. Teeming with life, this landscape symbolically promises the treasure of knowledge, while also acting as metaphor for the exponential growth of the colonial enterprise.

The image of the Surinam toad was reproduced again and again throughout the eighteenth century, and Merian was credited with its origination. This image is reproduced, by an "R.R.," in the Royal Society's *Classified Papers on Zoology, 1660-1724* (Cl.P/15i/36), and the twelfth volume of Linnaeus's *A General and Universal System of Natural History, Comprising the Three Kingdoms of Animals, Vegetables, and Minerals* (1794-1810) devotes an entry to the Surinam toad, finding that

Madame Merian, to whom we owe the first observations on this wonderful subject, mistakenly supposed that the young were conceived beneath the skin on the back of the mother. The fact is, that, after the eggs are excluded from the female and fecundated by the male, in the same manner with those of all other toads, instead of dispersing them in the water, the male collects them under his belly with his feet, and spreads them over the back of the female, where they stick close by means of the viscid liquor which surrounds them: by some unknown process, perhaps irritated by some property of the male seminal

liquor, the skin, or the back of the female tumifies, and forms little cells over all the eggs. In this singular situation, like an external matrix, the eggs increase in size, and the tadpoles are formed, perhaps more expeditiously than in the ordinary way, by the assistance of the heat of the female, and, when the young tadpoles are completely formed, they come out from the cells more advanced in their state of growth than ordinary tadpoles; having already lost their tails, which they were furnished with the early state of their existence. After they are all come forth, the female gets quit of the remainder of her cells, and of part of her skin, by rubbing herself against stones or vegetables, and the injured skin is renewed by a fresh growth...producing but one brood of young...the number of young produced by the female which [Fermin] observed amounted to seventy-five, which were all excluded within the space of five days...It would appear that the flesh of this toad is not unwholesome, as, according to Madame Merian, the negroes of Surinam eat of it with pleasure, and suffer no inconvenience from its use. (Linnaeus 137-138)

Merian began a century-long scientific debate and interest in the Surinam toad that occupied Linnaeus and others in the question of Surinam as reproductive and productive nexus of the larger West Indies.⁷³ Though by most accounts considered a Caribbean colony—in terms of its

⁷³An additional example of Merian's influence in this regard is Plate 71, the life cycle of the "frog-fish." Plate 71 was included posthumously in later editions (1719, 1726) along with eleven more new plates by Merian's daughter, Dorothea, but according to Kay Etheridge, was one of two plates (71 and 72) based not on Merian's own drawings, but on Albertus Seba's. The text does reference Seba, but as testament to the privileging of Merian's images over text, these two plates still managed to injure her reputation as they contained a number of mistakes and were believed to be hers (3). The "frog-fish" plate in Merian's posthumous edition was then used as the basis for a plate on "The Paradoxical Frog," "made famous...by Mad. Merian's story" in Linnaeus's volume *A General and Universal System of Natural History, Comprising the Three Kingdoms of Animals, Vegetables, and Minerals, Arrange Under Their Respective Classes, Orders, Genera, and Species*, Vol. 12, containing the "Surinam toad" (Linnaeus 152-153). You can compare Merian's Plate 71 in the 1726 French edition with Linnaeus's artist's rendering, Figures 1-12 in Vol. 12 of *A General and Universal System*.

On January 1st, 1759, George Edwards published his "Account of the Frog-Fish of Surinam" in the Royal Society's *Philosophical Transactions*, 1759-1760, Vol. 51 (653-657), then presented this account to the Society on March 27, 1760. In this account, Edwards acknowledges that Merian and Seba both observed the amphibian's

heavy and early participation in the triangular trade—the existence and interest in the Surinam toad, launched by Merian’s provocative plate, locates Surinam as a unique, *South American*, colony, one sharing some environmental features with others in the tropics, but ultimately set apart by its verdant forests—the highly idiosyncratic setting of Stedman’s volume.

The self-sustaining maroon slave communities living in this forest hinterland, revolting continuously throughout the seventeenth and eighteenth centuries, only thrived due to Surinam’s topography. In her critical edition of *Oroonoko*, Catherine Gallagher’s image of one land mass eons ago connecting, like puzzle pieces, Guiana and Guinea, South America and Africa, is an apt one if we are to envision Guiana as an extension of Africa through the forced migration of its peoples, who then escaped their enslavement, and continued living as West Africans in independent agrarian communities halfway across the world (326, 330). “As if testimony to their primeval adjacency,” Gallagher says, “Guinea and Guiana share many natural features such as vast tropical forests and navigable rivers” (326), familiar landscape to Africans while wholly unnavigable to Europeans (331). A crucial participant in the triangular trade’s maniacal sugar production from the outset of its establishment as an English colony in 1651, Surinam, “in spite of the designs of its European colonists, became a cradle of self-governing African settlement in the New World” (331). Ironically, Suriname endured as a “cradle” or hotbed of revolt throughout

“changing from a frog [tadpole] into a fish.” He includes the full textual description accompanying Plate 71 in her volume, and reiterates that the models for her plate came from Seba’s collection, though she observed “great numbers in the river of Surinam”; the implication here is that they were not drawn “from life” as were the rest of her subjects. Edwards says that his illustrations “grossly cop[y] Mrs. Merian’s five figures from Plate LXXI, the better to explain her descriptions” (653). In addition to these five copies, Edwards presents the same subject “drawn and engraved immediately from nature, of the size of life, which on comparison, I find to be more than double the size of what Merian has figured in her book, plate 71. which inclines me to think this before us to be specifically different from Merian’s” (655). From here, Edwards introduces a small group of preserved tadpoles, that “doubtless...produce a species of frogs different from the European, and perhaps are the same that Merian and Seba describe as changing into fishes.” Finally, Edwards reluctantly concludes that Merian and Seba may have erred: “it seems strange, that a tadpole should first be changed into a frog, and that the self-same frog, by a reversed process of nature, should change again into a very large tadpole...and finally change into a fifth, as in Merian, table 71. fig.5. It seems very strange, that another tail should grow from the frog that hath lately lost one, and that he should gradually lose his legs, and become a perfect fish. Nature, in her ordinary course, is not accustomed to act in such a manner: backwards and forwards, to seem to perfect a work, and then reverse it by a process directly opposite” (656).

its early colonial history despite switching colonizers from the English to the Dutch in a 1667 conflict. The Dutch had possession throughout the eighteenth century, and in contrast to British islands Jamaica and Barbados, which “belonged wholly to the trade” (331), Guiana’s deserting slaves ensured that it never did. Finally, the relations of “perfect Amity” between the Brits and natives that Behn outlines in the beginning pages of her novella,⁷⁴ and the mutually constitutive influences of the African and Amerindian autonomous communities living in the forests, further troubled the linear colonial narrative told and re-told throughout the Atlantic triangle.

Surinam, then, was an anomaly. Reading its rich cyclical history of settlement and rebellion, and its resistance to a sweeping plantation economy (despite its economic status as such) as a form of stability that cannot, by definition, be applied to the West Indian colonies, accounts, in part, for my juxtaposition in this chapter of Merian and Stedman, whose work was published almost a century apart. Surinam’s distinctive topography, its incessant pull on the tropics-preoccupied European imagination, and its relative stability as unstable nexus of slave revolt in the larger West Indies, despite its changing colonizers, warrants this critical practice. No other colony simultaneously represented so many competing promises and agendas and yet changed so little in circumstance—for military incursions never prevented further marronage nor were there successful large-scale revolts⁷⁵—over that one hundred year period. It was Merian, who, in 1705, at the height of the influx of African slavery, captured the sense that should human lives be ceaselessly upended, Surinam’s natural habitats would remain unchanged, itself an

⁷⁴ Gallagher substantiates Behn’s claim that relations were indeed mostly amicable (327). It was the Dutch who, according to Stedman, exacerbated these relations: “The Dutch for the first few years enjoyed little satisfaction in their new possessions, as they were daily harassed by the invasions of the Caribbean Indians, to whom they were much more obnoxious than the English had been: indeed they carried their resentment so far as to murder several of the Dutch settlers” (1796 28).

⁷⁵As Gallagher notes, Surinam’s smaller-scale rebellions made them more successful than those attempted in Barbados for example, where the revolts in “1675 and 1692 were all-or-nothing actions in which the slaves projected taking the island in its entirety and then defending it against reconquest by the British” (333). There was also nowhere the Barbadian rebels could hide or retreat.

ecologic perspective. That the colony would endure as a mythical paradise, a trove of scientific knowledge while all else imploded and exploded around it was central to the fantasy of the Americas propagated by the larger project of the natural history genre, and crucial to Merian's "glocal" orientation. Naturally, Surinam's landscape changed tremendously over the course of the century as African slaves and Europeans arrived, but the sense that the landscape would not be given over wholesale to white planters, that the disastrous effects of a plantation economy on Surinam's ecology could be slowed, served as a powerful fancy for Merian, who was invested in the localized insularity of her depicted habitats and simultaneously in the marketability of this ecological fantasy. The implications of this myth-making reverberate throughout my reading of genre.

Contact Zones

Merian, Plate 1, Pineapple and Cockroaches

In this plate, the pineapple is foregrounded and mimicks the leaves in their expansion, hence overpowering the composition. By including the pineapple as her first image, Merian thrusts herself into an ongoing botanical conversation and simultaneously exoticizes her own remarkable work. As the cockroaches hover around the prickly pineapple, we are infected by the cockroaches' appetite for this sweet fruit, an exotic rarity that almost no European—except perhaps royalty—had tasted fresh in the seventeenth and eighteenth centuries. Beginning her book with this fruit sent a clear message to Merian's subscribers—this volume would be opulent and non-replicable. The beautiful literary description of the leaves—"long, outside a green sea, and within a green prairie, with reddish edges and filled with enough high peaks"—pulls us into a sensory experience of this natural wonder and metonymically reflects the greater Surinamese ecology in the small pineapple fruit plant. Merian's Cockroaches are an integral part of the

composition, drawing our attention, through their carefully directed antennae, to the pineapple, steering the composition to the center by pulling to the right and balancing the left-leaning pineapple, and finally by enclosing, as though in an oval frame, the fruit itself. These creatures are nuisances and even destroyers in Merian's text [**Appendix A**], but they are respectful of the beautiful pineapple, not feeding on it in the plate, as they might. Merian's textual description of the Cockroach focuses heavily on its behaviors, proclivities, even personality. Cockroaches are important agents in this New World, "gnawing" and "casting seeds" and "eating through the hull" and "destroying," and even possessive of a sense of humor.

As in all of her plates, the central act that concerns Merian is reproduction. How the Cockroaches "hatch," morph, slough off skin, inhabit or empty their "sacs," exit and enter private spaces, and of course raid and eat the pineapple, is the prime fascination here. Each of these acts is consumptive, but that does not mean that there isn't a parallel strain of sustainability present. Merian's curious decision in this plate—and in many others—to pair the most attractive with the most repulsive, strategically highlights the beauty of the insects she so admired and suggests that if we look closely, what we see in the natural world is both a mirror of human life and a vision of the peacable coexistence of God's creatures. Beginning with the familiar and revered pineapple and relying on the "learned men who have spoken strongly on this fruit," Merian immediately brings Europe to Surinam, reinforcing imperial modes of knowledge production; however, her own science and marvelous, ecologically-driven art proceeds to reject those modes by allowing the insects and plants to speak for themselves.

The language around the Cockroaches, their entries and departures, their perpetual movement, mirrors the workings of the natural history genre, and genre in general. The very way Merian frames this first plate—the revelation of the glorious pineapple as it blooms, surrounded

by the metamorphosing Cockroaches—implies her own commitment to glorifying and revolutionizing the genre all in one. One way in which she does the latter is by turning the provocative trope of feminized nature conquered, and subsequently defiled, on its head. The Cockroaches are simply fulfilling their instinctual needs, here their love for “sweet things,” the result of which, the actual devouring of the pineapple (not pictured), is a natural, rather than invasive, process. It is Merian’s gender that allows her to see beyond the boundaries of this imperialist trope, and ultimately to think “glocally.” Merian suggests that nature’s micro-conquests organically have alternate outcomes, namely the perpetuation of life cycles and cycles of predation, and the continuance, unaltered, of species and environmental processes that had been in existence for centuries. In documenting this scene and others “from life,” Merian illustrates that a woman “eyewitnesses” differently, and the implications of this shift in focus are enormous.

Stedman, Plate 64, “The Musk Melon, Water-Melon & Pine Apple”

For contrast, take Stedman’s pineapple Plate 64 from the published 1796 edition. Far from taking center stage, the pineapple here is grouped with two other melons, the musk and the watermelon. The drawings of each are indistinct, not scientific or aesthetically beautiful. They are fully decontextualized; the melons are specimens only, not shown in their natural habitats, or in their stages of growth, except for the equally indistinct smattering of seeds above the watermelon. The embedded textual description of this plate [**Appendix A**], on the other hand, is both minimally scientific and highly vivid: “the shape of this fruit is nearly oval, the size of a sugar-loaf, all over chequered, and of a most beautiful orange or golden colour, being crowned with a sea-green tuft” (337). Stedman draws on Merian’s description when he calls the leaves of the pineapple “an elegant sea-green” (337), and equally so when he channels the regality of this

fruit and its hold on the European imagination by calling it “the imperial fruit.” Stedman informs us that the wonder this fruit elicited inspired the fruit’s transatlantic exchange so successfully, that its “delicious taste and flavor...has in the space of half a century become so well known, that I have introduced it merely to notice its *plenty* in the country I write of.”

In a stunning departure from the exoticism and rarity the pineapple represented in the early eighteenth century, Stedman writes that by late century, “so spontaneously indeed do the former grow in this climate, and of such different kinds, without any cultivation, that on many estates they serve as a common food for hogs” (337). In other words, Merian’s choice to open her singular volume with the correspondingly rare pineapple would no longer, by 1796, have awed the European reader and drawn him into this exotic locale.⁷⁶ Stedman’s image of pineapple as waste, left to the hogs, starkly contrasts Merian’s composite portrait of the fruit as the source of the Cockroaches’ “extraordinary inclination,” its succulence the very reason for its exceptionality. For Stedman, it is “the imperial fruit” because it belongs now to the European myth of the New World; it has been naturalized in Europe and acculturated in the European mold. It is tropical insofar as the system of colonization has defined it as tropical, and not organically, locally so, as it evidently was for Merian. The European “hogs” have brutally plundered, defiled, and devoured its exotic value; if the pineapple is feminized nature, it has now been fully conquered. Stedman’s matter-of-fact remarks enact this conquest and suggest that, even as he laments slavery and the thrust of colonial life and rebellion in Surinam, he unequivocally works in the service of empire. The consumptive and degenerative ecological processes he records, like those of the hogs feasting on the pineapple, do not inspire a

⁷⁶ The allegorical and cultural resonances of the pineapple in Enlightenment thought have been productively explored in eighteenth-century studies. See Sean Silver’s article “Locke’s Pineapple and the History of Taste” for just one example. Richard Ligon, in his 1657 *A True and Exact History of the Island of Barbados*, was perhaps the first European to opine on this regal fruit, calling it “the Queen’s Pine.”

preservationist instinct, as they do in Merian, and melancholy is reserved for the human realm only (slavery, romantic love), rather than for nature's substantive losses.

Merian, Plate 23, Blue Lizard and Banana

In this plate, what strikes me again are the rounded edges of the butterfly wings, the banana, the lizard eggs, the curve of the lizard's tail, the teeny-tiny little rounded tail of the baby lizard on the edge of the round leaf. Moving counter-clockwise, we see the life cycle of the caterpillar, starting in the middle of the frame, and resting on the banana leaf and moving to the cocoon atop the banana, the side view of the butterfly, and then the frontal view of the flying butterfly. The lizard here again balances the composition, weighing it left, since we already have the rounded downward bellies of the banana, the oval stalk upon which the eggs sit, and the belly of the lizard for the downward pull, and the tensed cocoon and butterfly wings and curved lizard tail for the upward pull. This plate is remarkably fluid and this fluidity is reflected in the incantatory rhythm of the text. The lizard, though superimposed onto this habitat by Merian's own admission, feels naturally placed here and does not interrupt the life cycle of the caterpillar turned butterfly, instead its rounded form and little eggs and tiny baby lizard creating the impression of a perfectly-balanced ecosystem, of a natural Elysium. Here, she employs both taxonomic and holistic approaches, staging her lizard alongside the caterpillar, butterfly, and banana to complete, or round out, her composition, bringing relational order, the very goal of taxonomy, to two distinct natural processes—that of the metamorphosis of caterpillar into butterfly on the banana plant and the birth and death of the baby lizards—and symbiotic order, the province of ecology, to these same events. Merian's performative staging of this holistic habitat once again reveals her "glocal" orientation by placing her ecological and imperial investments in tension: to maximize the global saleability of the knowledge generated by this

plate, Merian must market the ecological fantasy made complete by the superimposition of the beautiful blue lizard.

Plate 23's attendant description [**Appendix A**] likewise exemplifies Merian's "glocal" investments. The scenes described both expand transatlantically and contract on the physical page, once again as a metonym for the operation of genre. Merian locates the brown caterpillar on the banana tree, the blue lizard in her Surinamese yard, and the hatched baby lizards on her transoceanic journey's ship. But the narrative spans across time too, for it takes the brown caterpillar seventeen days to morph into a beautiful blue butterfly, and the blue lizard's eggs hatch and die en route home to Amsterdam. We are to ostensibly imagine Merian's daily return to the banana tree, but we are left without knowledge of the precise location of this banana tree: has it been cultivated on some plantation Merian is visiting? Does it grow wild, and if so, where? The caterpillar is aptly named "Little Atlas," for something about the blue lizard's attempted transatlantic journey has inspired Merian to pair these tiny world travelers in one plate. Perhaps too it is the aesthetic coordination of their colors, as Merian always works in the service of art's beauty. Or perhaps it is the little creatures' shared appetite for the "soft" "flesh" of this fruit, though strangely, Merian does not tell us so.

Stedman, Plate 36, "The Spur winged Water hen of Guiana" and "The Red Curlew of Surinam"

In Stedman's 1796 publication, "Azure Blue Butterfly of South America" and "The Plaintain Tree, and the Banana," Plates 29 and 38, respectively, are fit matches for Merian's Plate 23; however, a more constructive comparison can be made with Stedman's split Plate 36, "The Spur winged Water hen of Guiana" and "The Red Curlew of Surinam." In the top half of the plate, we see a pair of water hens (Stedman tells us that "they are always seen in pairs"), one angled down towards the water it stands in as it searches for food, the second angled up with

spread wings, taking off on its flight, in the opposite direction. Similarly, the red curlew pair on the bottom half of the plate face away from each other, here the one on the left facing forward with half spread wings, the one on the right, with lifted leg, angling down and to the right, presumably in search of fish-food on the riverbank on which it stands. Both pairs of birds are foregrounded and disproportionately magnified—a common enough feature in natural history art at this time, and for example, reflected in William Bartram and Mark Catesby—against a backdrop of what appear to be a plantation and a river replete with faded merchant ships and a docking yard adorned with the Dutch flag. The two halves of the plate feel like interchangeable, mirror images. The bottom plate’s docking yard is the top plate’s palm trees and plantation property, the faded ship between the two red curlews on the bottom, the top half’s two small houses/shacks, and the merchant ship on the bottom right the almost-dead tree on the bottom right of the top plate. These images match almost one-to-one in size and shape and placement on both halves of the plate. The birds themselves match in size and are diagonal, rather than fold-over reflections.

In direct contrast to Merian’s rounded, detailed Plate 23, Stedman’s Plate 36 is a study in incongruity, disunity, disjointedness. Though he manipulates the verity of representation in the bottom half of the plate by illustrating a pair of red curlews rather than the “amazing flocks” he describes in his text, presumably to mirror the top half of the plate, there is no ecological investment here. Instead, the birds’ oval bodies terminate in sharp edges, their necks and wings create Vs rather than Os. They turn away from each other; nor do they engage the reader/viewer. Though Stedman ostensibly encounters the birds while hunting in a coastal area, or their natural habitat, the plantation is easily discernible in the background. The water hens and curlews tower above and across, but not *away* from the plantation, the river. There are no birds to be found

anywhere, drawn anymore, Stedman seems to say, without acknowledging the radical changes human interference has wrought on the Surinamese landscape. Nothing feels alive in this plate—not the sole, sickly-looking tree, not the unpeopled houses on the plantation, not the static flag on the docking yard, not the frozen-in-time-and-space water hens and curlews, clearly drawn from rigid, dead specimens, rather than “from life.”

Even more remarkable is Stedman’s embedded textual description accompanying this plate [**Appendix A**]. It is Joanna, a slave, and Stedman’s lover-turned-wife, who is “straying with me through a watery savanna,” and who, according to the 1790 manuscript, “point[s] to a bird which she desired me to shoot and which I did” (1790 274), though this small act of agency on the part of Stedman’s “young Mulatto” is tellingly excised by the editor of the 1796 edition. Otherwise, Stedman’s text, aside from numerous punctuation normalizations, remains intact. The vibrant color description of the water hen—“a deep cinnamon colour, between red and very rich orange; the neck and belly are perfectly black”—echoes the later description of the curlew—bright scarlet or crimson, some not lighter than *the colour of blood*...they are seen in such amazing flocks, that the sands seem *dyed with vermilion*” [my emphasis] (185)—and is no doubt the reason they are juxtaposed in this plate. Stedman simultaneously alludes to the work of coloring in natural history art and the imperial apparatus that erected the natural history genre as the world’s painter.

Though the plate’s image does not replicate the color-immersive experience of viewing these “amazing flocks” as one body, the text itself taints the page with its powerfully vivid descriptor: the birds are “the colour of blood.” For Stedman, violence had become an intrinsic mode of knowing Surinam, so it is no accident that his birds are stained with a deep, blood red, that they are “armed on each pinion with a short and sharp horny spur,” that they are heard

“whistling from their throats,” as are the slaves trudging through swampland to warn the European troops of rebel encampments. Fitting too, with Stedman’s imperial, global investments, that his Guianese curlew, though of an entirely different species, is in the family of the flamingo, “seen in Canada and many parts of North and South America, and which is supposed to be of the crane kind, with its body as large as that of an European swan” (185). Mapping Europe onto Surinam is only one manifestation of empire-building through this genre, a manifestation Merian noticeably, consciously avoids, instead riding a middle course and treating each specimen “glocally,” rather than globally. Stedman proceeds to call the red curlew a “flamingo,” deliberately allowing the European designation to eclipse the Guianan one. Rather than a marvel of science, a symbol of nature’s fecundity, as it is for Merian, the reproductive cycle for Stedman is a metamorphosis of color that ends in death rather than in life—“the flamingo lays always two eggs, which, when hatched, the chickens appear black, next grey, then white, as they come nearer maturity; and final the whole bird becomes a bright scarlet or crimson, some not lighter than the colour of blood.”

Merian, Plate 18, Spiders and Ants

In Plate 18, the perfect guava fruit and the proportional egg-like abdomens and heads of the spiders are juxtaposed against crisp lines: the langly limbs of the Spiders and tree branches and falling, munched-on leaves. A great deal is happening here as the large spider on the right appears to pince a tiny ant, the spider on the left devours a still exquisitely colorful dead hummingbird, ants make a bridge from limb to limb of the tree, and a smaller spider captures an ant in its web. The composition itself is a complex web representing life and death at work, and conveying Merian’s sentiment that “the ants are always at war with the Spiders and Insects of this country,” though this war is natural. The language of war, or here, of predation, among New

World insects, is not bemoaned as it is in William Bartram, for example. Ants “armed with curved teeth” are a part of this beautiful web of life. The rounded, slightly oval guava fruits form an imperfect, left-tilted circular frame with the egg-shaped abdomens of the three larger spiders in the upper left, lower left and middle right. The four tiny hummingbird eggs in the nest above the lower guava fruit replicate this frame, only latitudinally, rather than vertically, and the nest itself is directly in line of the falling leaves, an ant on the tree branch inching towards it, the antennae of the insect in the process of being eaten by the ants. The ant wing color matches that of the guava fruit. The proportionality and magnification of this plate are astonishing: the upper left quadrant appears more distant, and as the webs the spiders have woven ripple out, so too does the plate zoom in on the two larger spiders, the guava fruit, the dead hummingbird, and the stalk of the tree. Processes of predation, death, and destruction in no way preclude Merian’s ecological orientation here; to read this plate metonymically is to imagine that Merian rejected slavery and consumption as the definitive destructive forces to New World ecologies.

Merian’s textual description [**Appendix A**] follows this same circular framework, beginning with the spiders, moving to the ants, then back to the spiders, and finally to the hummingbird. Her description of the ants echoes that of Plate 1’s Cockroaches, entreating us to see her project as one large representation of a larger, highly intricate network of life processes: “they come out from their caves in countless swarms...men are obliged to flee as they enter room by room by troupes.” Hummingbirds, for their part, are compared to marvel-inducing peacocks, and of prime importance are the mutually sustaining food reliances of insects on the plate, as well as of humans and animals outside the plate, including “Surinam hens,” which eat ant eggs, and “priests,” who, like spiders, relish the hummingbird for its meat. This involved “ecosystem” again bespeaks Merian’s “glocal” orientation. Her comparison of the unfamiliar and

the familiar, of the hummingbird and the peacock (well-circulated in imperial natural history discourses), is a generic convention. Her complex integration of humans within this scene works on two planes: it both registers a colonial presence and suggests a profoundly transformative human-nature alliance that sees humans and spiders competing for the same food source.

In line with male generic convention, Merian boldly asserts her right to publicly produce the new knowledge embodied in this plate and description, and to correct those “facts” that have been documented incorrectly by other naturalists: spiders “do not spin long Coccoons as some travelers would have us believe,” “the ignorant call these small beans eggs of ants, but they are wrong because the ant eggs are much smaller.” Her observations are keen and scientific, and yet her text, for this plate in particular, exemplifies the intense literariness of the genre. Once more, her insects are sentient actors, for they make bridges, bite, make war, hibernate, attack, devour, terrify, and even make it look like Winter where there is none. In her words, “they do as well as men can do.” The use of anthropomorphism, analogy, and metaphor—techniques used by imperial naturalists that are sometimes employed taxonomically, sometimes literarily—here plant the reader into this scene of predation and reproduction in medias res. The reader/viewer experiences this scene as an observer (from the outside) and as a participant (from the inside). This dynamic tableau and its description render Merian too, as naturalist-illustrator, and alongside her reader, both invisible and invasive in the habitat. Merian’s overarching claim to illustrations “from life”—certainly the sentiment in this remarkable plate—also acknowledges multiple other levels of the naturalist’s intrusion, from the practice of staging plates to that of basing foundational knowledge on human-flora-fauna analogy. At the same time, Merian’s symbiotic focus, her “time-lapse of life cycles” as Kay Etheridge calls it, and the giant folio-sized plates that allowed for a full observational and sensory experience of a plate like this one,

literally and symbolically magnify her ecologic point-of-view. Nature should operate unimpeded—an “environmentalist” view. And yet, that her audience could “eyewitness” almost as nearly as the naturalist herself does, from home, epitomizes the “glocal” orientation. The audience is central, after all: the spiders Merian chronicles have already traveled globally even as the home-viewer looks upon a dynamic ecosystem that ironically appears undisturbed.

Merian also negotiates her preservation ethic through gender. She appears to engage the male tradition of feminizing and sexualizing nature through the parted leaf lips of the oval guava fruit, as well as through the labial falling leaves, their lip shape if we turn the plate horizontally. Neither is the falling of these leaves towards the nest of hummingbird eggs an accident. Reproduction, not death, is central. These observed processes constitute the definitional focal point of her work, with nature itself exhibiting an auto-reproductive capacity. In the male-authored natural history, it is instead the colonizing apparatus that catalyzes production: natural fecundity is witnessed, then penetrated, and finally reproduced through knowledge by the imperial eye. Merian’s nature is feminized and sexualized not *in deference* to a male tradition centrally concerned with the conquest of the fertile natural world, however, but *in the service* of an ecologic orientation distinctly female, in opposition to that tradition; nature’s wholeness and reproductive capacity is threatened, not improved by, colonialism.⁷⁷ Though Linnaeus was the first, in the mid-eighteenth century, to use the modern gender symbols for male (♂) and female (♀), variants of these images were in circulation for centuries prior (Stearn). Was Merian subliminally channeling this now-feminist symbol with her tilted guava fruit so prominently dangling at the bottom of this evocative plate?

Stedman, Plate 55, “March thro’ a swamp or Marsh in Terra-firma”

⁷⁷ Richard Grove argues that environmentalist discourses circulating as early as the fifteenth century were concerned about the destruction wrought on fertile landscapes by imperialist ideology and “improvement,” and that these concerns did in fact influence colonization projects.

Before arriving at the accompanying text for Plate 55, “March thro’ a swamp or Marsh in Terra-firma,” engraved by William Blake,⁷⁸ Stedman tellingly gives three vivid natural history descriptions, the latter two attended by plates, of the ant, vampire bat, and mouse opossum, two of which reference Merian’s contributions. Stedman’s crossing of the Cormoetibo Creek towards the Cottica river is interrupted by the ant species Merian describes in Plate 18: “Madame Merian, says, they form themselves in chains from one branch to another, while all the others pass over these temporary bridges; and that once a year these formidable armies travel from house to house, killing all the vermin, & c. that come in their way; neither of which facts ever came within the limits of my observation” (296). On the morning of the campaign illustrated by the plate, Stedman wakes to his body “weltering in congealed blood” (298) from the bite of a vampire bat. Of the mouse opossum, there are many “erroneous writers on the subject” including “Madame Merian [who] mentions one kind of them, which in time of danger, carries its young ones upon its back: but this animal, I confess, I never heard of in Surinam, and am persuaded of its non-existence” (300). The text for Plate 55 [**Appendix A**] is of a decidedly different tenor, drawing on the rich tradition in the genre of dramatic storytelling, which Stedman makes the centerpiece of his hybrid volume. That Merian must be acknowledged to only then be dismissed as in error, underscores the highly masculinized endeavor Stedman is about to describe and illustrate, his “March thro’ a swamp or Marsh in Terra Firma.” That he must stage this march by challenging and crossing the ant army, surviving the attack of the vampire bat to then chop off its head and display it “as a great curiosity” (299) in the accompanying plate, and dismiss the greats of the genre in one fell swoop, not only Merian, but Linnaeus and Seba, too

⁷⁸ Parrish discusses this plate briefly as well, 266-271.

(300), allows Stedman to stake his claim to the genre by capturing the dangerous and marvelous at once, and positioning this conflation as flagrantly male.

Plate 55 is a fit comparison for Merian's Plate 18, as it is equally busy, each corner of the plate active, only this time, with people. This key difference tells us much about how gender informs genre. It is not simply that Stedman's volume details his military campaign against marooning slaves, but that Stedman's entire orientation is imperial—the white soldiers and their slaves must trudge through an unyielding swamp to quite literally force their way to the other side, into what defines this place as place. Surinam can sustain this penetration only if it ceases to be Merian's Surinam; hence, by the 1770s, Stedman can no longer observe bands of ants building bridges or opossums carrying their young on their backs. By the publication date of 1796, the genre itself has moved even further towards impurity and hybridity, and can no longer account for place as singular.

Stedman's Plate 55 is unique, however, in its depiction of an incursion into rebel territory with the help of a volunteer corps of "black rangers." In contrast to Merian's Plate 18, Plate 55 is terrifically disjointed and angular, beginning with the muskets of the soldiers, which are aimed both right and left, pointing fingers, angled swords, turned heads, pointy palm trees. The bodies of the soldiers and slaves and the faded shapes in the background are empty of movement, frozen in time, hardly suggestive of the drama and treachery of the swamp crossing the plate is meant to portray. The eyes of the soldiers are similarly devoid of life and the large figure of the white soldier in the front center is oddly disproportionate in contrast to the "Black Ranger" in the forefront. The rectangle created by the four central soldiers and their lifted muskets excludes the two slaves on the left of the plate, front and back, and freezes the soldiers in a tableau of dislocation: the place does not befit the soldiers, nor do the soldiers befit the place. Feminized

nature is parodied in the image of the center back soldier (presumably Stedman himself, weak from a “late loss of blood”), posed as in early depictions of nature as goddess and muse, parallel to, but larger than the typical female “noble savage” depiction, here a slave carrying provisions on his head. Here, nature has turned on herself: she is an invading soldier, a slave to man, bending at will. The laborious sentences of the textual description drag the reader along through the swamp, implicating the reader in this invasion. Admiration for the difficulty sustained by the invading corps transfers in the text to the rebels, who have already been brutally killed, and whose headless, handless bodies are left to be marveled at and halfheartedly lamented; in perfect unison, both text and plate convey barrenness and death.

Conclusion

A chapter devoted to Maria Sybilla Merian in *Lives of Eminent Naturalists*, published in 1840, gives an ambivalent review of *Metamorphosis*, and begins with the “general neglect of these pursuits,” here, the study of natural history, “by her sex” (17). In her biographer James Duncan’s opinion, it is both genre which excludes—with its “unnecessary profusion of technicalities, and a most barbarous nomenclature”—and gender itself which does so—for these generic constrictions “made [the genre] unattainable, if not altogether repulsive, to the gentler sex” (18). Merian is a fine example of a practitioner whose work encapsulates the successes and pitfalls of generic knowledge production in the early eighteenth century, but it is her gender, the author implies, which colors the work’s imperfections brighter. Merian has an

imperfect acquaintance with the objects of her study...occasionally placing her figures in fanciful and unnatural positions. In this respect, some of them exhibit more of the artist than the naturalist, being disposed with a view to effect, rather than for the purpose of displaying their habitual and characteristic attitudes. When circumstances did not admit

of personal observation, she gave far too easy belief to the reports of the Indians, who seem occasionally to have imposed upon her. Hence it is that she has introduced many idle stories into her work, for which her only authority is, *persuasum est mihi ab Indis*; and also the fictitious figure in Plate XLIX. composed of the body of a Tettigonia, surmounted by the mired head of a lantern fly, the manufacture, in all probability, of some cunning negro, who doubtless turned the unique specimen to good account. (32-33)

This telling passage operates on a number of gender-based assumptions. Firstly, that her travel to Surinam and her subsequent research there was not institutionally-sanctioned, and therefore, unprofessional. Perhaps her lack of familiarity with other naturalists' work and the difficulty of creating knowledge on site led to her "imperfect acquaintance with the objects of her study." Secondly, that her status as scientist must be subsumed by her superiority as artist, for that is a more acceptably delineated subject position for a woman attempting the genre. Thirdly, her womanly gullibility, her readiness to validate native knowledges, made her the dupe of "cunning negro[es]" and Indian "persuasion" and "impos[ition]," and caused her to "introduce too many idle stories into her work." The effect of this biography is to debunk Merian's own claims about her "from life" illustrations, to withdraw a self-bestowed agency in producing knowledge based on scientific observation, to clearly mark her as outsider in institutional science and relegate her to the sphere of artistry, where women can nonthreateningly reside.

Merian's failure to fully inhabit the genre in her time and since, implicates the natural history genre and its instantiation as masculine form, in gender exclusion. While Merian writes her gender identity through the generic ruptures her work performs (native knowledge validation, life-size illustrations of insects, aesthetic privileging, and I argue, her "glocal" orientation), and while this identity is read as alien and interloping, acknowledged as such, and dismissed, Merian

also, as a “minor” or historically elided user of the genre (Freedman and Medway 12), significantly reshapes the genre. If Merian’s innovations are to be read as gendered, as all genre writing is, then the very impact of gender on genre is exemplified in *The Metamorphosis of the Insects of Surinam*. Her circumvention of culturally-binding limitations complicate imperial modes of knowledge production about the New World. Her “glocal” approach to Surinamese ecologies seems largely lost by the interconnected globalism of 1796 and John Gabriel Stedman’s *Narrative of and Expedition Against the Revolted Negroes of Surinam*; nevertheless, Stedman draws on Merian to make sense of place, and in his rejection of her authority, betrays a sense of just how impactful gender can be on the writing of genre.

Surinam as place remained—even into the late eighteenth century—a distinct topography, preserving Merian’s ecological vision to a degree of purity that no other colony in the tropics could have. Merian’s work suggests that she rejected the idea that outside forces—plantation culture and slavery in Surinam—were changing her idealized, seemingly self-contained habitats, though she was also obviously aware of their great potential to do so. The meticulousness of her symbiotic tableaux, her insects in their natural habitats, might in fact reflect the urgency she felt in recording these habitats as they were before they were irrevocably altered by rapidly expanding colonialism. Merian’s habitats are dynamic both internally and in relation to a larger ecosystem of place, but they are also wholly perfect, and it is their “perfect” staging on the plate that implies the fantasy of their immovability, both external and internal. Though Merian knew that humans were encroaching on these habitats, she likely did not stipulate that they were subject to random, intrinsic changes, that they would have looked different centuries prior, should humans not have touched them (impossible, as we cannot exclude natives from habitats, either). Likely, Merian would have embraced Clements’s “climax

theory,” which I discuss in the Introduction, and which would have allowed for dynamic possibilities within the known limits of a particular habitat. However, to acknowledge “patchiness,” or “random changes” (Phillips 79) would have meant destroying the myth of the prelapsarian paradise stumbled upon by colonists, explorers, and naturalists.

It would have also meant seeing nature as its own entity, irrespective of human life, and no longer justifying the rhetoric of cultivation and improvement. Though Merian actively rejected rhetorics of improvement, she also subscribed to the myth of nature’s unchanging continuity, *as habitat*. In short, Merian’s work embodied the contradiction the theory of “patchiness,” or “random change,” implies, and therefore, ultimately, and even though she was a participant in early ecologic discourses, neither she nor her contemporaries could envision nature as *wholly* self-governing, *wholly* dynamic. This difficult paradox to resolve is evident in Merian’s own participation in the natural processes she documents—from her illustrations to her text to her search expeditions to her research to her staging of the plates—and is why I call her orientation “glocal.” The spiders in Plate 18 whose tableau suggests both perfectibility and mutability embody this paradox. If, after all, we are meant to imagine her spiders in perpetual motion, performing other undocumented acts, we are also entreated to visualize the spiders as pictured (their size, shape, color, movement). Merian simultaneously expands and limits our vision—there may be changes, yes, but short of these habitats’ externally-forced destruction, these changes can be scientifically bound and imagined.

As object of natural history study, Surinam itself absorbed its gendered representations—since it was one of the only colonies at the time to be physically explored by a woman—and reflected them outward, such that Stedman writing the story of intrusive European domination alongside that of rebelling Africans admits Merian’s ecological narrative, if only to then reject it.

By reclaiming Surinam from the threat Merian's "glocally"-informed ecological vision poses, Stedman both reasserts European hegemony and himself participates in the performance of gendering genre, a performance that *cannot* exclude Merian. Stedman's text becomes site of gendered influences including Merian's, influences which had slowly stewed and worked their way into natural history productions for the length of the eighteenth century.

Chapter Two

Circulated Objects, Botanical Subjects: Colonial Children Jane Colden and William Bartram, and the Divergent Trajectories of their Ecologic Sensibilities

This chapter hinges on my introductory discussion of ecology—its history, including its evolution as term and concept, and its entwinement as early discourse with pastoral and georgic modes, which often served imperial purposes. I call “ecology” in natural history production at this early date, mid-eighteenth century, an orientation, or to use Dana Phillips’s term, a “point-of-view.” I define it as the record of symbiotic, organic relationships of observed specimens functioning holistically in their local environment—that also often negotiates the visibility/invisibility of the naturalist herself, but generally imagines minimal human interference. Ecology did not yet constitute a scientific discipline, nor did it denote political efforts towards conservationism or environmentalism, although we can trace the ethics of each movement back to very early nature writing and natural history production: back to the fifteenth century in fact, according to Richard Grove. We can also imagine that writing proto-ecologically, as I argue Jane Colden did, constituted a political statement of sorts, so oppositional was it, particularly in the natural history genre, to the prevailing imperialist orientation of the great majority of natural histories. Even localized habitats, when portrayed perfectly intact and generally self-sustaining like in the work of Maria Sybilla Merian, fed the “virgin land” myth of the New World that ultimately fueled imperialism. Jane Colden’s ecologic orientation, I argue in this chapter, though not uncomplicated or “pure,” manifested in a chronicling of region that was neither generalizable nor overtly intended as marketable. Her work did garner some attention, however: the manner in which her work was disseminated within transatlantic circuits of exchange implicitly imagined for it a neat pastoralism, rather than an imperfect ecology, tidily making the assumption that the “subordinate” and “passive” woman could be aligned with a like

colonial nature (Merchant 9). Indeed, I document here how Colden's work was pushed by her father and his correspondents onto the global scientific marketplace despite her deep reluctance; what is remarkable is how Colden maintains the integrity of her ecologic, regional vision despite this intense external pressure to harness the economic value of her botanic study.

Pairing Jane Colden and William Bartram in this chapter is a method that critically parallels not just the trajectories of their botanic careers, but also their accounting of region in *Botanic Manuscript* (1750s) and *Travels Through North and South Carolina, East and West Florida* (1791), respectively. In Chapter Three, I gesture to a colonial regionalism in the works of Eliza Lucas Pinckney and William Byrd II, but if this term could be anachronistically applied to colonial naturalists, it would be apt to do so with Colden and Bartram. Colden's chronicle of the upstate New York wilderness is a chosen living *in* and *through* region, in all its idiosyncrasy; Colden is deeply invested in the local, in her region, her garden. She writes region for its own sake. Part of her ecologic point-of-view is determined by gender, which confined her to that particular geography. Bartram, I argue, who writes a profoundly complex account of the Southeast, or effectively for that time, the "tropics," moves in and out of an ecologic orientation—just as he physically travels—that is largely compelled by place. In my later discussion, I invoke M. Allewaert's work on the tropics to explore how Bartram documents the organic nature of what Allewaert calls an "assemblage of interpenetrating forces" (341) unique to the tropics. Bartram's region is both contiguous with the Caribbean, and in its proto-nationalism, marked as North American.

Additionally, Bartram's use of the pastoral and Romantic modes to convey nature's holism are ultimately funneled towards agendas of empiricism, agrarianism, and nationalism; Colden's navigation of empirical methods, like taxonomy, are redirected towards an ecologic

orientation. Though *Botanic Manuscript* (1750s) is a highly structured, seemingly taxonomic botanical account (in the Linnean method) of the upstate New York wilderness, with rudimentary sketches rather than colored or engraved plates, Jane Colden's work operates on both scientific and literary planes and surpasses William Bartram's pastoral vision, often misguidedly read as plainly ecological. It is the shifting of both Bartram's and Colden's positions as objects to those of subjects in natural history writing and art, particularly in botany, that I argue moves the genre from the pastoral mode to the ecological point-of-view, with Colden's manuscript more closely articulating a new colonial ecology through region than Bartram's. In this chapter's close readings of *Botanic Manuscript*, I draw on my Introduction's discussion of description in the genre, attempting to show both Colden's commitment to naturalist practices of the eighteenth century and her rejection of the Renaissance model of natural history as just one discipline of natural science. I argue that in simultaneously forsaking the exhaustive model of the natural history, however, Jane Colden looked forward, despite the constraints inherent in classification, and with a singular vision, towards ecologic discourses of nature.

* * *

In a January 20, 1756 letter to John Bartram, Peter Collinson fluidly moves between discussion of his colonial children, Bartram's son William and Cadwallader Colden's daughter Jane:

Billy's Drawing & painting of the Tupelo is fine & Deservedly admired by Every one
There is a Delightful natural freedom through the whole, and no minute particular omitted
the Insects on the Leaves &c it's a pity he had not kept it, to add the Flowers & to have
Disected a Flower showing the Stile & Stamina &c each part distinct by it self after
Linnaeus Method which seems to be the prevailing Tast our Friend Coldens Daughter

Has in a Scintificall Manner Sent over Several sheets of plants very Curiously Anatomised after his Method I believe she if the first Lady that has Attempted anything of this Nature they are to be sent to Doc Gronovius & He poor Man I believe is in a bad State of Health for I cannot get a Line from Him (who used to be very punctual) if He has received Billys fine Drawings of Oaks & they System—Tho I have writ Several Letters I shall this Day send Another...By all means make Billy a Printer it is a pretty Ingenious Employ. (January 20, 1756, Collinson to Bartram, Berkeley and Berkeley 391-393)

That Jane Colden, Cadwallader Colden's botanist daughter, aged thirty-two at the time of this letter, is sandwiched here between discussions of seventeen-year-old William Bartram and elderly Dutch botanist Jan Gronovius, speaks to understandings of natural history as generational inheritance and as web of (transatlantic) familial-like relations.⁷⁹ Collinson, in letter after letter, fervently and warmly discusses the accomplishment and promise of the talented second-generation naturalists I pair in this chapter—Jane Colden and William Bartram, whom he affectionately calls “Jenny” and “Bill[e]y.” Though Jane is a woman, while William is still a youth, it is nevertheless astonishing for the time—once we look beyond Collinson's impulse to equate them by reading their work side by side—that Collinson notes Jane's mastery in contrast to William's apprenticeship. Jane is simultaneously “the first Lady that has attempted anything of this Nature” and lockstep in time with institutional trends in botany, working through the Linnean method, or “the prevailing Tast,” in ways William apparently is not. However, Collinson's instinct to return at the end of the letter to William's career prospects⁸⁰ in light of

⁷⁹ Susan Scott Parrish calls this network of homosocial correspondence “candid friendship.”

⁸⁰ In another letter dated February 18, 1756, Collinson reveals that he has already discussed William's future with a network of correspondents, and has given thought to William's inclinations and difficulty in settling on a career path (which would become a running theme in letters concerning William, as venture after venture failed): “as printing is an Ingenious Art, Drawing and Engraving may with advantage be applied to It. I would fain Have thee Embrace our kind Friend B. Franklins obligeing offer” (Berkeley and Berkeley 399).

both the promise and oversight in his drawing of the Tupelo, suggests that Collinson's greater investment lies with William; naturally, a young man's promise must be read early, while a young woman, even the daughter of a valued correspondent, only becomes visible at a moment of critical achievement. This does not mean, however, that once visible, Jane was not, like William, actively molded and exploited for her privileged status as colonial naturalist.

Collinson pairs his fatherly interest with a subtle pressure supported and sustained by the entire weight of institutional knowledge-making, still centered, mid-century, in England. To Jane's father, he writes: "I now send for your fair Daught—Two or Three more of Ehrets prints—and a plate or Two of Birds—In hopes She may take a Likeing to add them to her plants which will be an Elegance to the whole" (November 10, 1757, Collinson to Colden, N-YHS *Colden Papers* MSS Box 12). To William's father, he writes, regarding the mud turtle, in the first letter I cite above: "I wish Billy could get one this Size and Draw it, in its Natural Dress—but pray Lett the Shell be well Wash'd that the Sutures of the shell may be well expressed...All the Species of Turtles Drawn as they come in yr way with some Account of them would prove a New piece of Natural History worth knowing" (January 20, 1756, Collinson to Bartram, Berkeley and Berkeley 391-393). Though the latter example differs from the first in that William is commissioned to complete these drawings, while Jane's work's wider visibility in circles of sponsorship is as yet undetermined and unproductive,⁸¹ Collinson's impulse to channel their work towards institutional profit demonstrates his legitimization of these colonial children inheritors as the propagators and torch-bearers of natural history as genre.

This theme is echoed by John Fothergill, who ultimately commissioned the stunning drawings—now housed at the Natural History Museum, London—which became integral to Bartram's famed 1791 publication *Travels Through North and South Carolina, East and West*

⁸¹ Nor does she ever obtain European sponsorship.

Florida.⁸² Fothergill expresses concern for William's ineptitude at finding a suitable profession, including his attempted venture as a planter, which proved miserably unsuitable: "He draws neatly, has a strong relish for natural History and it is pity that such a genius should sink under distress. Is he sober & diligent?" This concern morphs, however, into a "selfish" interest in naturalization, central to the maintenance of the metropole-periphery power imbalance, for which Fothergill becomes a mouthpiece:

Florida It is a country abounding with great variety of plants and many of them unknown. To search for these will be of use to Science in general but I am a little selfish I wish to introduce into this country the more hardy American plants, such as will bear out winters without much shelter However I shall endeavor to assist his inclination for a tour of Florida, and if he succeeds shall perhaps wish him to see the back parts of Canada— Many curious flowering plants will doubtless be found about the lakes that will grow any where—. (September/October 1772, Berkeley and Berkeley 750-751)

Except William never explored Canada, and Jane never included Ehret's plates in her manuscript. I begin this chapter, then, by framing the subjecthood of the naturalists I discuss—namely Jane Colden and William Bartram—through their objectification in the voluminous culture of transatlantic scientific correspondence their fathers—Cadwallader Colden and John Bartram, respectively—played such starring roles in.

The careful crafting and shaping of these two younger botanists by the likes of the elder Colden and Bartram themselves, as well as by Collinson, Fothergill, Ellis, Gronovius, Linnaeus, Edwards, Franklin, Whytt, Alston, and the younger Garden, among others, was an enterprise mired in gender paradoxes. Collinson alternately patronizes Jane, in an October 5, 1757 letter

⁸² Fothergill supported William Bartram from 1766-1776. The album of Bartram's sent drawings was posthumously compiled (Ewan vii).

suggesting that she would benefit from the tutelage of William, fifteen years her junior, concluding that botany and botanical art “is a fine amusement for her—the More She practices the more She Will Improve,” and recognizes her scientific work as a contribution by sending his genuine “Respects to Miss Jenny all that Wee have done, and Said, is Due to Her Wee hope to See more of her Works” (October 5, 1757, Collinson to Colden, N-YHS *Colden Papers, 1755-1760* 190-191). Unlike Merian who actively sought inclusion on her own merits, Jane participated reluctantly in the culture of epistolary and specimen exchange, and desired to remain unpublished (Hallock 142); the archive suggests that it was at her father’s urging and tentative insertion of her work within his own correspondence networks that Jane took on the greater responsibility of knowledge-making through these networks. It remains almost impossible to locate Jane’s outgoing letters to these men, though some letters addressed to her, as well as letters of her father’s and those written to her father about her achievements are chronicled in the Colden Papers housed at the New-York Historical Society. One of the few remaining documents in Jane Colden’s hand, aside from some intra-family letters which remain, her *Botanic Manuscript* stands as testament to her agency and subjecthood, to the subtle and subversive way in which she seized the reins of her own botanical career away from her father in order to land, conceptually, outside of this institutional network.

Susan Scott Parrish explains Jane’s qualified acceptance within these circuits of exchange by suggesting that

as a daughter writing under the aegis of her accomplished father, [Jane’s] botanical enthusiasm could be read as a chaste offering on the altar of science rather than as the symptom of a (less dependent and, hence, more disturbing) widow’s ‘longing.’ Her social status did not make her sex irrelevant (she, in fact, received more accolades than her

brother who pursued astronomy); rather her thorough dependence as an unmarried daughter made her curiosity, not transgressive, but marvelously devotional. Much as scientific men traded specimens to solidify their connections, these men circulated the marvelous American curiosity that was Jane Colden. (198-199)

The circulation of Jane herself as specimen perhaps did not require a great shift or opening of bounds, but rather American nature's "capacity for producing novelty has extended to the human realm: Jane Colden, in discovering so many new species of plants, has demanded a new human classificatory slot" (Parrish 197). Thomas Hallock, in *From the Fallen Tree* (2003), informs Parrish's later argument by finding that "the same culture of masculinity that defined Jane Colden as the exception, as the first of her gender, fueled the narrative of the hero-botanist in the Lewis and Clark Journals" (138). Jane's status as colonial anomaly, then, while enabling her botanical practice, also disabled the masculinized narrative of exploration, including one like William Bartram's. As Jane squeezed her way into this narrow definitional space, she also stretched and manipulated that space. Hallock pinpoints this contradiction when he finds that accolades for Jane's achievement in science marked a "network, which fetishized individual achievement, [and] vaulted the practitioners over more local landscapes of discovery" (141). As she inhabited this clearly marked and delineated space, her "individual achievement," and its status as "exception" made her an accredited colonial practitioner. But, did this institutional demarcation succeed in "vaulting" her achievement as botanist (in the service of empire) over the region she was illuminating? Or over alternate forms of regional natural history production? I would argue that Jane Colden, unlike other naturalists of her day, did not allow her status as exemplar to dictate the stakes of her project; rather than equating her exceptionality with the

generic mandate of an imperialist agenda, Jane redirected this originality towards a local and regional ecologic orientation.

A telling episode in the testy transition of Jane Colden's move from object to subject is the commonly-related story of Alexander Garden's (1730-1791) enthusiastic interest in Jane's work. Garden was a Scottish transplant, a practicing physician in Charleston whose continual efforts for recognition by the elites in Europe were alternately frustrated and rewarded.⁸³ He was only in his early twenties when his acquaintance with the Colden family began on a visit to Coldenham in the Spring of 1754. Jane, six years older than Garden, showed him around their home and garden, and shared with him her manuscript. Scarce a letter Garden wrote to Colden thereafter neglected to mention Jane, and many letters were addressed, with packets of seeds, directly to her. Various sources tell this story differently, but at some point Garden overstepped his bounds either by his effusive praise of Jane's work to the European luminaries or by his submission of her description of the "Gardenia" plant, number 153 in her *Botanic Manuscript*,⁸⁴ to *Essays and Observations*, a scientific journal based out of Edinburgh, and published in 1756 under both Garden's and Colden's names. For one of these indiscretions—since Jane was not Garden's to promote, sell, and unveil, and since this public exposure was to a degree improper for a lady botanist⁸⁵—Garden was chastised by Jane's father. Garden wrote a humble apology in

⁸³ See Parrish on Garden, 127-135, and Berkeley and Berkeley, *Dr. Alexander Garden*, 252-254.

⁸⁴ There is some confusion on the matter of the "Gardenia." Paula Ivaska Robbins finds that although Jane had named the "Gardenia" "using the privilege of the first discoverer" (Jane Colden qtd. in Robbins 51), in fact the plant belonged to the genus *Hypericum* (which Garden first suspected). Unbeknownst to either, Linnaeus had already formally named the "Cape Jasmine" the "Gardenia" at the urging of mutual correspondent, John Ellis, and so Jane's designation was rejected despite its publication (51). Sara Stidstone Gronim tells it differently: the plant was classified as *Hypericum*, but that was in fact incorrect, and indeed Jane's "Gardenia" was eventually classified in its own genus, although her originary discovery was not credited (42).

⁸⁵ This point is further complicated by Sara Stidstone Gronim, who reads Jane's reluctance to publish as a form of "modesty," a social construct that also acted as bridge to botanical practice. Modesty was "explicitly a marker of the worthy participant in natural history and philosophy...such simultaneous display and effacement of the self were supposed to characterize all successful reporters of natural phenomena, but the character trait of modesty that underlay such self-presentation was particularly suitable for women. Modesty was so commonplace a prescription for women in the early modern period that it lent itself to a range of understandings. Just as early modern

reply that bespoke his intense devotion to his correspondence with Jane, and perhaps to her image as a colonial botanist: “The Expression which you say gave her most offence, gives me now a great deal of uneasiness as I suspect it has deprived me of the pleasure of a letter from her by last opportunity” (May 23, 1755, Garden to Colden, N-YHS *Colden Papers, 1755-1760* 11).⁸⁶

In Garden’s attempt to promulgate Jane’s work, he fails to understand that agency cannot be forcefully bestowed. His role in spreading her reputation is calculated to his own benefit, for it is purely out of egotism that Garden chooses the “Gardenia” plant’s description as the excerpt from a flora of four hundred plants to be published (finally, there were three hundred and forty-one). The desire to inhabit the role of learned mentor, though Jane’s junior, was very much in line with Garden’s character and led him to casually shape Jane’s botanical interests through seeds sent without specific request.⁸⁷ His knowledge greater than Jane’s, and his status as colonial correspondent vigorously taking shape, on August 14th, 1756, Garden writes Colden that “I remember Miss Colden sent me the Seed of an Arbutus which she took to be a new Genus—I imagine it is the Epigaea of Linnaeus’s new Genera or the Arbutus foliis ovalis integris, petiolis laxis longitudine foliorani of Gron. Flor. Virg. p.49—Please compare them & let me know/ You may likewise compare it with the *Anonyma peduncilis armatis* of the Flor. Coldenham. No. 98

understandings of the nature of the sexed body were interpreted by the Coldens as making women particularly suited for botany, an interpretation of modesty may have been what allowed Jane Colden the conceptual space to display her learning to others” (47).

⁸⁶ This story is told by various sources, including by Paula Ivaska Robbins (51-53), Dorothy and Edmund Berkeley, in *Dr. Alexander Garden* (48, 61), and Thomas Hallock (142), the latter of whom suggests that it is the publication of Jane’s work without her knowledge that leads to the chastisement. Garden himself in his May 23, 1755 letter to Cadwallader Colden says the offense was due to “some expressions that insensibly dropt from my pen as archetypes of what my heart dictated was in sincerity” (*Colden Papers, 1755-1760* 11), suggesting that his effusive praise of Jane embarrassed her, disrobing her of the very modesty Gronim reads as so crucial to her circulation in this elite circle.

⁸⁷ In the same letter, Garden presumes to know which seeds would be of interest to Jane when he says “Its now passed the season of Seeds but I’ll endeavour to procure Such as Miss Colden may want this year” (May 23, 1755, Garden to Colden, *Colden Papers, 1755-1760* 11). Though this sort of exchange is a common convention in transatlantic networks, it takes a decidedly paternalistic tone in light of Garden’s earlier transgression: after he has sung her praises beyond appropriate limits governing women’s modesty, he will once more take charge of her botanic practice by shaping her garden with the seeds he sends.

or p.98” (August 14, 1756, Garden to Colden, N-YHS *Colden Papers, 1755-1760* 89-92). At stake here beyond correcting Jane’s erroneous conclusion—a convention of natural history writing—is the attendant opportunity to place on display memory, learnedness in the genre, and experience, as well as to gain favor through flattery. The common thread that runs through Garden’s letters to Cadwallader Colden where Jane is concerned is both her value as specimen supplier and botanist, but also her usefulness as object of discourse that will sustain his correspondence with Colden and build his larger network of exchange—as Parrish says, after all, Jane is just one more thing to exchange within this network.

Nowhere is Jane’s dual purpose so clear as when Garden writes Colden on March 14th, 1758 that “I was unlucky enough never to receive your Letter which you mention of the 23rd of June last year, neither that of Miss Colden’s with the seeds & *Filipendula*, the loss of which I greatly Lament, Yet flatter myself you will be so good as make up my Loss in giving me your account of the Agreements of Dr Whytt’s Principles & yours” (March 14, 1758, Garden to Colden, N-YHS *Colden Papers, 1755-1760* 227-231). Jane’s seeds—or her knowledge, as the seeds were likely chosen carefully, identified, and described fully—can be easily substituted and overridden by something far more valuable, that is Colden’s own scientific knowledge.⁸⁸ The unexpected meeting of Garden, Colden, John Bartram, as well as William and Jane, at Coldenham in the Spring of 1754⁸⁹ began Garden’s personal acquaintance with the Bartrams; Garden, sandwiched between these two colonial luminaries, became a symbol of the tie between their children, as he was between them in age and yet a rising star of his own individual

⁸⁸ This letter serves as anecdote of what both Parrish and Hallock call the homosocial, even “homeroetic” network of epistolary exchange. Another example Hallock provides in “Male Pleasure and the Genders of Eighteenth-Century Botanic Exchange: A Garden Tour” is a letter Henry Muhlenberg, botanist and Lutheran minister, sends to William Bartram with a list of queries in response to *Travels*: “but I am in Spirit with You and wander with you Hand in Hand through Your Garden and on the Banks of Shulki!” (715). Hallock calls this phenomenon an “exchange between men tapped into a deep reservoir of emotion that led to furious word weaving, often bordering on homoerotic, that left women at the margins” (698).

⁸⁹ See Berkeley and Berkeley, *Dr. Alexander Garden*, 43-44, and Robbins, 49-51.

ambition. Garden sought, in a way, to be adopted by this older generation of naturalists, and struggled mightily to stake a place for himself within their network, while William and Jane were first the circulated objects, and then the subjects of this network.

While John Bartram garnered the advice of his naturalist friends overseas and at home in regards to William's professional future, often receiving offers of commission and financial support without explicit request, Cadwallader Colden actively marketed his daughter's skills. Henry Laurens's concerned letter to Bartram about William's miserable failure as a planter on the banks of St. John's River sets up a fascinating contrast with Colden's correspondence concerning Jane. Bartram foretells this failure in an earlier letter to Collinson in June of 1766 in which he complains that "nothing will do with [William] now but he will be A planter upon St Johns river about 23 mile from Augustine & 6 from ye fort of Picolata this frolick of his hath & our maintenance drove me to great straits" (June 30, 1766, Bartram to Collinson, Berkeley and Berkeley 668). Laurens, in a letter dated August 9th, 1766, proceeds to summarize William's misery so:

no colouring can do justice to the forlorn state of poor Billy Bartram. A gentle, mild young man, no human inhabitant within nine miles of him, the nearest by water, no boat to come at them, and those only common soldiers seated upon a beggarly spot of land, scant of the bare necessaries, and totally void of all the comforts of life, except an inimitable degree of patience, for which he deserves a thousand times better fate; an unpleasant unhealthy situation; six negroes, rather plagues than aids to him, of whom one is so insolent as to threaten his life, one a useless expense, one a helpless child in arms; distant thirty long miles from the metropolis, no money to pay the expense of a journey there upon the most important occasions, over a road always bad, and in wet weather

wholly impassable, to which might be enumerated a great many smaller, and perhaps some imaginary evils, the natural offspring of so many substantial ones; these, I say, are discouragements enough to break the spirit of any modest young man; and more than any man should be exposed to, without his free acceptance, unless his crimes had been so great as to merit a state of exile. (August 9, 1766 Laurens to Bartram, Berkeley and Berkeley 670-673)

In response to John Bartram's report of William's state, Collinson deeply laments William's troubles (December 25, 1767, Collinson to Bartram, Berkeley and Berkeley 693-695). This triangle of sympathy places John Bartram himself alongside his correspondents in a joint lament. William is to be pitied; of concern is not the selling of illustrations and natural history descriptions to support a professional career in botany, but rather a matter of finding work suitable and stable that is opposed to William's obvious inclinations and talents. That natural history was seen as a professional hobby, rather than as an avocation—except in the rare case, like John Bartram's own—suggests that William's grooming by the European elite was decidedly strategic. As long as William practiced a profession that primarily occupied his time, as did Garden and Colden for example, he would be comfortable eschewing individual agency in order to follow the highly specific interests of the virtuosi abroad. And, he could still be called a naturalist—a win-win. Fothergill admits his discomfort with William's pursuit of his own interest—his travels through the Southeast—in the letter to John Bartram I cite earlier. He does, however, reluctantly support William's desired travel, likely after tactically calculating William's economic value as colonial naturalist and the benefit of a preliminary indulgence that could then be returned. Fothergill's caveat is that William then venture to Canada, on an

expedition that would prove of greater value to European interests, for in similar climates, similar plants thrive more readily through naturalization.

Jane's gender necessarily precludes such cause for pity. Instead, her work can be promoted as curiosity since for a woman, both "amusement"/"delight" and "industry"/"liveing" are one and the same. On October 1st, 1755, Colden writes Gronovius about Jane's induction into botany. He begins the letter thus:

I thought that Botany is an Amusement which may be made agreable for the Ladies who are often at a loss to fill up their time if it could be made agreable to them Their natural curiosity & the pleasure they take in the beauty & variety of dress seems to fit them for it The chief reason that few or none of them have hitherto applied themselves to this study I believe is because all the books of any value are wrote in Latin & so filled with technical words that the obtaining the necessary previous knowledge is so tiresome & disagreeable that they are discouraged at the first setting out & give it over before they can receive any pleasure in the pursuit/. (October 1, 1755, Colden to Gronovius, N-YHS *Colden Papers*, 1755-1760 29-32)

Colden opens this dense letter by making the claim that it is their sex that predisposes women for an interest in botany, and simultaneously that alienates them from its scientific study. The first is more obviously the fault of nature, the latter more obviously the fault of the scientific community; but, he seems to say, the lines are not so clearly marked.

After opining on the reason for female exclusion from botanical production, he continues by introducing Jane's education, recommending her method, and calmly praising her discoveries (attendant with his own natural history descriptions to substantiate them):

I have a daughter who has an inclination to reading & a curiosity for natural philosophy or Natural History & a sufficient capacity for attaining a competent knowledge I took the pains to explain Linnaeus's system and technical terms and then put it in English for her use by freing it from the Technical words in place of one She is now grown very fond of the study and has made such progress in it as I believe it would please you if you saw her performance Tho' perhaps she could not have been persuaded to learn the terms at first she now understands in some degree Linnaeus's characters notwithstanding that she does not understand Latin She has already a pretty large volume in writing of the Description of plants. She was shewn a method of taking the impression of the leaves on paper with printers ink by a simple kind of rolling press which of use in distinguishing the species by their leaves. No description in words alone can give so clear an Idea as when the description is assisted with a picture. She has the impression of 300 plants in the manner you'll see by the sample I sent you That you may have some conception of her performance & her manner of describing I propose to inclose some samples in her own writing some of which I think are new Genus's. One is of the *Panax foliis ternis ternatis* in the *Flora Vir.* I never had seen the fruit of it till she discover'd it The fruit is ripe in the beginning of June & the plant dies immediately after the fruit is ripe and & no longer to be seen. Two more I have not found described any where & in the others you will find some things particular which I think are not taken notice of by any author I have seen.

If you think Sir that she can be of any use to you she will be extremely pleased in being employed by you either in sending descriptions or any seeds you shall desire or dried Specimens of any particular plants you shall mention to me She has time to apply her self to gratify your curiosity more than I ever had & now when I have time the

infirmities of age disable me.” (October 1, 1755, Colden to Gronovius, N-YHS *Colden Papers, 1755-1760* 29-32)

Paradoxically, because her work is noteworthy, she holds economic value for institutional science. And so, Colden tries to market Jane’s labor in the manner of hiring out a servant. Jane’s intelligence is diminished at every turn, almost as a precondition of writing on her behalf to ask for institutional consideration, and through sentence inversion, she is made passive recipient of botanical practice over and over: “Tho’ perhaps she could not have been persuaded to learn the terms at first she now understands in some degree Linnaeus’s characters notwithstanding that she does not understand Latin,” “She was shewn a method.” Colden is sure to place himself in the subject position of each sentence: “I have a daughter,” “I took the pains,” “I believe it would please you.” At the end of the letter, this subject position shifts to Gronovius, who is to “employ” Jane in order to “gratify [his] curiosity,” and it is clear that this offer is made with no expectation of return services of any kind. Colden is now “infirm” and his daughter Jane—an adequate, though perhaps imperfect apprentice—will do to take his place. Nowhere does it matter that Jane may have individual interests, like William, for these interests are to be sublimated for the greater institutional good.

As I alluded to earlier, Jane’s work is presented here rather late—her *Botanic Manuscript* is by this point close to completion—and yet, she is peddled by her father as a fledgling, rather than as an accomplished botanist. I say this despite Colden’s praise of Jane’s discovery of several new genuses, for this praise is given tentatively, qualified before and dismissed after. That she is presented by her father as apprentice and servant certainly supports Parrish’s theorization of Jane as exchanged specimen and commodity. After all, Colden wears the weather-beaten cloak of humility, so common in natural history prefaces, to narrate Jane’s induction into a botanical

community he is unsure will open its doors to her. Finally, that this new method of inking plant outlines never makes its way into her manuscript (and none of these prints are extant), certainly diminishes her contribution, especially in light of Colden's fervid assertion that "No description in words alone can give so clear an Idea as when the description is assisted with a picture."

As interest in Jane gathers steam, however, Colden begins to more confidently tout her import as female botanist, and her contribution to botany as a whole. This confidence is reciprocated by Colden's more intimate correspondents. To Collinson that same month with the shipment of descriptions to Gronovius, Colden writes that Jane is "an example to others of her sex" (October, 1755, Colden to Collinson, N-YHS *Colden Papers, 1755-1760* 38-39). In a letter of April 6th, 1757, Collinson calls Jane a "proffessor" and her manuscript a "dissertation" (139-141). On October 18th, 1757, Colden writes to Fothergill, again suggesting that Jane be set forth as example to other young ladies who may wish to pursue the botanical amusement, and then recounts once more the story of Jane's instruction in botany and "botanic Latin" (202-205). In a February 15th, 1758 letter to Robert Whytt, Colden describes a plant drawing sent to Garden whose genus Jane disputes and whose description he will likewise forward for verification (215-217). Colden functions as ordinary mouthpiece for Jane's botanical work; thereafter, other relayers like Garden, Collinson, Fothergill, and Whytt pass the torch. In a letter of October 27th, 1758, Whytt writes that "Doctor Alston to whom I shewed your letter desires his respectfull Compliments may be transmitted to your Daughter & you: he received Miss Coldens letter & said he would have wrote her before now but had nothing to offer which he thought worth giving her the trouble of a letter" (261-263). Dr. Alston could not speak directly to Jane, then, for fear that he had "nothing to offer" that she could understand or acquire the agency to shape and use.

The communication of Alston's non-response had to filter through Whytt to Colden to Jane, if she was informed of it at all.

It was John Bartram only who treated her as agent of natural history production without the attached strings of self-interest, as in the cases of Garden and others. His now-famous letter of January 24th, 1757 to Jane reads:

Respected Friend Jane Colden

I received thine of October ye 26th 1756 & read it several times with agreeable satisfaction indeed I am very carefull of it & it keeps company with ye choicest correspondents, ye European letters ye plant thee so well describes I take to be ye dioscoria of hill & Gronovius tho I never searched ye characters of ye flower so curiously as I find thee hath done...I should be extreamly glad...to shew thee my garden My Billy is gone from me to learn to be A merchant in Philadelphia & I hope A choice good place too Captain Childs I shewed him they letter & he was so well pleased with it that he presently made A pocket of very fine drawings for thee far beyond Catesby took them to town & tould me he would send them very soon...

I have several kinds of ye Cockleat or snail trefoil & trigonels or fenugreck but being annual plants they are gone off ye species of persicary thee mentions is what turnfort brought from ye three churches at ye foot of mount Areatat ye amorpha is A beautifull flower but whether wont your cold winters kill it if ye Rhubarb from London be ye Siberian I have it I had ye perennial flax from rusia livonia it growed 4 foot high & I don't know but 50 stalks from A root but ye flax was very rotten & course ye flowers large & blew it lived many years & died neither what you will want thus I am quite at A

loss what seeds to gather & what quantity of each to preserve. (January 24, 1757, Bartram to Jane Colden, N-YHS *Colden Papers, 1755-1760* 25-26)

Bartram calls Jane “Friend” without irony, speaks about his son’s prospects as though with an equal, gives natural history descriptions as he would in a letter with a male correspondent, expresses a wish to visit again despite settler conflicts with natives, and shares her work. William is always front and center as he draws the tie binding William and Jane.

Linnaeus had named plant species after both John Bartram and Cadwallader Colden. Bonded through their mutual network of correspondents, themselves friends, Colden summarizes their attachment as one that will live on: “It gives me much pleasure to think that your name and mine may continue together, in remembrance of our friendship” (January 27, 1746-7, Colden to Bartram, Berkeley and Berkeley 284-5). But it is not only through their individual botanic recognition that Bartram and Colden came to be bonded forever, but through their talented botanist children.

Jane (1724-1766) and her father

Jane Colden spent the better part of her life at Coldenham, the estate and farm her father had built as their family home in what is now Montgomery, in Ulster County, New York. In 1728, when the Colden family—parents and five children (and later three more)—arrived at their three-thousand acre estate about eighty miles north of New York city, they arrived in a barren wilderness with none but Native Americans and a small community of settled Irishmen for neighbors. By 1755, conflicts with the Native Americans made venturing beyond the garden for Jane and her family dangerous, and so, in 1757, the family finally moved back to New York; until that point their land was worked by their neighbor Irishmen, slaves, and the family themselves. An orchard for fruits, a garden for vegetables, a farm for dairy and meat and grains,

made Coldenham self-sustaining and prosperous (Robbins 22-28). Jane appears to have been an important actor in the making of this prosperity. Her particular delight, according to her brother Alexander, was the garden (May 8, 1756, Alexander Colden to Colden, N-YHS *Colden Papers, 1755-1760* 71-74). She was a meticulous cheese maker, as evidenced by her “Memorandum of Cheese Made 1756” (Jane Colden, N-YHS *Colden Papers, 1755-1760* 55-63).

Sara Stidstone Gronim, in her article “What Jane Knew: A Woman Botanist in the Eighteenth Century,” finds that, in her science, Jane “needed to demonstrate that she knew how to balance self-assertion with decorum, a performance particularly difficult for women and one she did with particular success” (35). Certainly Jane’s entrenchment in family affairs and production was at the core of both this confidence and decorum. According to Gronim, Jane’s status as favored daughter allowed her to “escape the worst effects of misogyny,” and gave Colden leave to imagine Jane as willing participant in a family botanic enterprise out of a loving, rather than obligatory allegiance to him as her father. Additionally, early modern understandings of gender differences viewed women as suited for botanic study, and through these understandings, female botanic practice, mid-century, could still be conceptually reconciled with both daughterhood and autonomy (38). Gronim sums up Jane’s father’s fortuitous choice for her this way: “These axes of beliefs and practices that people commonly used to keep genders distinct intersected in ways that allowed Cadwallader to choose the person who was, in fact, the best choice” (39). And so Jane was chosen for a career (of sorts) in botany.

Before and during and after her botanizing, domestic cares occupied Jane, and her solicitous letters to her mother when away from the estate with her father suggest that she felt grounded at home, and found comfort from management of the estate as well as in her familial relations, particularly with her mother and sisters. This was of course entirely appropriate for her

gender, class, and race; nor do Jane's letters evince a hint of discontent with, or subversion of, her expected familial role. Alice Colden, often ill or indisposed, received letter after letter from Jane on one trip to New York of several months in 1747, inquiring after her health and overall mental well-being. Jane expresses her earnest desire to be home with her mother, especially given the high rate of soldier desertion at Albany threatening Alice's security at Coldenham, and says, "if our going home could make you any safer or easier I would very willingly have gone but Papa thought it could not" (Jane Colden to Alice Colden, May 5, 1747, *Colden Papers* N-YHS MSS Box 12).

Jane's dutifulness to mother and family is exemplified by her preoccupation with ailments and domestic interests. In the following letter just a couple of weeks later on May 18th, 1747, she relates in great detail her sister Alice's toothache, stomachache, and fever, reassures her mother that the worst is past, and counts the days until their reunion, with a further foretelling that her father will not have to leave home for some time once this business in Albany is concluded. In a letter dated May 27th, Jane discusses gown and shoe fittings, china, and her father's spirits in light of news of political opposition. In a particularly loving letter dated June 10th, 1747, at which point Jane has reached exasperation for the continual delays in starting back home, she writes that "for some time past it has been a renewal of tenderness & concern to us for you I am sure I shall be afraid of leaving you again we have so many hindrances of getting back to you...I think now this four weeks we thought last week to go without Papa & took leave of our friends but then Papa expecting to go in a few days we still waited for him." Still in New York, now with her father back home with her mother, Jane writes on July 5th, 1747 to say she has indeed contracted the measles, but that her condition is not serious, though she writes without the doctor's permission (*Colden Papers* N-YHS MSS Box 12). Jane is bulwark for her

brother John who requests, in the Fall of 1749, that she send him words of faith and Godliness to sustain him as “I am now where there is no English Sermon to hear & have but few books to read & that one left to his own thoughts only is but very weak I am persuaded I need use no more Arguments to induce you to do it by which you will lay a lasting obligation on My Dr Sister.”⁹⁰ It is unclear from where John addresses this letter, but what *is* clear is his tenderness for his sister, whom he even affectionately teases: “you mention the last I wrote was to Mama by the Mouse that lived at the Pond” (John Colden to Jane Colden, Fall 1749, *Colden Papers* N-YHS MSS Box 12).

Cadwallader Colden, Jane’s father, was well-known, but not always popular, as a statesman and scientist.⁹¹ He was surveyor-general of New York from 1720 onwards, as well as “weigh-master of the Port of New York, ranger of Ulster County...and master of Chancery” (Robbins 17). Colden’s official appointments kept him traveling, conducting surveys, petitioning grants, acquiring land, drawing maps, and setting boundaries for the growing colony (18). He worked for many years on his *Principles of Action in Matter* from 1744 onwards (42), and published *The History of the Five Indian Nations* (1727-1747), for which he is probably best known today. He was of course also a practicing mineralogist and botanist, and his catalogue of plants of the upstate region, *Plantae Coldenhamiae* (1743), described ninety-one out of two hundred and forty-seven plants indigenous to the region of the Coldenham estate (Robbins 39); it found audience in the colonies and Europe and was likely the foundation of Jane’s botanical education. Its basis was Colden’s *Catalogue Planatarum*. Colden’s meticulous attention to

⁹⁰ Jane’s purity of faith—if we can trust her brother’s assessment—aligned with the project of botany too, for “botany was advocated as a natural branch of religion. With its emphasis on firsthand observation of the order and harmony of nature, the study of plants was acclaimed for inspiring an admiration for God” (Schiebinger 243).

⁹¹ His stint as governor’s aide in the 1740s was one such example. Gronim says that this endeavor was a “disaster. Cadwallader could be quite pompous in public and rapidly alienated all factions in what was chronically a politically contentious colony. At one point someone wrote to a local newspaper that Cadwallader should stop ‘bedawbing the weekly News Papers with the Excrements of his Brain’ and return to his ‘Excess of Folly and Vanity’ in trying to surpass Newton” (37).

nomenclature—that Jane later replicated—can be observed in the opening pages affixed here. Even as emulator, however, Jane remained outlier. Ironically, it was her outlier status that allowed for generic destabilization, something her father could not effect.

In a twenty-page essay entitled “Introduction to the Study of Natural Philosophy wrote in America for the use of a young gentleman” (1760) he compiled for his teenaged grandson, Peter De Lancey, Cadwallader Colden begins Section V with a rather direct Baconian philosophical position:

Nothing so much prevents the advancement of knowledge, as false maxims, when received on the authority of great names, as the test & evidence of truth. They are, in our progress to knowledge, like shackles on our legs in walking, they are not only a continual hinderance to our advanceing, but frequently throw us down in the dirt. It may be of use to discover such, & to expose them, especially when supported by venerable names, which otherwise have respect done to them. (N-YHS, *Scientific Papers and Notes of Cadwallader Colden*)

Very much at stake for Colden was the conversation scientific study necessarily provoked, with those he called the “great names.” The disappointment he felt when his *Principles of Action in Matter* was not received with the enthusiasm he expected urged him to share ideas from this work with his correspondents. Rather than quibbling with the “great names,” or clearing the obstacles they have set, he often piggybacks, extends, and builds on their existing ideas, accepting the “maxims” governing each scientific field and thereby failing to follow his own advice. For example, when writing Robert Whytt in 1758, though Colden identifies such a potentially “false maxim” in Newton’s theory of gravity and approaches Newton’s findings

cautiously, he fails to acknowledge the theory's central role as the foundation of his own.⁹² With others of different scientific persuasions, as to Gronovius in a letter dated October 29, 1745, later printed in the *American Journal of Science of Arts*, XLIV, 98-101, Colden discusses fructification and lists plants by number and Latin name with involved descriptions, once again relying heavily on a taxonomic system already in place (Linnaeus's). Colden had a hand in everything—as so many naturalists did—and his scientific notes contain every variety of activity, including a note on the “successful use of oil in curing snake bites,” where once more, he builds on the work of the “great names,” such as “Dr Mead, [who] was the first that I know who published to the world in his [] the use of the Viper fat or Axungia Viperna in the Cure of the Bite of Vipers” (N-YHS, *Scientific Notes* 365).⁹³ But the subversion of “false maxims” Colden lays out as principle in his “Introduction to Natural Philosophy” is never fully effected in Colden's many works; he is too embroiled in the networks that have built those maxims to comfortably become outlier, nor, as all his correspondence indicates, did he want to. On the other hand, as woman, his daughter Jane, approaching these networks precisely as outlier, can subtly subvert in ways Colden cannot.

What did it mean for Jane, as woman, to botanize? In her book, *Cultivating Women, Cultivating Science: Flora's Daughters and Botany in England, 1760-1860* (1996), Ann B. Shteir studies this question through the lens of the vibrant transatlantic specimen, knowledge, and instructional fiction exchange women participated in during the eighteenth century and into the nineteenth. Open to women as both *limited* science and leisurely pastime until about 1830,

⁹² He writes: “Notwithstanding of Sir Isaac Newton's demonstration that the Gravitation of a planet moving round the sun on an Ellysis is every where reciprocal to the squares of the distances from the sun in the force [?] my mind could not be satisfied that when a planet approaches the sun by the force of its gravitation it could recede again from the sun without some other power acting upon it besides motion once impressed” (N-YHS, *Scientific Letters* 360).

⁹³ He elaborates: “[Dr. Mead] tells us that the Viper Catchers must so much to this cure that they are no more afraid of the Bite of a Viper than of any other. . . . In that treatise he mentions some experiments he made to confirm the truth of what had been told him. Since that it has been discover'd that the Viper Catchers use with no less success Oyl of Olives or common Sallad oyl & the Experiments published by the Royal Society of London put this matter out of Dispute being a most certain & effectual remedy for the Bit of Vipers.”

botany was still, early on, a tightly guarded sphere of natural history. Shteir dates the final shift to the recognition of botany as masculine science, and to female “botanizing” as belonging “in the breakfast room, in a separate sphere” (169) to 1830, when women practitioners found themselves actively excluded from scientific circuits. Continuing the active pursuit of botanical study meant couching their work within socially acceptable, gender-demarcated genres, like the epistolary novel. Shteir notes the poor reception of Agnes Ibbetson’s work as an example; Shteir calls Ibbetson (1757-1810), who came to botany late in life, “an outsider, who had no significant mentor, no buffers, no champion, no companionable strategist within the ranks of public botanical culture” (134). In contrast, Jane was an early example of championed inclusion through her father, as with others like Linnaeus’s own daughter Elisabeth Linnea (1743-?), J.G. Children’s daughter, Anna Children Atkins (1799-1871), and George Baker’s daughter, Anne Elizabeth Baker (1786-1861) (Shteir 177-178). The majority of women working as helpmates did so in the role of artist or illustrator, as drawing was a skill genteel young ladies were expected to possess. Though by all accounts Alice Colden, Jane’s mother, was a gifted home-maker and educator, it appears that the trials of settling the wilderness did not allow for Jane’s schooling in drawing. Jane’s sketches are rudimentary, and highlight instead the important project of description—a linchpin of Enlightenment science—and the privilege of the eyewitness and discoverer in an era when words conveyed pictures as much as did pictures themselves.

Sanctioned by the male scientific community as a passive, feminine pastime, and even as a way to regulate female behavior (Schiebinger 243), botany struck Cadwallader Colden as an appropriate channel through which Jane could extend his scientific influence.⁹⁴ He had trouble,

⁹⁴ Gronim writes that “Jane’s work fulfilled Cadwallader’s hopes, for it rejuvenated his intellectual relationships” with John Bartram, Peter Collinson, and Jan Gronovius. Through Collinson, he opened communication with John Ellis and John Fothergill, and through Alexander Garden, with Dr. Robert Whytt. Fothergill even published Colden’s notes on a local epidemic in London (41).

at first, convincing Jane: Jane's entrée into botany, as detailed by Sara Stidstone Gronim, was a hesitant and cautious one. In 1752, Jane described only twelve out of thirty-two plants she'd collected, but by 1753, she'd described one hundred and forty; whereas in her first year, she did not venture beyond the garden, in her second year, she collected "by roadsides, in the woods, and in thickets and swamps," everywhere really, "as Coldenham was in a region of rolling upland, pocked by ponds and swamps, punctuated by rocky hills, and crisscrossed by streams" (40). Her work was meticulous and thorough, and she exceeded her father's catalogue in number, finally listing three hundred and twenty-six plants, with "at least one hundred seventy-five...not in his flora at all," and with "plants that he had described, she saw details he had missed" (41). As Gronim notes, Jane's success in this highly regulated endeavor did not ensure the survival of her legacy (once her moment had passed) beyond pat acknowledgments that she was "America's first lady botanist." By the end of the Revolution, and by the time new female practitioners emerged in the serious study of botany, "Jane's botanical work was effectively erased." Gronim traces this erasure from Johann David Schoepf, post-American Revolution, who compiled a medical dictionary with plants of the Northeast using Jane's work, mostly attributed to her father, as a source, to Jacob Bigelow's *American Medical Botany* (1817-1820), which completely erased Jane's originary work (49-50).

William (1739-1823) and his father

Steward of the first colonial botanic garden sowed on his own property around 1729-1731 and "probably responsible for the first appearance in the gardens of England of between one hundred and fifty and two hundred of our plants" (Barnhart 28), John Bartram was also a pioneer in plant hybridization and pollination studies (34). Without formal education or field publications, John Bartram built his reputation through skilled botanic work and extensive

correspondence networks. By the early 1770s, as William was imagining a Southeastern trek through Indian territory, John Bartram felt secure enough in his status as the premiere colonial botanist to write with a bruised ego to John Fothergill, from whom he received no reply for two letters and a box of plants sent to Europe the previous season: “it seems strange to me that a few minits time could not be spared to sattsifie thy friend whether thee received them & whether thee intended to break off all Correspondence with me or to continue it” (May 9, 1771, Bartram to Fothergill, Berkeley and Berkeley 740). The letter makes clear that all botanical relations are familial, for the offense given was also by “thy Nephew [who] is near as far behind for I have not had a line from him this spring nor no account what is become of ye Cargo which I sent last fall consigned to him or whether he is dead or alive.”⁹⁵ Bartram’s discontent is rooted in the perceived lack of forthrightness and honesty—as a Quaker, a deep matter of principle—and in the slight given by unreturned acknowledgement and ceased discourse. Finally in a position to make clear his displeasure at this egregious breach of decorum, Bartram singularly drops his prevailing tone of obsequious deferral. He stakes a space for the respectability and superior status of the informant, here the colonial botanist, by demanding fair and righteous acknowledgement of his contribution. This is the space into which Bartram’s son William enters, a decidedly more capacious space than his father’s was at the start.

Affixed to William Stork’s 1766 *An Account of East Florida*, John Bartram’s *Journal: A Journey from St. Augustine Up the River St. John’s* lacks the liveliest version of that stylistic embellishment so integral to the natural history genre, though this quality is far from absent. There is of course little comparison between William’s majestic eleven page description of the

⁹⁵ This letter also reveals Bartram’s anxiety about his own continued sponsorship from the Crown and whether his networks will remain intact after Collinson, his most faithful advocate, has died: “I can yet have no account whether his Majesty continue this bounty to me since our worthy friend Collinsons death or not William Young stiles himself Botanist to their Majesties the King & Queen of Great Britain. Pray dear friend to favour me with A letter by ye first convenient oportunity which will much oblige thy real friend.”

fiery alligator (112-122), hyperbolized to mythological proportions, and Bartram's matter-of-fact inclusion of this same alligator in a catalogue of events for his first entry of December 19, 1765 in his *Journal*: "some little swamps bordering the small rivulets; we encamped, saw a large alligator" (3-4). While John Bartram's accounting of the landscape can be dry, there is still a good deal of the literary in passages like this one from December 31, 1765: "Cool morning. Thermometer 56. wind N. Set out, and in half a mile came to a middling creek 2 fathom deep, and from 50-100 yards wide, a rich island on the south-side hard enough for a horse to walk upon, and pretty full of wood, as maple and ash" (14). The vivid image of the strength of the soil upon which a heavy horse can tread is precursor to William's own descriptive method. John Bartram's "Remarks on the River St. Johns" (68-70) further illustrate this method and detail that shore as excellent ground for planting, a venture that William undertook shortly after this very trip through the Carolinas, along the coast of Georgia, and into Florida (on which William accompanied his father) in the years 1765 and 1766.

The second time William Bartram traveled South, he did so with the reluctant financing of his patron John Fothergill. From 1773-1777, he traveled through North and South Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana; these travels would become the subject of his book of the same name, published in 1791. The map affixed to John Fothergill's album shows the trajectory of William's journey. Introduced through his father's letters to the "great names" of botany and natural history at the tender age of fourteen, William had advocates on both sides of the Atlantic, looking to publish his drawings, and finally his thoughts and descriptions, and in addition to *Travels*, his oeuvre included a number of essays, as well as varied artwork for other authors, much of which was appropriated without his explicit collaboration or permission. Among the artists depicting North America before and during William's time, John

Ewan, in *William Bartram: Botanical and Zoological Drawings, 1756-1788* (1968), lists John White, John Banister, Mark Catesby, and Jane Colden, who “may be passed over” for her “caricatures,” but as “only Jane Colden and William Bartram were Americans by birth...Bartram remains the one indigenous colonial artist of merit for natural history” (4). In his old age, cultivating his extensive garden on the same plot of land on the banks of the Schuylkill that was his father’s, William Bartram was the most famous and well-respected naturalist in America.

William’s lifelong bachelorhood only contributed to the sense that he was married to nature. What it meant for William to botanize as a man without a female helpmate, without a family to support was just that: a total devotion to the workings of nature, a purer physio-theological belief in God’s glorious creation unpolluted by the deepest of human relations (spousal, parental), and an ambivalent positioning as the first male American “ecologist” writing within and without pastoral literary constructs. William’s homosocial network in play with his heterospiritual network with nature—without the interference of domestic obligations—we might call a third, unnamed gender space that uniquely positioned William to alter the genre. Never fully operating within the realm of heterosexual male natural history narratives of conquest, nor fully within the realm of female botanizing for leisure and edification, William Bartram was an aberration with the freedom to, like the female naturalists I discuss in this dissertation, subtly subvert and shift the genre. This outcome, often narrowly viewed as William’s influence on later American nature writing like Thoreau’s, from the standpoint of his narrative’s early ecologic bent, appears to have literary and history of science critics (mostly) in concurrence. I challenge this narrow view and interrogate how William alters his gendered subject position. In the rest of this chapter, then, I shift from the appellations Jane and William to

Colden and Bartram, respectively, as the objects of their fathers' correspondence and the inheritors of their natural history tradition become subjects in their own right.

Ecologies of Place and Genre

When we call William Bartram the first American ecological writer, we really mean that he is appropriating pastoral influences, and hybridizing them alongside a new and uncharted literary tradition of burgeoning ecological discourses, all intimately tied to his proto-nationalism. Hallock makes precisely this point in his chapter on Bartram in *From the Fallen Tree* (2003). The pastoral becomes central to Bartram's *Travels*, argues Hallock, by allowing him to conflate reverence for the pristine landscape with human, peacable occupation, to "portray wilderness as anterior to 'civilization,' as cause for elegy, but without directly confronting programs for expansion" (172). Bartram channels the pastoral by suggesting that civil order is inherent to wilderness, by moving from wilderness to civilization linearly, manifesting a landscape that represents nature and technology unified (167-168). Ultimately, Bartram asks, "What kind of civilization could the continent support?" (168), the answer at which he arrives by appropriating the pastoral mode. This appropriation requires mourning the loss of an indigenous ecology that he never believes is completely gone, even as colonialism and plantation culture rapidly and drastically erode the landscape.

The "romantic" merging of the primitive and the civilized is a calculated state of limbo, much like Merian's: a reluctant acknowledgement that change has arrived, and a simultaneous negation and denial of the magnitude of that change. Bartram uses the pastoral mode, Hallock argues, to uphold this contradiction (164). Christopher Iannini extends this argument further with his contention that Bartram was a proto-nationalist who separated the North American continent from the West Indian colonies by romanticizing its landscape, ultimately "supplant[ing] the West

Indian within the mercantile and cosmopolitan imagination, proposing a radical new vision of New World nature in which the natural abundance of North America, as prospective material basis of the incipient nation, would fuel a planetary future of republican liberty” (16-17).⁹⁶ This proto-nationalism became the basis of a new national pastoral mode that Hallock argues “establish[es] a republican citizenry as indigenous to the continent,” and it is nostalgia for an environment this citizenry never really knew that is the foundation of an ecological orientation in a text like Bartram’s. It is not then purely that civilization emerged from the wilderness, but that the very concept of an Edenic New World nature emerged from the concept of the new Republic (7).⁹⁷

It is in the tropics, M. Allewaert claims in her article “Swamp Sublime: Ecologies of Resistance in the American Plantation Zone” (2008), that “‘Savages,’ Maroons, and naturalists were all aware of how the distinction between persons and objects collapsed” (349); this conflation, Allewaert argues, so crucial in Bartram’s *Travels*, moved writing about nature from a “landscape” orientation to an “ecological practice.” Rather than simply relaying an admiration for nature, writers began to paint nature as a powerful “assemblage of interpenetrating forces” (341, 349). The shift from the pastoral to the ecologic—and Allewaert calls this “assemblage” “ecology”—was imperfect, certainly, but made possible by the particular ecosystem of the tropics, especially its swampland, which became site of marronage and white colonial invasion. Marronage forced naturalists, natives, and Africans alike into new relations with nature that worked against the plantation model by subverting racial hierarchies (341). Likewise, the plantation zone could not be represented in text or art, as evidenced by Bartram, while still

⁹⁶ Lawrence Buell says something similar: “Following the boosters of Western expansion, the settlers themselves took over the topic of America as pastoral paradise, as an assertion first of colonial pride, then of national identity” (313).

⁹⁷ This is in line with Myra Jehlen’s assessment, in *American Incarnation*, that Bartram envisions an America in which “natural man...lives...not in society but in a civilization that is the human dimension of nature” (59).

“hold[ing] apart fantasies of tropical scenery and the realities of entanglement and brutal fragmentation” (350). It was the particular ecology of the tropics that “contributed to revolution” (350), and, the plantation zone, in its representational and literal capacity of forcing into contact the colonizer and the colonized, became “an animate force whose combinatory power could provide strength (and was imagined to do just that for African agents) but could also consume (and was imagined to do just that to Anglo-European agents)” (351). Revolution, then, became part of the landscape, and therefore the pastoral vision could not stand: “detached subjectivity was impossible in plantation spaces, where white men struggled against an ecology that was often militarized” (351). Allawaert argues that the ways in which Africans began to be portrayed in the plantation zone—as vessels of revolutionary potential—further shifted writing of the tropics from the pastoral (“landscape”) to the ecologic. It was after all, the prevalent white fear that Africans *knew* the land, “could manipulate ecology” (353), and could use this secret knowledge, often impenetrable by the European colonist or naturalist to, as Parrish documents, poison slaveholders or incite rebellion. Further, the “detached subjectivity” of which Allawaert speaks belonged exclusively to pastoralism, for the renunciation of the self Bartram experienced was a presence within this “entangled” space; in fact, Allewaert argues, it was this very embroilment that inspired Bartram’s sought-after abandonment of the self (342). Bartram’s ecologic orientation, or point-of-view, then, was necessitated by place.

What is fascinating about Allewaert’s argument is the way the meaning of the word “ecology” changes when we consider early American natural history as a variant form of the broader genre. Where the definition parsed in my introductory discussion generally understands ecology, in its early iterations as discourse, to mean a point-of-view that places object-specimens (and sometimes, reluctantly, subject-naturalist) in symbiotic, organic relation, and that

simultaneously erects and collapses a utopian, pastoral ideal, Allewaert defines the term, within the American context, as a place-imposed “assemblage of interpenetrating forces” undergirded by violence, death, slavery, and the constant threat of revolution. Though Bartram’s *Travels* exposes and veils this violence at every turn, Colden’s doesn’t admit of it so overtly; without reading her correspondence, or closely reading her admissions of native knowledges, this violence may remain wholly invisible. Allewaert calls *Travels* a testament to “an ecological cycle that consumes the history and subjectivity of white men” (346). Within this “cycle,” both Bartram’s literariness and his science become consumptive rather than regenerative, the language of the narrative, catalogues, and descriptions, themselves place-specific conditions of writing natural history in and about the tropics—and seriously calling into question the mindfulness and purity of Bartram’s ecologic vision.

Other Bartram critics have invested less meaning in the tropics in particular as enabler of Bartram’s ecologic orientation, and have instead focused their work around the ways in which Bartram positions the land in relation to his incipient nationalism. While the tropics play a significant role in this relation, they are not necessarily central, for as Myra Jehlen, Thomas Hallock, and others have argued, Bartram’s “place” is the North American continent. How Bartram unites nature and civilization is through the elision of the constant churning, brewing chaos Allewaert sees as so critical. Bartram’s indebtedness to the pastoral and georgic visions, argues Jehlen, reconciles the “idea” of “land and landscape” with the “body of the American continent” (4). Jehlen uses the term “incarnation” to describe the process by which nature was understood to inherently express American political ideology, and in turn how this ideology needed nature and nature discourses to define and justify it. Republicanism, then, is indigenous to place (Hallock 12). Jehlen puts it this way:

Incarnation reconciled not only man and nature but man and man. The world Bartram envisioned that day in the Georgia swamp would not only emerge free of inherent opposition but remain so. In short, the accord of nature and civilization implied as well an internally homogeneous society: without original conflict there need be no later conflict, and different classes, religious groups, nationalities, and even races can come together on the basis of a more profound sameness. The ground upon which American political pluralism rests is the continent itself. (59)

Just as in Hallock's assessment, Jehlen reads Bartram's vision as a peaceable, progressive transition from wilderness to civilization. Notably, the swamp here does not representationally enact or conceal a brewing violence, nor does it compel a terrifying and unstable ecology. Rather, it is site of peace and harmony, symbol of the American pastoral vision, and finally of the American democratic vision. Bartram's natural history "took 'America' to be an exceptional entity that was at once, and necessarily, nation and continent. As [an] American, [he] participated in this exceptionality; [he] guarded and implemented it" (78). His descriptions of the landscape exemplified this exceptionality, and also justified it. Jehlen's definition of Bartram's ecological sense is much different from Allawaert's then, imagining his ecology as a projection of an American fantasy, rooted in the pastoral tradition.

There is no doubt, however, that the still largely uncharted Southeastern tropics loomed large in Bartram's imagination as the symbolic heart of the nation and of course, as rich site of natural history research. Looking towards the nineteenth century, the natural history genre played a central role in erecting the tropics, in Richard Grove's words, "as the symbolic location for the idealized landscapes and aspirations of the western imagination" (3). It is important that although French, Spanish, Seminole, and Creek East Florida was at the time of Bartram's journey 75%

black (Iannini Class Lecture), this staggering statistic is never made fully visible in *Travels*. The sublimation of the tropic empire to the garden of the world myth,⁹⁸ then, required an elaborate elision of enslaved labor *and* place. What I mean by this is that despite the natural history's rootedness in the Southeast—what with its alligators, hurricanes, natives, enslaved peoples, and plantations—the work of *Travels* is not to exoticize place for the benefit of knowledge production and curiosity, but rather to promote an idea of place that positioned the tropics as endemic to the idea of the nation. Towards that agenda, there is much at stake in suppressing the violence that threatens him (and the pastoral-turned-ecologic vision) at every turn, and which symbolically manifests in natural disasters, encounters with dangerous wildlife and natives, and most importantly in scenes of slaves on plantations.

The text's narrative jolts exemplify this suppression. Throughout the text, predatory animals symbolize mutinying slaves, so when Bartram recounts the alligator attack at Battle Lagoon in medias res, it is a sudden and astonishing shift to an inserted paragraph that begins, "the wood-rat is a very curious animal." After a two-sentence interlude of peace, the attack resumes (119). In another scene, Bartram's company feeds on a tortoise whose remains they leave to the vultures overhead; after noting how the vultures are "sharpening their beaks," we are reminded of "how cheerful and gay all nature appears!" in the morning (161). When Bartram sleeps through a night in which a "rapacious wolf...stole fish from over my head," he muses the next morning on how the wolf might have "glutted his stomach...with my warm blood, and dragged off my body, which would have made a feast afterwards for him and his howling associates." Without warning, we then transition into "the morning being clear, I sat sail with a favourable breeze" (145). Each of these petrifying scenarios is mitigated by the pastoral. But it is

⁹⁸ The "garden of the world myth," per Henry Nash Smith, was effectively the agrarian ideal, Western expansion through cultivation and "improvement."

nevertheless the astonishing threat of violence that remains foremost in the mind of the reader, catapulting the text into a deeply troubling ecology of place. This ecology, Allewaert argues, is necessitated by the tropics. However, Bartram's social and political agenda and its attendant repression of violence fatally compromises his depiction of the local, painting instead an illusion of place. The question looms: where and what are the tropics?

If, as Leo Marx claims, the "pastoral ideal has been incorporated in a powerful metaphor of contradiction—a way of ordering meaning and value" (4), then Bartram is just one user of this contradiction, and what interests me here, one user in the context of the natural history genre. With Bartram, natural history as genre itself changes; he evolves the genre to think through nationhood, altering the orientation of the genre away from a record of knowledge-making about nature, and towards a philosophy about nature that Jehlen calls "American incarnation." Pastoralism and ecology alternately, and imperfectly, serve this purpose, but ultimately, *Travels'* multivalent agendas frustrate the claim that the sensibility of *Travels* is generally ecologic. Jane Colden, however, uses the "metaphor" of the pastoral ideal differently. She uses it to map place, to promote an ecology of place, by literally and literarily plotting her garden, her piece of land. She stays *inside* place for the entirety of her *Botanic Manuscript* (1750s). Colden's wilderness is quite literally her backyard; she does not extrapolate this wilderness to the North American continent or to the British empire, for after all, it is her *home*, rather than a place she is passing or traveling through. She records the local and suggests that botanical science, even in the context of natural history generic production, need not always function imperially. The implied pastoralism evident in the beautiful simplicity of her descriptions and even in the elision of African and native labor, serves early ecologic discursive goals, for the specimen in its organic function and natural habitat, in that particular season and moment in time, absent human

disturbance, is documented without assured expectation for its global travel and impact on scientific knowledge-making. That the specimen and its description can speak from the page towards an imperial agenda regardless of Colden's intentions can certainly be argued, particularly as Colden did participate in sending and receiving seeds, and was even published once without permission. However, other natural histories make stronger, more overt claims for new knowledge, telling, rather than showing, the reader the importance of a given discovery. Colden simply places her place on the page.

The notion of the botanic metaphor may make this even clearer. Colonial gardens were extensions of empire that quite literally staked a place in another land, cultivated European interests, transplanted that land through naturalization back to Europe, and thereby emblematically grew the empire.⁹⁹ Colden was an avid gardener, but it was not her garden alone that supplied the collection she documented in *The Botanic Manuscript*. Her natural history text itself is the true garden of her region, creating an enclosed space by literally excluding non-indigenous specimens and metaphorically cultivating an early ecologic discourse. Generically speaking, her natural history totally rejects the mandate of the botanic metaphor, rejecting in due course politics, the imperial agenda, and in fact even the sundry agendas of the natural history genre itself. What is especially striking here is that Colden was writing a botanic-scientific natural history. The text's ecologic bent, then, takes on even greater significance in terms of Colden's evolution of the genre.

Colden's *Botanic Manuscript* belongs to an enduring subgenre within natural history called the *flora*. The flora specifically classifies the plants of a region within a taxonomic system

⁹⁹ There are other understandings of the botanic metaphor too. In Kate Mulry's talk, "The Scent of 'Flora's Wide Domains': Cultivating Gardens and Political Subjects in the Early Modern English Atlantic," Mulry posited that the garden reflected and supported humoral ideals of the strength and health of bodies that then symbolically transferred to the strength of the polity and nation—a new "physical conception of the political subject." As humans needed to be reformed through careful cultivation, so too was cultivation a form of political governance.

and implies fieldwork on the part of the naturalist (Shteir 6-7). Carl Linnaeus's taxonomic system that Colden uses in her flora gained prominence in the 1730s and was still relatively new at the time she compiled her manuscript in the 1750s. Shteir reads the Linnean system as "constructing difference...illustrating a larger moment of reaction to cultural fears about blurred distinctions in sex and gender" (16). Though reading difference as the governing principle of Linnaeus's system explains the ultimate shift in botanical scientific practice away from female participation, Colden's use of the system instead erases difference, equating her work with that of her father's and other botanists'. If a woman can learn and use the system, her work is "science," and if a woman can learn a passable Latin, which functioned as a "gatekeeper" (Shteir 30) for women seeking to enter scientific pursuit, her work is doubly secure—or is it? I maintain that taxonomic bounds do not necessarily obstruct a rootedness in the ecologic, and particularly in the context of a flora, whose very purpose, if executed outside of the "myth of the garden of the world" and outside of the "botanic metaphor," is to record the local. Colden's living in the local was uncommon, inseparable theoretically from her gender, but for her contemporaries her gender and her ecologic sensibility still made her outsider.

The flora was typically the most scientific of the subgenres under the umbrella of botany, but we can see in both Colden's flora and in her father's, his *Plantae Coldenhamiae* (1743), published by Linnaeus, that rarely could the scientific be extracted from the literary, even in this subgenre. Cadwallader Colden's *Catalogue Planatarum*, which became the basis for *Plantae*, groups flora alphabetically, by their Latin and matching common names. The final *Plantae*, which uses Linnaeus's new method, taxonomizes according to the Linnean system, with short, attached descriptors for one-third of the plants (ninety-one out of two hundred and forty-seven) (Robbins 39). Jane Colden's *Botanic Manuscript*, already making use of the Linnean method,

describes fully three hundred and five of three hundred and thirty-six catalogued plants out of three hundred and forty intended entries.¹⁰⁰ Jane's descriptions crucially bleed into the literary, as do her father's, if we are to take for example, Cadwallader Colden's "Description of 2 Flowering Plants" as a model of his fuller descriptive method. For the first plants, he writes of the leaves: "The leaves are large & oval, their edges indented like a saw, stand on [illegible] upon long leaf stalks ([illegible]), one opposite to the other, & they have one longitudinal fibre from the stalk to their tip which sends forth alternately side branches round & upwards towards the tip." Simile, imagery, and diction enliven this description, but description is also a generic discourse: "These four little bodies [seeds] seem to be peculiar to this plant & I do not remember that they are taken notice of by any writer that I have seen I suppose Linnaeus would call them Nectaria 2 of what use are they" ("2 Flowering Plants"). Jane Colden's descriptions embody the same literary quality, and imbue the plants with an agency that almost anthropomorphizes them. In her description for the "Dandylyon" flower, No. 2, she speaks of "this remarkable thing," that the leaves "now stand upright & prevent the seed, from being blown away with the wind, before they are fully ripe." In the next paragraph, she uses her father's simile of the saw: "Leaves single long & narrow indented like the teeth of a saw, and deep and irregular, sharp pointed."

William Bartram's descriptive method fully embraces the literary. His introduction to *Travels* proposes the very argument that plants, or rather "vegetable beings," "are endued with some sensible faculties or attributes, similar to those that dignify animal nature; they are organical, living, and self-moving bodies" (17). He wonders, "is it sense or instinct that

¹⁰⁰ My own count. Gronim counts three hundred and twenty-six catalogued plants. Additionally, "Thirty-five of hers were clearly in her father's flora, but for many others his catalogued plants simply have too few details to allow for comparisons. Nevertheless, at least one hundred seventy-five of hers were not in his flora at all, including at least fourteen that they could not identify even with the use of the botany books in his library. Even for plants that he had described, she saw details he had missed, like the delicate fibers that accompanied the central rib of the Polygala leaf or the rough grains insides the petals of the Uvularia" (41).

influences their actions?” (17), and reminds us that plants have children, for “vegetables have the power of moving and exercising their members, and have the means of transplanting or colonizing their tribes almost over the surface of the whole earth,” typically through travel within animals’ stomachs (18). His plants are crucially colonizers, further strengthening the connective strand before object-specimen and subject-narrator, and reader too, complicit in the imperial enterprise. The exhaustive natural history that teeters on the brink of novelistic memoir, like Bartram’s, can still be used to probe how description informs scientific practice, for after all, Bartram is a working botanist, zoologist, and anthropologist, whose story is punctuated by catalogues of animals, plants, and native tribes, and whose [botanical] illustrations are the most detailed of the Southeastern region.

Reading Descriptively

As further testament to the entwinement of the Bartram and Colden families, William Bartram’s two hundred and forty-seven plant specimen descriptions and illustrations for John Fothergill—contained now in seven quarto notebooks at the Natural History Museum, London, after having been compiled by Joseph Banks (Bartram, Fothergill Album)—match in number exactly to Cadwallader Colden’s plant identifications in *Plantae Coldenhamie* (1743). I am certainly not suggesting that John Bartram’s and Cadwallader Colden’s children are interchangeable, but only that they are in a sense, shared. As I have argued above and will argue below in my close readings of William Bartram’s and Jane Colden’s work, these two colonial children whose journeys began so similarly arrived at radically different endpoints, largely because of their genders, but also because of their proto-national and proto-ecologic orientations, respectively. Their divergent descriptive practices towards the evolution of the natural history genre are finally symptoms of their different sensibilities.

William Bartram's notebooks for John Fothergill contained some of the glorious illustrations ultimately published in *Travels*, and have been compiled in various publications since, including in Joseph Ewan's comprehensive 1968 volume, *William Bartram's Botanical and Zoological Drawings*. Ewan provides a contemporary history of *Travels's* reception among the community of transatlantic botanists, who wrote each other of their difficulty in placing some of the new plants Bartram had identified within known genera. Ewan also cites some confusion around non-user-friendly features of the text, such as separating plant names from their descriptions and incorrect Latin spellings (12). In contrast, Jane Colden's scientific precision, especially exposed, as it is not couched in narrative, is a staple of her work; Gronim calls her particular form of engagement with generic convention an "acuity with which she replicated the experiences of authoritative botanists [and] demonstrated that she had the skills and judgment with which to participate in deliberations about taxonomic placement of specific plants" (41). Gronim cites Colden's description of No. 58, the Polygala/Seneca Snakeroot, which, much in the way Merian does in her preface, rewrites existing knowledge of the plant's Flower by debunking Linnaeus's own description. That she "must beg Leave to differ from [Linnaeus]" enacts her entrance into the institution of botany as science, and into the New Science, or natural history as genre. It also suggests that precision is of ultimate importance to a woman botanist who cannot afford to make an error or be insensible to the ways in which her text will be read. Though Colden claimed that she would not publish, we can still imagine her work to have been completed with an audience of botanists in mind. This community of scientists certainly would not have afforded Colden the same benefit of the doubt afforded Bartram, who by the time of his publication, was the most reputable botanist in the Americas—and besides, a man.

In the below close readings, we can see time and again the contrast between Bartram's highly precise illustrations and either literary or omitted descriptions and Colden's highly precise (and literary) descriptions and bare illustrations. I argue that we should read these differences in light of their differing engagements with descriptive methods, within the context of evolving the natural history genre more broadly. These differences finally highlight, I aver, Colden's ecologic stakes, while complicating Bartram's critically accepted ones. Gronim argues that Colden's descriptive method—the division of the plant body into parts, and the subsequent compartmentalization of the senses, such that those senses belong to a universal experience of the plant, rather than “the idiosyncratic personhood of the witness herself”—“detaches from its ecological context” and “from any specific social location” both plant and botanist, generating a “sensorium without sex” rather than a botanist (44). However, we can likewise read this erasure of the “I” ecologically, as the senses become a way of getting close to the life of the plant, being physically in a form of unity with the plant, within a universal experience facilitated by her scheme of classification (the Linnean description paradox outlined in my Introduction). Gronim acknowledges that the botanist's divided body, through the senses, always stays in contact with the equally divided plant, and by association, with the earth, but I believe that reading this conjoinment as detachment from a “specific social location” is erroneous. In fact, Colden was recording, and writing, a region as precisely as possible through the carefully culled selection and identification of indigenous plants, and also locating herself “socially” among a botanical and natural history generic community. The upstate New York wilderness, then, isolated as it was, was far from barren of social relations, and certainly Colden's volume, and Colden herself, made it even less so. Her plants, their descriptions imbued with sensorial literariness, are in delicate and complicated relation with their local and with the subject-botanist herself. It is only

through this relation that they are able to reach a global audience. It is this that is astonishing about Colden's work. She does not begin with the global, but with the local, and it is the same generic conformity—seemingly—that is wrought towards an ecologic, rather than an imperial purpose.

Bartram, *Andromeda Pulverulenta*, Illustration, Part 3, Chapter 5, Text page 310 & *Kalmia Ciliata*, Part 1, Chapter 3, No Illustration, Text page 39.

These two shrubs in the same family, Ericaceae, positioned almost three hundred pages apart in Bartram's text, highlight opposing impulses of description, one of which Colden takes up in her Plate No. 71, discussed below. The *Andromeda Pulverulenta*, also called the *Zenobia Speciosa Pulverulenta*, grows along the coastal regions, bogs, and swamps from South Carolina to Florida, and in the West Indies, among other places, according to one source, (Sudworth 102), and from Virginia to South Carolina according to another (Cullina 259). Bartram's image is a black and white illustration, less visually impressive for the lack of color and depth of habitat-treatment than his plates, which do exhibit a greater degree of difficulty in execution than his illustrations, including the *Andromeda*. The bell-shaped flowers in bloom at the top of the isolated stem lean towards the group of leaves, as though weighed down by the leaves towards the bottom of the stalk. The leaves appear to be in motion, several of them turned and twisted as though in response to an imaginary breeze. That the shrub is drawn alone, detached from its environment, tells us that Bartram wishes the reader to view it as specimen. Even within his illustrations, Bartram balances the scientific and the literary.

Most of Bartram's images place flora and fauna and peoples in osmotic relation; many are complex, layered, and even action-packed, as is one of his two famous images of the *Colocasia* plant, in Plate 25, alongside the snail and black root. However, the *Andromeda*, along with his other illustrations, is botanical observation in its most basic scientific form, a nod to his

full engagement and participation in a botanical community who can easily read the image. That there is no textual description here further emphasizes Bartram's full investment in eighteenth-century descriptive strategy—drawn “from life” and proportionally (although this was not always the case, even for Bartram), classified and named, and in its inclusion, automatically assumed part of existing generic discourse. Even in the introduction and discovery of new indigenous plants, the transatlantic botanical community had Linneaus's system in place, an identification system that could slide that plant into a designated slot within a genus and class, finally to be known. Hence, Bartram's readers' consternation—though they had not traveled through the Southeast as Bartram had—that certain plants Bartram had pinpointed were not clearly deemed “new or already described...What is *Pinus squarrosa* C[anna] *lutea*?” (Henry Muhlenberg to Stephen Elliott qtd. in Ewan 12).

The *Kalmia Ciliata*'s textual description, on the other hand, reads as though it can be transposed onto the *Andromeda Pulverulenta*. In the same genus, the adjectival in the species names serves its own descriptive purpose: the *Kalmia* is “ciliated,” and the *Pulverulenta*'s flowers are “dusty” or “mealy” or “powdery.” The *Kalmia* is described, in contrast to the *Andromeda*, in detail, and without an accompanying illustration:

the stems are very small, feeble, and for the most part undivided, furnished with little ovate pointed leaves, and terminate with a simple racemi, or spike of flowers, salver formed, and of a deep rose red. The whole plant is ciliated. It grows in abundance all over the moist savannas, but more especially near ponds and bay-swamps. In similar situations, and commonly a near neighbor to this new *Kalmia*, is seen a very curious species of *Annona*. (39)

Bartram stumbles upon the *Annona* and the *Kalmia* side by side after having “lost sight of the river, [and] ascending some sand-hills.” The plants become integral to the narrative of the sublime beautiful wilderness, itself side by side with cultivation and civilization. This wilderness serves as a restorative here, as it does at many points in the text: “The sudden transition from rich cultivated settlements, to high pine forest, dark and grassy savannas, forms in my opinion no disagreeable contrasts; and the new objects of observation in the works of nature soon reconcile the surprised imagination to the change” (39). Though Bartram sees these settlements as an extension of nature, and part of a pastoral vision that becomes an American national vision, rather than the antithesis to an untouched wilderness, he suggests at the same time that civilization must be left behind for the imagination-sparking discovery of nature. Except that it can’t be. As Myra Jehlen argues in *American Incarnation* (1986), it is not cultivation that is an extension of wild nature, but nature that becomes an extension of cultivation. Bartram is scientist first, and participant second, when he comes upon this little plant community, or these “new objects of observation.” That the *Kalmia* and *Annona* are the objects of his description, and in the case of the *Annona*, his art, almost simultaneously as they are the subjects in a mutual sensory experience, taints Bartram’s ecology. He does not belong to this little community; he is contaminated by his point of origin.

Colden, *Kalmia Augustifolia*, *Kalmia Latifolia*, No. 71 [Text and Plate]

These plants, also within the genus Ericaceae, found from New Brunswick up to Lake Erie on the northern shore in New York State, along with some other Eastern locations, are called the Sheep and Mountain Laurel (Cullina 151-152). No. 71 is one among three hundred and five final descriptions that is paired with a rudimentary drawing of the plant. The precision with which the plant is described is purposeful. A short excerpt reveals this precision: “*Flower* one

Leaf a short Pipe, Brim large cut into 9 shallow scallops, pleated in 10 folds, in each of these pleats, there is a pit or hollow on the inside of the Leaf, which makes a lump on the out Side, the flower is of a pale red colour, and on the inside, just below the pits, it has a Circle round it of a dark red colour, in the form of Weaves consisting of 10 points.” Colden is practicing a descriptive method that behaves like Renaissance description, where a botanist-teacher could take his pupils plant by plant within the garden and identify it based on its description, where the value of the illustration itself was nominal, for it was not meant for purposes of definition and identification, as the description itself was.¹⁰¹ Her text must compensate for the poor illustrations with concrete descriptive language—so crucial to botanical science and in certain iterations of the natural history genre. Where she omits frivolity and aesthetic considerations in art, her text renders visualization *through* scientific description.

Colden accomplishes the reverse of Bartram. Bartram privileges the aesthetic in a paradoxical attempt to inhabit a more fully credible scientific role (for beauty is integral to eighteenth-century description), circling through his scientist-explorer-narrator-tour guide hats as a form of narrative aesthetic all its own. Bartram’s experience is offered to the reader as personal, and this is made especially evident by his use of the present tense alongside vivid sensory language when describing the sublime: “what a quantity of water a leaf is capable of containing, about a pint! Taste of it—how cool and animating—limpid as the morning dew” (16). Colden is effortlessly botanist, a different sort of teacher who instead entreats the botanist-reader to act and participate in the generic practice of identification of the real plant. To do this based on description, rather than on illustration, places a greater onus on the reader, blurring the boundary between writer/reader, observer/receptacle, knowledge maker/knowledge recipient, scientist/scientist. Colden’s writing functions then communally, very much staking a space

¹⁰¹ See the Introduction for a discussion of both Renaissance and eighteenth-century descriptive practices.

within botanical and natural history discourse communities. Ironically, her emphasis on the specimen itself is the basis of her ecologic point-of-view.

Where Bartram asks his readers to experience holistically and sensorially, Colden's text demands human-specimen interaction through the senses. Though she appears to be writing a pure taxonomy, she, as though an eighteenth-century naturalist writing a narrative account rather than a taxonomy, returns into circulation the senses of taste, smell, and texture. In No. 71, these senses are absent, however, except here: "leaves...very stiff." Though she follows the strict categories of Cup, Flower, Chives, Pestle, Seed, Stem, and Leaves, the language afforded by Linnean taxonomy did not encompass the entirety of the sensory experience of the specimen she offered the reader. Her description, in garnering the reader's active participation in its identification, pushes away from the observer-specimen dichotomy in an unexpected way—by redirecting focus to the sensory experience of the specimen across the subject-subject relation (here, the writer-botanist and the reader-botanist). The major caveat here, explored in my next close reading, is that this translated sensory experience for the non-present reader is imperfect by virtue of the plant's decontextualization from its local habitat. Colden is aware of this contradiction, but her effort at bestowing greater agency upon her audience is nonetheless a mindful step towards an ecologic point-of-view. This endeavor is quite different from Bartram's, whose holism subjugates nature's and nature's parts' roles to the scientist and the disinterested reader abroad.

Colden, *Geranium*, No. 6 [Text and Plate]

The omission Stalnaker cites as Fouceault's definition of eighteenth-century descriptive practice is made literal with Colden's blank pages scattered throughout the *Botanic Manuscript*, and especially with Description No. 6, which is highly literary, but faces opposite a blank page.

Image No. 6, too, is unusually developed, with an attempt at shading, and is the centerpiece on a page with two other small and more rudimentary illustrations. No. 7, the Rose, is part of a classification scheme that Colden never completed. That an illustration exists of this missing plant and others tells us that her text was meant to shade, detail, develop, color the picture that was so inadequate at either scientifically or aesthetically representing the plant. None of her flowering plants are drawn blooming, either, once more stressing the role of description as the fully formed version of the plant. Where the image plants the specimen, the text births it, produces it in its full beauty and potential. The text *is* the plate.

The (No. 6) Geranium's description is longer and more detailed than are others. Colden's use of commas here, and in other descriptions, generates a string of modifying phrases, and stylistically engenders a feeling of sensory transcendence and simultaneous presence:

five oval shaped, with a little rising on one side, half the length of the seed, with a line from it to the other end, the seeds are contained each in a separate Shell, which are first at the top of the 5 Valves that cover the Stile. As the Seed ripens, the Stile opens on the inner side, and the Valves spring up it throw the seeds from them, separating from the Stile, quite to the top, and tourn round in a half circle with the Shells, stile first to them, which make a regular pretty appearance

The plant is a sentient actor in Colden's description, agent of its own birth and life, consumed with its own intricate and unique birthing process. Colden strategically builds excitement with short modifying phrases that progress toward the geranium's surprising act of "throw[ing] the seeds." The first sentence purposefully deflates the building action with the modifier—"which are first at the top of the 5 Valves that cover the Stile"—for the preceding independent clause—"the seeds are contained each in a separate Shell"—in order to restart the action with the visual

of “ripen[ing].” The second sentence couches the independent clause—“the Stile opens...and the Valves spring”—in visual action verbs—“ripens,” “separating,” “toun”—but then uses the same technique to still the action—“which make a regular pretty appearance.”

Colden continues with two stand-alone short sentences that punctuate the description above and below them, and then ends with two more such short sentences:

The plant has two hairy stems.

The flowers branch out upon stalk from the top of the stem.

The leaves grow single, upon short branches, from the top of the Stem, set opposite, The leaf roundish, slashed deep to near the center, into 5 parts, each part notched on the outter end.

The flowers are of a purple colour

Flowers in May

The longer descriptive sentence embedded here between the shorter sentences, much like the first, is highly imagistic and active. The powerful verbs “slashed” and “notched” suggest an actor here outside the plant itself—perhaps nature itself. Though the process of the geranium’s growth is spectacular and unique, and though the plant is oblivious to the naturalist’s intrusion upon its habitat (perhaps here the garden Colden herself cultivated), neither the first lengthier sentence description I’ve excerpted here, nor the second, exclude the naturalist or the reader from the productive process. In fact, the heavily active verbs place the reader squarely in the middle of the action. The punctuating phrases before and after these longer descriptive sentences are descriptive in their own right, and just as in poetry, Colden’s choice to separate them should be read as an attempt to pause the fluidity of the other images and lay emphasis on the images drawn by the shorter phrases. The separation of the plant into parts implied by these short,

punctuating sentences is the epitome of the descriptive struggle between classification and literature at work, traced by Joanna Stalnaker and Brian Ogilvie, and which I expound on in my Introduction.

Throughout No. 6's entire description, the subject shifts, from nature—"five leaves, set upon the seed bed"—to the geranium—"Chives 10, broad & flat at bottom, overlapping each other & furrowing the Seed bed, they grow small and round towards their tops"—to the naturalist—"The chives are united together at bottom, but that it is not to be perceived, that they are, till the other parts of the flower, is separated from them." In other words, nature sets the scene, the plant acts, and the naturalist participates in the process through observation. Colden purposely leaves ambiguous the subject of the phrase, "till the other parts of the flower, is separated from them," leaving the reader to wonder whether it is the plant or the botanist enacting this separation. If the latter, this intrusion is a form of staging the plant for science; if the former, perceiving the action and recording it for science still serves imperial purposes.

We might also, however, read this ambiguity, and the language around it, especially the word "united" in context with the shifting subjects of nature-at-large, plant, and botanist, as an early ecologic point-of-view. Nature, plant, and naturalist here are in symbiotic relation, alternately assuming the roles of actor and object. These shifting subject roles circulate throughout the description. The naturalist is ever-present and always returned back to the world of the plant, always just as the reader gets lost within this world: "...and tourn round in a half circle with the Shells, stile first to them, which make a regular pretty appearance." The reader's transcendence of his or her own place achieved through the picture drawn is always mediated by the scientist, Colden reminds us. There is finally no substitute for presence in the local, which the naturalist attains, but the reader simply cannot, no matter the level of descriptiveness. Perhaps

this is why Colden doesn't bother with elaborate, glorious illustrations; while her text is written "from life," the sensory, personal experience of mutual interaction with a plant in its indigenous environment is paramount and nonreplicable. However, this presence alone does not equate to an ecologic practice, and in fact, may hinder it by virtue of the naturalist's intrusion upon habitat.

Bartram, *Magnolia Awriculata*, Part 3, Chapter 3, Plate 26, Text pages 278-281

Where I begin discussion of Colden's Description No. 6 with the contrasting methods of omission and description, I must begin discussion of Bartram's Plate 26 and text by commenting on its descriptive abundance. Bartram draws on rhetorics of the sublime and the pastoral to place the plant itself at the center of the regional experience. However, he is far less successful than Colden in this endeavor. While Colden as naturalist minimally interacts with her specimen, insignificantly altering habitat (though, of course, just by existing in that space, she does anyway), Bartram's entire narrative focus is his own experience of the plant and its environment. Ironically, the Romantic and pastoral modes work to highlight the naturalist's perception and sensory experience rather than the scene itself. In other words, in teetering away from the scientific and towards the literary, Bartram compromises the local. His Plate 26 is an attempt to restore the imbalance generated by the text, but the *Magnolia's* (gorgeous) decontextualized depiction still operates literarily.

The text that is meant to be read side by side with the plate begins with Bartram's own ascent up the mountain he has named after the flower, the naturalist's transcendent entrée into a natural habitat he deigns to lay claim to:

This exalted peak I named mount Magnolia, from a new and beautiful species of that celebrated family of flowering trees, which here, at the cascades of Falling Creek, grows in a high degree of perfection: I had, indeed noticed, this curious tree several times

before, particularly on the high ridges betwixt Sinica and Keowe, and on ascending the first mountain after leaving Keowe, when I observed it in flower, but here it flourishes and commands our attention. (278)

The focus in this opening passage remains on Bartram's own experience of the sublime. As traveler, Bartram describes a simultaneous loss and transcendence that is the crux of the Romantic tradition: the first half of the sentence, before the colon, could almost be a passage of Wordsworth's or Coleridge's. However, Bartram never strays so far into the literary that he cannot return into the generic tradition of the natural history. Even this one sentence intersperses language of the sublime (or literary) with that of the scientific, mixing "exalted," "new and beautiful," "cascades," "perfection," "flourishes" with "noticed," "curious," "observed," "commands our attention."

The attendant description of the Magnolia tree is highly descriptive in the scientific sense, and just as Jane Colden's descriptions often are, meant as a sort of paint-by-numbers description, except in Bartram's case, for the plate he has already illustrated:

This tree, or perhaps rather shrub, rises eighteen to thirty feet in height; there are usually many stems from a root or source, which lean a little, or slightly diverge from each other, in this respect imitating the *Magnolia tripetala*; the crooked wreathing branches arising and subdividing from the main stem without order or uniformity, their extremities turn upwards, producing a very large rosaceous, perfectly white, double or polypetalous flower, which is of a most fragrant scent; this fine flower sits in the centre of a radius of very large leaves, which are of a singular figure, somewhat lanceolate, but broad towards their extremities, terminating with an acuminate point, and backwards they attenuate and become very narrow towards their bases, terminating that way with two long, narrow

ears or lappets, one on each side of the insertion of the petiole; the leaves have only short footstalks, sitting very near each other, at the extremities of the floriferous branches, from whence they spread themselves after a regular order, like the spokes of a wheel, their margins touching or lightly lapping upon each other, for an expansive umbrella superbly crowned or crested with the fragrant flower, representing a white plume; the blossom is succeeded by a very large crimson cone or strobili, containing a great number of scarlet berries, which, when ripe, spring from their cells and are for a time suspended by a white silky web or thread. The leaves of those trees which grow in a rich, light humid soil, when fully expanded and at maturity, are frequently above two feet in length and six or eight inches where broadest. (278-279)

If we match Plate 26, then, to this description—read it side by side, sentence by sentence, while looking at the artwork—we see the actualization of the natural history generic imperative to read text and art together. No close reading could come closer to capturing the sensory experience of *observing* this plant. And Bartram certainly returns into his description the senses of taste, smell, and texture. Because his description is so “perfect,” we cannot be sure if Bartram wrote it as he experienced the plant in its habitat, “from life,” or if Bartram illustrated the plant first, and then performed his close reading based on his illustration. He likely had a specimen at his disposal, so imagining any sort of linear performance of this close reading is an experiment in flawed logic; however, the sense that text and plate are in perfect congruence remains, and this is natural history at its most excellent, functioning as intended generically.

Bartram’s specimen level exactitude, however, is always bordered by, if not enmeshed with, the literary modes of Romanticism and pastoralism, and with the agendas of cultivation and a budding nationalism. These simultaneously operating modes and agendas at best complicate

Bartram's ecologic sensibility, making it impossible to sustain throughout the text as such. The passage immediately following Bartram's own close reading of the Magnolia tree, for example, returns us back to the naturalist-traveler's point-of-view: "The day being remarkably warm and sultry, together with the labour and fatigue of ascending the mountains, made me very thirsty and in some degree sunk my spirits" (280). And continues with Romantic exclamations of the sublime: "I now entered upon the verge of the dark forest, charming solitude! As I advanced through the animating shades, observed on the farther grassy verge a shady grove; thither I directed my steps" (280). And after describing a beautiful scene of natural tranquility, "I here seated myself on the moss-clad rocks, under the shade of spreading trees and floriferous fragrant shrubs, in full view of the cascades." Enacting a oneness with nature does not quite amount to an "aesthetics of relinquishment"¹⁰² Lawrence Buell assigns to the text, for Bartram is still observer, here encircled by a gathering of trees and shrubs whose central purpose is to *be eyewitnessed*: "At this rural retirement were assembled a charming circle of mountain vegetable beauties; Magnolia auriculata...&c." (280). The Magnolia auriculata heads a long catalogue in this passage, and along with other flora, is actor in this gathering, theatrically performing for the naturalist:

Some of these roving beauties stroll over the mossy, shelving, humid rocks, or from off the expansive wavy bough of trees, bending over the floods, salute their delusive shade, playing on the surface; some plunge their perfumed heads and bathe their flexile limbs in the silver stream; whilst others by the mountain breezes are tossed about, their blooming tufts bespangled with pearly chrysaline dew-drops collected from the falling mists, glistening in the rainbow arch. (281)

¹⁰² Buell defines this orientation thus: "to give up individual autonomy itself, to forgo the illusion of mental and even bodily apartness from one's environment" (144). I discuss this concept at greater length in the Introduction.

And then, abruptly: “having collected some valuable specimens at this friendly retreat, I continued my lonesome pilgrimage” (281). The anthropomorphizing of the Magnolia and its “friends,” just as in Colden’s No. 6, is intensely vivid. The action verbs “stroll,” “bending,” “salute,” “playing,” “plunge,” “bathe,” “tossed” “bespangled,” “collected,” “glistening,” call forth an endless stream of images rendered only more vivid by the imagistic adjectives “roving,” “delusive,” “perfumed,” “flexile,” “blooming,” “pearly,” “chrystaline,” “falling,” “rainbow.” But this scene is to be experienced and then left. The traveler-naturalist does not live here; he is not counted among the friends. Bartram returns the reader to the purpose of the expedition—specimen collection—and reminds us that his is a “lonesome pilgrimage,” ripping the reader from the fantasy inherent to an “aesthetics of relinquishment.”

Where Colden *lives in* the specimen by giving us a minimal description of its full habitat and eliding, where possible, the conflation of voyeurism and observation, Bartram’s Magnolia specimen is only one part of the naturalist’s experience; other specimens, the environment, the scenery, the naturalist, the naturalist’s full impressions, and even the description itself, are all conscious agents of experiential conveyance to the reader. Ironically, this holistic approach amounts to a diminishment of the specimen itself, and highlights instead the naturalist as central subject in the narrative. Though we cannot claim that the parts of Bartram’s experience here suggest his investment in a classificatory scheme, the larger picture falls apart to expose the crafty staging of its pieces by the naturalist-subject. In Colden’s case, her own subjecthood is present, but purposely minimized, instead calling to prominence, opening the curtain, on the performance of the plant—and tellingly, in contrast to Bartram, sustaining that performance throughout each description, rather than closing that curtain and returning the reader to the naturalist’s subjectivity. In this sense, Colden both brings and keeps her reader closer to the

specimen—for her description is minimally mediated by the describer—and simultaneously reminds the reader, through shifting subjectivities, including sometimes, the naturalist’s own, that the scene of the description forms a triumvirate of nature, specimen, and botanist. Colden’s reader is not called to transcend the scene, as is Bartram’s, but rather to keep close within it; the erasure of a generalized transcendence (Bartram’s description of his experience of the sublime wilderness could be equally experienced in Europe, in the Alps, for example) challenges the reader to read region rather than nature more broadly. The catch that Colden acknowledges, however, is the impossibility of doing so without presence. And this is Colden’s major innovation in the natural history genre. Her work does not pretend to substitute experience or paint a complete ecology of a region that any reader can enter through the text or art. Her work, instead, entreats us to understand that place *is* presence.

Bartram, *Mimosa Pudica*, *Alligators* [Plate 9], *Pelicans*

The imperialist impulse is expressed in Bartram not exclusively through the holistic approach, but also through the language of agency and anthropomorphism when describing nature’s processes of predation. Predation is not unique to animals, however, as Bartram makes clear: “The Humble plant (*Mimosa pudica*) grows here five or six feet high, rambling like Brier vines over the fences and shrubs, all about the garden...[natives] condemn it as a noxious troublesome weed, for wherever it gets footing, it spreads itself by its seed in so great abundance as to oppress and even extirpate more useful vegetables” (347-348). The action verbs “spreads,” “oppress,” “extirpate,” function oppositionally to the verbs that describe the beautiful forest of trees including the *Magnolia* of the earlier-cited passage. This “troublesome weed” metaphorically colonizes its environment, consuming it and those around it, causing native condemnation, rather than hosts a friendly gathering as does the *Magnolia Arucula*. Bartram

judges the natives who “pay no attention to [the weed’s] culture” (348), and by doing so, instantly inserts himself as naturalist without invitation into a local ecology. Here, Bartram overrides native discomfort with the *Mimosa Pudica*’s consumptive growth, but elsewhere Bartram himself is so disturbed by processes of predation that he elides them entirely, or exposes the undergirding violence only to then abruptly obscure it.

Predation is a symbolic stand-in for slavery and the underlying threat of slave revolt for Bartram. In moments of predation, the text hovers between the pure pastoral and georgic modes. In just one scene, where Bartram is now traveler-surveyor, rather than naturalist, he watches the plantations from above, as alligators swim all around him; in his raptness, he neglects to notice the imminent threat the alligators pose, and he is “often surprised” by their “plunging.” The sentence continues, however with “the pleasing prospect of cultivation, and the increase of human industry, which frequently struck my view from the elevated, distant shores” (83-84). By placing the alligators in the first clause of the sentence, and “human industry” in the last, Bartram effects a recuperation of the surveyor’s imperfect peace—but not without a jolt.

Slave language and imagery markedly appear in the natural history descriptions themselves, but particularly in descriptions of birds. I quote the following passage from the beginning of Part 2, Chapter 3, in its entirety because of its richness in this imagery:

Being now in readiness to prosecute our voyage to St. John's, we sat sail in a handsome pleasure-boat, manned with four stout negro slaves, to row in case of necessity. After passing Amelia Narrows, we had a pleasant run across fort George's sound, where, observing the pelicans fishing, Mr. Egan shot on of them, which he took into the boat. I was greatly surprised on observing the pouch or sack, which hangs under the bill: it is capable of being expanded to a prodigious size. One of the people on board, said, that he

had seen more than half a bushel of bran crammed into one of their pouches. The body is larger than that of a tame goose, the legs extremely short, the feet webbed, the bill of a great length, bent inwards like a scythe, the wings extend near seven feet from tip to tip, the tail is very short, the head, neck, and breast, nearly white, the body of a light bluish graph, except the quill feathers of the wings, which are black. They seem to be of the gull kind, both in form and structure, as well as manner of fishing. (79)

In one of the first mentions of diasporic Africans in the book, Bartram clearly creates an analogic association between the African and the pelican. The jarring use of the pronoun "one" in "Mr. Egan shot one of them" juxtaposes the violence of slavery with the shooting of the pelican. The shot pelican's presence in the boat with the slaves symbolically resonates with images of the Middle Passage.¹⁰³ The pelican's description draws on images of slavery, like the "pouch or sack" the slave carries to gather crops, the "half a bushel of bran" "crammed" into this sack to maximize work and profit, and the "scythe" the slave wields in the fields. But "scythe," "crammed," and "shot" paint a darker picture of suppressed violence, troubling Bartram's account of the "pleasure boat." Here too the threat of slave revolt emerges, for when Bartram mentions that this pelican is "of the gull kind," he surely would have been aware that gulls travel in mobs.

¹⁰³ Later, in nineteenth-century abolitionist writing, including in slave narratives, boats commonly symbolized freedom. Recall Frederick Douglass's dark musings in *Narrative of the Life of Frederick Douglass* (1845) as he lived with the cruelest of slave drivers, Mr. Covey: "Those beautiful vessels, robed in purest white, so delightful to the eye of freemen, were to me so many shrouded ghosts, to terrify and torment me with thoughts of my wretched condition... You are loosed from your moorings, and are free; I am fast in my chains, and am a slave! You move merrily before the gentle gale, and I sadly before the bloody whip! You are freedom's swift-winged angels, that fly round the world; I am confined in bands of iron! O that I were free! O, that I were on one of your gallant decks, and under your protecting wing! Alas! betwixt me and you, the turbid waters roll. Go on, go on. O that I could also go! Could I but swim! If I could fly! O, why was I born a man, of whom to make a brute. The glad ship is gone; she hides in the dim distance. I am left in the hottest hell of unending slavery. O God, save me! God, deliver me!" (41).

Twentieth-century African-American literature picked up this symbolization, as here, in Zora Neale Hurston's opening scene in *Their Eyes Were Watching God* (1937): "Ships at a distance have every man's wish on board. For some they come in with the tide. For others they sail forever on the horizon, never out of sight, never landing until the Watcher turns his eyes away in resignation, his dreams mocked to death by Time."

The idea of Bartram as an early ecologist is enormously compromised by the necessary registering of slavery and slave revolt in a narrative natural history of the tropics. Traveler, botanist, zoologist, gardener, surveyor, artist, writer, naturalist—all of these roles Bartram inhabits by recording specimens within a story told by holding and repositioning the tension implicit in eliding and registering slavery. Ultimately, slavery registers everywhere—within the natural history descriptions, the art, and the narrative. While slaves are frequently in direct symbiotic relationship with nature, trudging through swampland, aiding Bartram’s collecting expedition, contributing plant knowledges, they are, like natives, also specimens. Bartram substantiates this dual reading when he places the saved and injured slaves from the deadly hurricane side by side with this salvaged and harmed notebooks and specimens.¹⁰⁴ After commenting on the miraculous survival of the slaves, he tells us that he spends three days nursing his books and specimens, so that “with attention and care I saved the greatest number of them; though some were naturally so delicate and fragile, that it was impossible to recover them” (133). Crucial objects of his natural history, slaves survive just as do his notes and art, side by side with his work, in fact, inextricable from it.

The text’s overall ambivalence about neatly dichotomizing plantation slavery and sublime nature tells us that Bartram’s empiricism could only be equally significant, nor could a vision of a regional ecology be sustained in light of so many contradictory narrative agendas. These agendas amount to pieces—as I mention above in my discussion of the Magnolia, not quite a classification system, but almost reading like one—and come together as a jumbled whole, unfocused. To return to Allewaert’s claim that the tropics presuppose, or force, an ecology—certainly this is true. When we read Bartram for genre, however, we must recognize that his is an exemplary narrative natural history that equally balances unitary visions of nature

¹⁰⁴ For more on the impact of hurricanes on colonial landscapes, see Matthew Mulcahy.

with imperial ones, and that Bartram's tropics cover under their umbrella multiple regions (the coast, inland, mountains, lakes, swamps)—to start—and multiple agendas (empirical, literary, national), subjectivities (naturalist, traveler, writer, nature, specimen, natives, slaves), and objects (specimens, natives, slaves). Though we may anachronistically read Bartram for Transcendentalist impulses, these too do not equate with unpolluted ecologic discourses. In short, though Bartram was participating in these discourses, Colden was enacting them with greater exuberance.

Colden, No. 286 *Aralia/Prickly Ash*, [Text and Plate]

Colden's *Botanic Manuscript* does not register slavery at all. Gronim stipulates that the invisibility of slaves, and the small mention of Natives and neighbors aiding in her production of knowledge could be simply because her work was solitary, or "perhaps she was haunted by a sense of what was at risk for a woman in undertaking such work: that to present herself as a botanist, she needed to avoid hints that her knowledge depended on others" (48). I find the latter explanation unlikely, preferring to imagine instead that Colden consciously wrought a botanical work so laser-focused on the specimen, that even her own interference in the specimen-habitat ecology, where registered, served to undermine that ecology. In other words, Colden wished to have the plants—through her descriptions of course—generate, produce, and reproduce as self-governing entities, just as they do in nature. These were her ecological stakes. Where humans are allowed to permeate this process of reproduction is telling—always as subjects, and in her own case, as scientist-subject, in attempted fluid interaction with plant and habitat. In the case of "country people" and "natives," these subjects could participate so long as they were serving the corollary, generic purposes of the botanic text, that of the flora, generating knowledge about medicinal, nutritional, and practical uses.

In No. 279, Colden ends her description of the Lauraus/Wild Allspice, Spice Wood, with “The Bark, Leaves & Berries, have all a Spicy Tarte, the Berries most so, and are used by the Country People in the Head of Spice in Cookery.” In No. 292 Fibraurea/God Thread, likewise, she notes that “The Country People here calls it Gold Thread. I came to the knowledge of it by their using a Decoction of the Root, for the sore Mouth that Children often get in the Mouth, they also use it for the Canker sore Throat, as they call it, this has been frequent in this Country, the Leaves & Root are very bitter.” In No. 286, Colden includes natives in her comments: “The Indians make a Decoction of the Bark of this shrub & use it for long continuous Coughs, & likewise for the Dropsy.” Only this final note is uncommonly followed by one more: “The Seed Boxes stand 2 or 3 together, upon branched foot Stalks of about half an Inch long.” It is curious indeed that the description continues around the unusual insertion of native knowledge. Perhaps we are meant to understand that this form of knowledge is intrinsic to this plant’s ecology, and so the description simply absorbs it.

No. 286 also returns into natural history the senses of smell, taste, and texture. The sentences preceding the one concerning native knowledge tell us that “The Leaves of the Bark have a hot Spicy flavour, the Bark most so. Both the Seed Box & the Seed have a great Deal of this hot spicy tart & Leaves on the tongue for half an hour after chewing them.” Again, this description unusually makes visible the botanist herself. And her description of the seed cover’s texture once more exposes her own subjectivity: “Cover of the Seed is a roundish Box, the outside of it is full of little punctures like a Woman’s Thimble, it is composed of 2 Valves & contains one Cell.” Colden’s choice of female domestic object is symbolic here. She seems to say that women too have a claim to this plant, to knowledge of this plant.

That Colden uses *Manuscript* as a journal to also pose questions, rather than posit answers, is evident at the top right corner of the physical page, where, in a lightly-scribbled annotation, she wonders if the *Aralia Spinola* is also the “*Zanthoxylum?*” It is not, in fact, the same species. When taken together, her willingness to privilege native knowledge, include women, and expose her own *lack* of knowledge, No. 286 is an extraordinary entry that radically defies generic mandates. Though native knowledges are sometimes validated in male-authored natural histories, they are also commonly dismissed. Women are *never* included in a plant’s description in a connective capacity, as they are here, nor obviously envisioned as serious readers of science (rather than of narrative). While humility is often exhibited in natural histories, it almost always functions as a narrative trope that must be performed in order to lay the foundation for a subsequent performance of hubris.¹⁰⁵ Colden’s illustration for No. 286 is especially rudimentary, but it is positioned on the page alongside other specimens as though to leave room for a fifth on the page; even her drawings, and their placement on the page, then, acknowledge the necessary openness of documenting a regional ecology. Colden’s No. 286 finally shows that evolving the genre does not mean compromising the descriptive method. It does, however, mean, envisioning a different ecology—here, one that includes native, woman, and embodied in one person, master and student botanist.

Conclusion

A photo of the family gravesite taken by Anna Murray Vail, one of Colden’s first biographers, dated February 17, 1907, and attached to the *Botanic Manuscript* that finally found its way to the Natural History Museum of London, provides a stark contrast to the *Manuscript* itself; its underexposure on what appears to be a bleak Winter day opens the volume almost

¹⁰⁵ I discuss the negotiation of hubris and humility in Chapter One’s section on Merian’s and Stedman’s prefaces, and in the Introduction.

ominously. And yet, the tranquility of the isolated landscape depicted in the photograph, with only a few bare trees to color it, conveys the governing ecological point-of-view Colden's *Botanic Manuscript* does. Colden's volume is both highly scientific, following the system of Linnean classification, and highly literary, returning as did most eighteenth-century narrative natural histories a full sensory experience to descriptive practice. The photograph works similarly: on the surface, it depicts a cold Winter's day, bare and uninteresting. Upon a longer look, however, one can't help but feel entranced, pulled in, even lost in this landscape—and simultaneously far away, detached, alienated. The landscape is ours to view, but not to touch or be a part of, though Jane Colden *was* a part of it. That a photographer had intruded upon this place only mildly registers. Similarly, Colden, as female botanist, documents this very upstate New York wilderness, sometimes peeking out of the frame to remind us of her subjecthood, then retreating. Her enactment of a scientist subjectivity at all is critical in assessing her ecologic point-of-view, but also for negating the critical position that she remains, as she did for transatlantic scientists of her day, simply an object of circulation and curiosity.

The caption to the posthumously-attached photograph reads: "The old private burying ground in the 'Spring Hill' farm. Gov. Colden's grave is said to be in the lower right hand corner of the small grove of hickory trees." I am struck by what is unsaid, who is left out. Jane Colden's omission (where is *her* grave?) is a condition of the natural history genre; after all, to include a female naturalist, is to radically shift the metaphoric gravesite. Instead, we are to imagine Jane, as "Gov. Colden's" dutiful daughter,—which she most certainly was—to be buried beside her father, though she does not deserve even this mention. Colden's position as the daughter of a prominent statesman, scientist, and colonial correspondent ensured that bits and pieces of her work would be circulated and sometimes even entered into institutionalized botanical discourses.

However, it most certainly did not ensure that her larger work would be recognized for its visionary reading of the upstate New York landscape, or in fact, recognized at all. Her *Manuscript* accidentally found its way into the hands of a “Hessian Captain” in May of 1782, who would safekeep it as it traveled transatlantically, as had countless specimens, including Colden’s own, until it arrived in the hands of Joseph Banks, who would preserve it in the British Museum. Captain von Vangenheim penned an introductory letter for *Botanic Manuscript*, and the title page was most likely written upon intake at the Museum. That Colden’s volume was read as curiosity, anomaly, specimen, and that its recovery—and consequently, her recovery—has been accidental, makes for a fascinating story that roadblocks serious criticism of her work. As an exemplar in the classificatory botanical science genre that simultaneously broke new ground by participating in, and even launching, early ecologic discourses, *Botanic Manuscript* ought to be read as a key evolver of the natural history genre.

Chapter Three

Unstable Regions, Fluid Creole Identities: Eliza Lucas Pinckney, William Byrd II, and Reorienting the Colonial Natural History Towards the “Lobal”

In an undated letter to a girlfriend sometime in March or April of 1742, nineteen-year-old Eliza Lucas embodies in just a few lines the spirit of the natural history and defines her personal stakes in New World improvement:

I have planted a large figg orchard with design to dry and export them. I have reckoned my expence and the prophets to arise from these figgs, but was I to tell you how great an Estate I am to make this way, and how ‘tis to be laid out you would think me far gone in romance. Your good Uncle I know has long thought I have a fertile brain at schemeing. I only confirm him in his opinion; but I own I love the vegitable world extremly. I think it a innocent and useful amusement. Pray tell him, if he laughs much at my project, I never intend to have my hand in a silver mine and he will understand as well as you what I mean...[you] talk of coming very soon by water to see how my oaks grow. Is it really so, or only one of your unripe schemes. (Pinckney, *The Letterbook* 35)

The many competing and confluent elements that compose this small excerpt are representative of the complexity of Eliza Lucas Pinckney’s project in *The Letterbook of Eliza Lucas Pinckney, 1739-1762*. Faith in her business acumen alongside its dismissal as laughable “romance” is a careful play on the natural history convention of humility. Her self-imposed limitation on the pursuit of more transparently global routes to profit, like silver mining, is but thinly veiled code for her acceptance of gender bounds—at least it is so, on record. The phrase “innocent and useful amusement,” commonly employed in eighteenth-century justifications for women’s work in botany and cultivation, is used ironically here, subverting those same gender bounds. Young Lucas’s “fertile brain” and her friend Miss Bartlett’s “unripe schemes” function as gardening

metaphors that unify her with the anthropomorphic “vegetable world” she “loves” “extremely.” Lucas’s reliance on the model of the exemplary self is prominent and unequivocal: “I have planted a large figg orchard with design” “I have reckoned,” “I know,” “I only confirm,” “I own,” “I never intend,” “my oaks grow.” Through and through, Eliza Lucas identifies as a naturalist and consciously writes natural history.

Reading *The Letterbook* as natural history is fraught with definitional challenges, however. Because the genre came to exist in many forms and because writers negotiated generic conventions for diverse purposes, it is however historiographically-sound to read a text like *The Letterbook* as part of the genre, and furthermore, doing so opens *The Letterbook* to heretofore unexplored readings and its author to new scholarly attention. Whereas William Byrd II’s *The History of the Dividing Line betwixt Virginia and North Carolina Run in the Year of Our Lord 1728* (composed 1728-1736), the comparative text I use in this chapter, presents as a survey, it hybridizes generic influences in close alignment with more conventional natural history texts, and intuitively reads as natural history. Pinckney’s *The Letterbook*, on the other hand, reads as a letterbook. Though epistolarity is almost never a frame for the male-authored natural history, it is frequently so for the later, female-authored natural history, particularly post-1830s, when women wrote natural history through familiar formats (Shteir 177). While unusual, epistolarity cannot be excluded as form from the imperial natural history—for example, the conventional preface frequently appears in letter form, and letters may be interspersed within the body of a natural history narrative. I argue in this chapter that among the many compelling reasons to place *The Letterbook* within the natural history genre are its compositional history and envisioning of a global audience, its rhetorical practices, concern with plantation culture, food, and medicinal botany, its use of gardening metaphors, interest in agronomy and agriculture, investment in

knowledge production and exchange, and of course, its natural history descriptions. These elements are all likewise present in Byrd's *History of the Dividing Line*. Rather than reading these features as natural history digressions, I read the natural history as a genre built through digression. These narrative detours synthesize in the larger work to create a sense of place: frequently, in the imperial natural history, a sense shaped by the colonizer's predetermined agendas and preconceptions gained through networks of knowledge exchange.¹⁰⁶

It is too easy, however, to dismiss Pinckney and Byrd as imperial naturalists. *The Letterbook* and *History of the Dividing Line* problematize strictly imperial readings, particularly as they bare their authors' deep and complicated relationships with the local landscapes of the South Carolina lowcountry and the Virginia/North Carolina borderlands, respectively. Rather than beginning with the global, and from there extrapolating the local—the modus operandi of the “anti-conqueror” naturalist arrived in exotic locales—Pinckney and Byrd begin with the local, then move their homes onto the global stage. Unquestionably, each local ecology has global market value, and neither is above its exploitation; however, neither does so as an outsider, a critical distinction that entreats us to consider their treatment of the local differently than that of the disinterested naturalist. To clarify this distinction, I invent a term, “lobal,” which plays on the designation “glocal” I use as frame in Chapter One. Rather than writing towards a “self-contained regional insularity” still bound by the global marketplace (Nussbaum, *The Global Eighteenth Century* 10-11), Pinckney's and Byrd's circumstances of birth and family inheritance gave them privileged knowledge of local ecologies and their global political purchase. Neither naturalist ascribed to a preservation ethic; there was no attempt, in other words, to conserve their regions from the perversions of the burgeoning global economy, including plantation culture. Where Maria Sybilla Merian, writing in a “glocal” vein, arrived at

¹⁰⁶ What Edward Watts and Keri Holt, through Denis Cosgrave, call “charting,” discussed below.

her natural history through global channels, and in turn, attempted to protect local ecologies from corruptive global influences, writing from a “lobal” orientation meant a forced contact with the local due to circumstance—here, creolism—that led to the production of knowledges saleable on the global market.

When I say, then, that Pinckney and Byrd were writing their *regions*, I invoke scholarship in critical regionalism that has broadened the definition of “region” to include region’s cultural, as well as political, purchase, its inclusion of the early national, as well as of the postbellum period. As Edward Watts and Keri Holt outline in their Introduction to *Mapping Region in Early American Writing* (2015), “region” has largely only mattered to scholars in the context of nation; readings of early national print discourses in particular have congealed around how regional differences were palliated in the service of a nationalist narrative. Watts and Holt anthologize essays which “find[] a consistent and intriguing tendency for writers to imagine destinies other than national membership” (6). Applying the concept of regionalism—or the “mapping” of local idiosyncrasies—even further back, to colonial North America, and divesting this concept of its nationalist ties, is critically challenging. But considering colonial-era “regionalism” does implore us to ask whether earlier texts, in the context of imperialism, might also be doing more than propagating either an imperial agenda or crafting a counternarrative, whether these texts might actually be invested in recording “the local *as* the local” (10).

In Chapter Two, I argue that Jane Colden—of probably any naturalist recording place in the Americas—comes nearest to engaging the local as such. However, even as I make the argument that Colden’s work should be read proto-ecologically, I acknowledge the pull of global scientific networks on *Botanic Manuscript* (1750s). In the context of the natural history genre and of knowledge production more generally in the colonial Americas, there could be no local

ecology, no region, removed from a globalist framework, as perhaps there could be a marked remove from the ideologies of nationalism for regional writers contributing to shifting, early republican literary markets. Pinckney and Byrd were certainly writing the local, but not *towards* the local, and not for its own sake; the distinctiveness of their regions, which their hybrid texts chronicle, is harnessed for the global. That we read their work proto-nationally does not mean that they envisioned their regional records as ultimately belonging to some future idea of nation, which neither possessed, but that certain Enlightenment principles and modes of thought that they employed fed into early republicanism. Unsurprisingly, in time, the “nation” coopted both *The Letterbook* and *History of the Dividing Line*.

Watts and Holt appropriate a distinction between the terminology of “mapping” and that of “charting” from Denis N. Cosgrove which provides a useful frame for understanding how both Pinckney and Byrd write early colonial region, even as we cannot call their work “regionalist.” “Mapping,” per Cosgrove, is not only the physical process of drawing a map, but a creative one that is often internal and rooted in the present moment and the singularity of the local environment, of place. This open-ended process of mapping was exercised by early national writers participating in conversations around national borders on their own terms. In contrast, “charting” was a closed process where documenters of region already had fixed borders or ideas of borders that would fit a national model in mind, and thereby wrote those spaces into existence (2). Watts and Holt summarize Cosgrove this way:

While chart makers imagine a centralized nation wherein the local or the regional is subordinated to the national or the universal, mapping imagine just the reverse: a decentered nation that accommodates the local and the divergent. These differences are revealed in opposed temporal and spatial orientations. First, the temporal: while

mappings are, on the whole, forward-looking, chartings usually look to the past, projecting American narratives as extensions of inherited models and myths. Second, the spatial: while mappings operate on the subcontinental and the subnational levels, chartings articulate macrocosmic national, continental, and global ambitions. (4)

While we cannot speak of Pinckney and Byrd through the lens of nationalism, we can still ask if either naturalist sought to communicate region through a top-down imposition: whether some “centralized” global entity had predetermined how they were to demarcate the local. While imperial natural histories frequently did engage in “charting” towards empire, subordinating the exotic geographies described to the scientific enterprise, culling specimens and crafting descriptions based on cataloged European interests, Pinckney and Byrd are not quite imperial naturalists, and do not unilaterally serve the British metropole. Additionally, in Enlightenment discourses, the North American colonies in particular were recognized as regionally distinct, a distinctiveness based in the very conditions of their formation (12). Region is by nature complex and multivalent, mutating through shifting borders and topographies drawn by both the surveyor, as in the case of Byrd for example, or the planter, as in the case of Pinckney. The North Carolina/Virginia borderlands and the South Carolina lowcountry break molds and move, through conflict, towards something that has not yet taken shape, but that will both remain as distinct localities and be rhetorically, anachronistically, assimilated into the nation.

It is this tension between the local and the global that endures as the hallmark of early American writing of region. In my frame for this chapter—the “lobal”—I argue that “colonial regionalism” can take yet another form from that of Merian’s interest in the global-economic purchase of preservation (the “glocal”) or that of Colden’s proto-ecology. Mapping region for Pinckney and Byrd is an integrative process through which the local and the global serve each

other, but importantly, through the funnel of the naturalists' creolism. Their creoleness drives an orientation that sees the local recorded from the inside out—with a view towards the local's global travel, but also towards creatively imagining lived region. I do not call Pinckney and Byrd "regionalists" even as their works belong to an open-ended, unstable regionalism, and even as they "map" region, because their investments are not exactly regional; nor are Pinckney and Byrd "charting" fixed borders (physical or political or cultural). *The Letterbook* and *History of the Dividing Line* reside in an interstitial space, sensitive to generic influences both local and global, recording region which is itself responsive to changes wrought by settler colonialism. A "lobal" orientation, then, is an iteration of what we might call a "colonial regionalism." For Pinckney and Byrd, the local is a forced condition. While region is inhabited and mapped, it is not with a preservation ethic, *or* towards some larger political purpose. The instability of region is what most emerges in these works; the interrelation of unstable regions and the fluid creole identities who map them on a global stage constitutes the "lobal" in these colonial natural histories.

Among the many reasons to place Pinckney's *The Letterbook* and Byrd's *History of the Dividing Line* in conversation, then, is their shared creole-as-naturalist lens. This dissertation has argued that natural history functioned as a capacious genre, evolving over the course of the seventeenth and eighteenth centuries by broadening both its contributor base and its readership, making limited room for women naturalists, particularly those working on the colonial periphery. Byrd and Pinckney speak particularly well to each other in the context of the genre: both are mobile elites whose voices travel transatlantically, even as they mark themselves disadvantaged colonials. This matters tremendously because as they describe specimens, local landscapes, and native populations, producing knowledge, they simultaneously transmit this knowledge through

global channels in their specimen shipments, the circulation of their texts, and their physical travel across continents. In other words, both are the embodied vessels of the natural history knowledge production enterprise. They are hardly “fixt” in this “part of the world,” as Pinkney drily notes (44), bound, or disadvantaged, but are rather prime examples of how creole status can contain power in transatlantic circuits of exchange—and it is through this power that Pinckney and Byrd evolve and redirect the genre.

The colonial’s embodied creole identit(ies) fluidly respond to this imposed creole status. Theories of creole degeneracy posited that the New World environment irreversibly altered mental and physical constitutions, bringing those transplanted and born in the colonies closer to a state of nativeness. “Whenever colonists were said to Indianize, the implication was that they were succumbing to the natural inclination of the American environment” (Parrish 96), which was believed to be, due to its climatic differences with Europe, site of bodily and psychological contagion. Tropical climates in particular were understood to foster the spread of disease, sexual profligacy, and racial denigration. In Enlightenment scientific discourses, South Carolina, and especially Charleston, was read as geo-economically contiguous with the West Indies; and indeed, in the colonial period, the lowcountry relied heavily on its trade routes with the Caribbean for subsistence. Rhetorics around creole degeneracy easily extended to both North and South Carolina, as we see in Byrd’s *and* Pinckney’s attention to “indolence” and moral improvidence in regional character.

In Chapter Four, I engage Sean Goudie’s arguments in his influential *Creole America: The West Indies and the Formation of Literature and Culture in the New Republic* (2006) to discuss the shifting and evolving negotiations of creoleness (and its concomitant processes of creolization) in early republican female-authored novels set in the West Indies. Here, in the

context of the pre-national North American colonies, creolism as identity proves equally nuanced. Just as do novelists Leonora Sansay and Susanna Rowson, Pinckney and Byrd both externalize and displace labels of creole degeneracy (thus, validating them) and repurpose these labels towards what Goudie calls a “creole regeneracy” narrative that comes to sustain the new Republic by refashioning the creole as *white* American. This process of regeneration whose roots we can find unconsciously espoused as early as the colonial period in which Pinckney and Byrd worked, sheds light on a gendered identity construction intimately tied up with creole status. Pinckney and Byrd do not yet register the heightened anxieties around creolization that Goudie explores and that are borne of nation formation (“the creole complex,” “paracolonialism”¹⁰⁷) and that I discuss at length in Chapter Four, but their negotiation of the autobiographical—and especially their creoleness—presages a foundational republicanism. Reading their work proto-nationally emphasizes Pinckney’s and Byrd’s navigation of their creole identities, including these identities’ dependence on place.¹⁰⁸ The creole is acted upon by the environment: “place became, not an incidental factor, but a determinative one” (Parrish 97), and so, a creole’s sense of place is shaped primarily by both the imposed status and the self-sought identity; I argue in this chapter that this is the case for Pinckney and Byrd.

In her exploration of region through this creole lens, Pinckney’s global investments are powerfully rendered and central. Pinckney is herself complicit in the imperial violations that

¹⁰⁷ Goudie defines the “creole complex” as a navigation of fluid creole identities that “defies any univocal, triumphant or stable understanding of the national character” (19), and “paracolonialism” as the new nation’s approach to trade with the West Indies, whereby the U.S. traded alongside Europe, but outside the framework of colonizer (12). This status symbolically both preserved republican values and built U.S. empire (by mirroring Britain’s imperial practices).

¹⁰⁸ For Goudie, the West Indies are site of colonial difference; through this difference, America is marked exceptional. Simultaneously, the West Indies is a “shadow,” “a surrogate, a monstrous double” of America (9-10). West Indies as “place” enormously complicates a unified notion of nation: what Goudie calls the “creole complex” (19). Pinckney is early on negotiating what “place” means in the context of the South Carolina lowcountry, so closely linked to West Indian markets; we should not ignore the resonances of this linkage as we consider how Pinckney’s work can be read proto-nationally.

come to define the South Carolina lowcountry by mid-eighteenth century. Her innovation, then, is not in the disruption or fragmentation of the natural history's governing imperial narrative, but rather in its repurposing. She lays claim to settling and cultivating the landscape within the rubric of institutional imperial agendas, but she does so autobiographically—that is, with open intent to “privilege[] the autonomous individual and the universalizing life story” (Smith and Watson, *Reading Autobiography* 2). In turn, her region is painted through an autobiographical lens, and imperial agendas are thereby complicated. Generically, the natural history is already evolving towards autobiography, so Pinckney's engagement with autobiography is both apace with standard convention, and unique in its expansive embrace of the autobiographical frame. This autobiographical lens has powerful implications for thinking through Pinckney's “lobal” stakes, and this lens shapes my reading of *The Letterbook* as proto-national. While reading Pinckney as an exemplary patriot is anachronistic, and worse, inhibiting for scholarship on her work, we can trace elements of her later revolutionary spirit back to the *The Letterbook* if we account for her investment in the autobiographical.

This chapter attends to this autobiographical impulse in Pinckney's work, as well as in Byrd's, in order to illuminate why the natural history hybrid moves further along the spectrum to the autobiographical as the eighteenth century unfolds, and how this move heralds the budding nation-state. I argue that the self, tied to Old World privilege—particularly in Pinckney and Byrd, who live the transition—begins to break away from the influence of the metropole and “map” region both creatively and concretely, without an overarching purpose dictating the process of shaping. At the forefront of South Carolina's indigo production, Eliza Lucas Pinckney physically and conceptually alters her region; Byrd does so by drawing survey boundaries. Critical to this alteration is the natural history itself and its concomitant negotiations of gender

and genre, as well as Pinckney's and Byrd's differing engagements with imperial values. The "lobal" is an apt frame for my argument, acknowledging as it does the primacy or originary status of the local rather than emphasizing the preservation of ecologic processes in response to global threats, including the genre of natural history itself. Pinckney's and Byrd's tenuous status as creoles inflects their engagement with the local, already irrevocably altered by colonization, but it does not lead to a proto-ecologic orientation. I do not argue that region is ultimately more important for Pinckney and Byrd than that region's global travel, but rather that, unlike in almost every other natural history that transparently works to exploit region, it comes first. As the local is the colonial-born creole's birthright, it precedes its own resonance in globalist discourses—is lived, shaped, and recorded *before* it is transported. This chapter, then, travels from natural history to autobiography to proto-nationalism to creoleness as inflected by gender, in order to map the complex entanglements of genre and identity in two works composed, through engagement with region, within and without global networks of institutional science.

Eliza Lucas Pinckney (1722-1793)

Born in Antigua, educated in England, and settled near Charleston, South Carolina, Eliza Lucas Pinckney lived the embodiment of a privileged colonial. Her father, George Lucas, was first a British Army officer, later Governor of Antigua, and ultimately died in 1747 a French prisoner-of-war in the British-Spanish conflict, the War of Jenkins's Ear (the War of 1739).¹⁰⁹ Lucas was also a planter with moderately profitable sugar plantations in Antigua always searching for a way to diversify his cash crops; his father, John Lucas, owned three Carolina plantations as of 1713, and in 1739, George Lucas settled his family on one of them, Wappoo,

¹⁰⁹ The War of Jenkins's Ear became the War of Austrian Succession by 1744, when France and Spain allied. (Ramagosa 256). For a full treatment of George Lucas's role in this conflict, and how it impacted his family, separating Lucas (living in Antigua) from his wife and children who were living in South Carolina and English, see Ramagosa, 252-256.

when the sugar market gave poor yield.¹¹⁰ The War of Jenkins's Ear necessitated Lucas's early return to Antigua that same year, and though Eliza remained in frequent communication, and in the most tender relations, with her father, she never saw him again. The war heavily restricted rice exportation from the lowcountry, compelling Carolina's experimentation with alternative exports. Eliza was among the first in the province to experiment with indigo production, per her father's instructions. Though she began her planting of West Indian seeds sent by George Lucas in 1740, and in subsequent years, saved seeds from previous years' plantings, there was no successful crop until 1744 (Elise Pinckney vi-xviii).

In 1744, on the eve of her family's reunion with George Lucas in Antigua, a turn of fate kept her in South Carolina: Eliza happily married the "good Uncle" of Miss Bartlett who is referenced in the opening letter to this chapter, newly-widowed Charles Pinckney, more than twenty years her senior, a planter and Carolina's first lawyer.¹¹¹ Eliza and Charles shared three surviving children, including Charles Cotesworth Pinckney (1746-1825) and Thomas Pinckney (1750-1828), who would both become statesmen and soldiers for the Revolutionary cause, and Harriott Pinckney Horry (1748-1830), likewise a patriot, and following in her mother's footsteps, a writer, planter, and estate manager in her own right. The Pinckneys worked together in indigo production, with Charles publishing how-to guides in the *South Carolina Gazette*, and Eliza distributing seeds among local planters. It appears that Eliza remained involved in the affairs of her father's plantation Wappoo, as well, which had passed to her husband as part of her dowry

¹¹⁰ Harriet Williams summarizes George Lucas's predicament this way: "The Antiguan sugar planter was tied to markets on three continents. He sold his sugar in London, and his rum and molasses in North America; he bought his slaves from Africa, his farming implements from London, the food (provisions) for his slaves from Ireland and North America, and his luxuries from London. Most planters lived on credit, and George Lucas was no exception. Sugar prices were depressed during the 1720s and 1730s, serious droughts reduced crops drastically, and diseases struck down both the canes and the slaves. To deal with these conditions, George Lucas, like other planters, opened new land, increased his ratio of slaves to acreage, and increased his debt to the point of encumbering all of his land in Antigua...New plantation land, different plantation crops, unencumbered land to mortgage—these were the inducements which South Carolina held for George Lucas" (261, 272).

¹¹¹ After rejecting at least two known suitors her father had proposed several years earlier.

(Schulz, “Marriage Settlement,” May 1744). She continued to correspond with her father regarding plantation matters even as George Lucas gave advice to, and received business recommendations from, Charles, and charged his son-in-law with the execution of business for his other plantations.¹¹² From 1753-1758, the Pinckneys lived in England, where by all accounts, they would have happily remained, except that their Carolina plantations were mismanaged and in need of immediate supervision. After leaving their two sons in England to complete their education, and sailing back to the colonies with their nine-year-old daughter Harriott, Charles Pinckney succumbed to malaria just three weeks after arrival (Elise Pinckney xxii).¹¹³ Though she intended to make a perhaps final return to England to be with her sons at the earliest opportunity, Pinckney’s business affairs detained her in South Carolina—it was eleven and fourteen years before she again saw Charles and Thomas, respectively (Schulz, “Pinckney Family Residence in England, 1753-1758”).

An anglophile as the majority of elite colonials were, in her early life, Eliza Lucas Pinckney thought of England as “home,” of South Carolina as land of exile.¹¹⁴ On May 22nd, 1742, she writes her younger brother Thomas that she will provide a “short description of the part of the world I now inhabit” (39); on June 30th, 1742 to her former governess Mrs. Pearson she writes, “I should say something of the part of the world I am now fixt in” (44); to Mrs.

¹¹² Eliza’s continued business presence is noted by Constance Schulz in her introductory essay “Lucas Family Plantation Management” to her digital collection, *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry*. Several letters between George Lucas and Charles Pinckney sent in the years 1745-1746 exemplify the reciprocally-advantageous relationship between them. On January 30, 1746, Lucas writes to Charles Pinckney: “I observe the uncertainty of getting the Rice to market, & I approve of the method You purpose in Storing it for a Conveniency of Shipping which ere now I hope you have mett with in the Schooner Charming Nancy mention’d in my last. I take notice you Say the Ruff rice is at 2S P bushell & if the Clean was but £7.”

¹¹³ For a short biography, see Elise Pinckney’s “Eliza Lucas Pinckney: Biographical Sketch,” xv-xxvi. For the most complete biography of ELP’s life, including many of her letterbook entries, see her great-great granddaughter Harriott Horry Rutledge Ravenel’s (1832-1912) 1896 biography, *Eliza Pinckney*. For more about ELP’s family in the West Indies, see Carol Ramagosa. For a detailed tracking of the Lucas family’s movements between Antigua, South Carolina, and England prior to 1740, see Harriet Williams. Finally, see Constance Schulz for full biographies of ELP and her notable descendants.

¹¹⁴ Perhaps the greatest example of her anglophilia is her extraordinarily detailed letter circa 1753 in which she narrates her, her husband, and her daughter’s meeting with the Dowager Princess Augusta at Kew.

Boddicott with whom she lived in England during her schooling, she writes on May 2nd, 1740, that “I like this part of the world, as my lott has fallen here” (6). Pinckney’s lack of agency—her fixedness despite her global mobility—is the central strain in each of these exchanges. By 1762, this thread begins to assume an ironic undertone: “[you] must be very good to think of your friends in this remote Corner of the Globe...there is so much merrit in seting down at home and writing now and then to an old woman in the Wilds of America” (To Mr. Keate, February 1762 181). Pinckney’s rhetorically masterful letters toe a fine line between civility and irony: while she wishes her correspondent to visualize an old lady (though she is not yet one) living in the wilderness on the other end of the globe and to pity her, she simultaneously touts the virtues of character necessary to endure such an existence. The very act of sending her letter insists on her presence on the global stage: while South Carolina may be a “remote Corner of the Globe,” Pinckney’s voice will travel transoceanically. Though she never quite considered the province “home” until her children were all with her and the Revolution necessitated a colonial loyalty transparently absent in her early life, as creole, by definition, neither could she assume the role of disinterested naturalist.

The composition of *The Letterbook* tells us much about this liminality that is resolved in later standalone letters.¹¹⁵ Pinckney was much too socially invested not to believe that all of her correspondence would constitute her legacy—and her letters are clearly rhetorical performances, all of them (hence the multiple copies made and preserved)—but *The Letterbook* in particular is remarkable for its self-conscious assembly by a young woman colonist seeking to shape the historical record. Accounts differ as to how the letterbook manuscript now extant at the South

¹¹⁵ The majority of ELP’s archives are housed at the South Carolina Historical Society, but there are additional letters at Duke University, the South Carolina Library at USC, and the Charleston Library Society (Elise Pinckney xxviii). It is now believed that several letters at Duke rightly belong to *The Letterbook*, and account for the years 1744-1753. Some of these originals have been lost; only Caroline Pinckney Seabrook’s nineteenth-century transcriptions remain (Schulz, “The Letterbooks of Eliza Lucas Pinckney and Harriot Pinckney Horry”).

Carolina Historical Society was composed. Pinckney's process of drafting and editing, meticulously transcribed in Constance Schulz's digital edition, may suggest that Pinckney used the letterbook to compose first drafts she then revised to send. Constance Schulz believes "it is possible that entries in the surviving letterbook were initially written in and have been copied from an earlier lost notebook" ("The Letterbooks of Eliza Lucas Pinckney and Harriot Pinckney Horry"), perhaps then constituting second drafts. Elise Pinckney describes the composition of *The Letterbook* as more of a mixed bag: it "served as a record for drafts of outgoing communications, brief memoranda of them, and copies of finished letters" (x). Some of these drafts were copied cleanly into a separate copybook, now at the Library of Congress (120-121).

Elise Pinckney notes in her edition that Pinckney left blank spaces and pages she then filled in; nor was she scrupulous about dating her entries (xxix). The intentional blanks suggest a highly-crafted, idiosyncratic, project-oriented writing process; in other words, Pinckney saw her letterbook as a narrative that had to be pieced together logically, rather than haphazardly, towards some larger purpose. I argue that this purpose is self-inclusion in global circuits of knowledge exchange, within which the natural history is central. That she did not carefully date her entries does not contradict my claim for her craft, but rather buoys it. *The Letterbook* cannot be pigeonholed into the epistolary genre alone: her record's inaccuracy opens up *The Letterbook* as a whole, as a project, to generic hybridization, and in turn, this hybridization earns the work global purchase and a wider audience. Pinckney's letters reveal her efficiency, accuracy, careful process of composition, and a character that sometimes her own family found too righteous, too precise, too unbending in its principles.¹¹⁶ It is unlikely that Pinckney would have accidentally

¹¹⁶ Her relationship with her grandson, Daniel Huger Horry (1769-1828), who later changed his name to Charles Lucas Pinckney Horry and lived out his adult life in France rather than returning to the new Republic, was rather one-sided. Many of her letters try to impress upon him the virtues he is expected to learn, possess, and return with to his native land. These letters are "preachy," and Daniel's rather vague replies (for example, about the difficulties of

left undated certain entries, unless she would rather have done so than retroactively date them incorrectly, from memory. I prefer to ascribe her an agency clearly in evidence in *The Letterbook* itself and in its fluid composition, an understanding that this document would one day constitute her legacy as colonial and naturalist. Pinckney's compositional practice mirrors the mutability of the colonial context.

William Byrd II (1674-1744)

William Byrd II's family inheritance was much like Eliza Lucas Pinckney's. Born a generation prior, Byrd was even more entangled in the global networks that Pinckney traveled. A denizen at various points in his life, and for long periods, in both Virginia and England, Byrd spent most of his life trying to earn the English equivalent of his elite status in the colonies.¹¹⁷ He was a Virginian politician and legislator, serving in the Virginia Assembly and representing Virginia's interests in England (Berland 6-7). From 1706-1716, he was married to Lucy Parke,

visiting with his family) suggest that he remained polite but not affectionately-bound to his grandmother. In one such letter dated February 18, 1787, Eliza reprimands Daniel for his words—relayed to her by Daniel's mother, her daughter, Harriott: "By your last letter to your mother dated in Novr. I plainly perceive you are under the [grosest?] misinformation with regard to characters [and things] in this Country, you are certainly assisted by people whose disappointments occasion'd by the late revolution have strongly prejudiced them against this Country and its [true] friends...as to your future prospects be assured your present apprehensions in regard to them are as erroneous as possible, was you not under the influence of the greatest misinformation you would find them such as every sensible young man would be happy in and I must request you will suspend your opinion on those matters till you are acquainted with your friends and able to judge for yourself." This letter she revised and redrafted to get the wording just right.

To her son, Charles Cotesworth Pinckney, in 1768, she admits that she pushed him too hard in his studies: "I am alarmed my dear child at the account of your being extremely thing, it is said owing to intense study, and I apprehend your constitution may be hurt; which affects me very much, conscious as I am how much, and how often, I have urged you from your childhood to a close application to your studies." On May 20, 1745, Eliza wrote Mrs. Bartlett that "Mr. Pinckney himself has been contriving a sett of toys to teach [Charles] his letters by the time he can speak, you perceive we begin by times for he is not yet four months old." ELP's biographer Harriott Horry Rutledge Ravenel writes of this extreme method: "It is a comfort to know that this precocious infant took no harm; but the Family Legend which duly records his cleverness, says that in after life (he became General Charles Cotesworth Pinckney) he always declared this early teaching to have been sad stuff, and that by haste to make him a clever fellow he had nearly become a very stupid one. Also, it says the he never allowed his own children to be taught until they had attained a reasonable age" (114-115).

¹¹⁷ "Upon his death, Byrd I left his son an ample fortune: vast properties, a flourishing Indian trade, and membership in the highest circle of elite Virginia society, a patrician network of gentlemen whose status sprang from the accumulation of land, wealth, and power, held and improved over two or more generations. A genteel pedigree was not required for this group—Byrd I's father had been a London goldsmith, and his maternal grandfather a sea captain—though descent from a 'good' family was an added benefit" (Berland 4).

with whom he had two surviving children; with Maria Taylor, whom he married in 1724, he had four children. He vigorously courted Englishwomen for each of his marriages, but finally settled each time on colonials (Adams viii). He retained a lifelong membership in the Royal Society, beginning in 1696 or 1697, one of only two colonials to be inducted at the time (Berland 6, Woodfin 121).¹¹⁸ When he returned to Virginia upon his father's death in 1705, he pursued his scientific friendships by sending seeds, observations, and other specimens (Woodfin 115-116). Byrd returned to England in 1715, and finally back to Virginia permanently in 1726, though, like Pinckney, he did not know that he would never return to his second "home." Once again, his return to Virginia was accompanied by renewed, transatlantic natural history activity, often through the channel of personal letters to Hans Sloane, president of the Royal Society from 1727-1741.¹¹⁹

Westover was Byrd's home plantation, but over the course of his life, he accumulated eleven Virginia plantations and 180,000 acres of some of the best land in the colonies (Johnston 5), including 20,000 acres by the Dan River, which he passed on the survey expedition, and which he called the "Land of Eden." He had planned to settle Swiss colonists on this land, but after the sinking of an emigrant ship, the project never came to fruition (Berland 11). The 1728 Virginia-North Carolina commission to survey the boundary between the colony and the province ultimately came to constitute Byrd's self-crafted legacy. Until the boundary line had been drawn, accusations about injustices towards Native American tribes and threats to evict non-tax-paying settlers flew between the governments; after all, "within the region extending from the Atlantic coast to the westernmost reach of the 1728 line there were 7,471 square miles,

¹¹⁸ The other was Arthur Lee.

¹¹⁹ For a detailed account of Byrd's lifelong involvement with the Royal Society, see Maude H. Woodfin.

or 4,781,440 acres, at stake” (Berland 15).¹²⁰ Byrd considered himself the spokesman and leader of the Virginia expedition—he was indeed responsible for reporting back to the King—and his *Secret History* makes plain that he saw himself as the “Steddy” heart of the commission, surrounded by incompetence, unreasonableness, and injustice.¹²¹

Scholarship emphasizes both Byrd’s masculinity and his self-education. As Douglas Anderson notes, “William Byrd has come to share, with Thomas Jefferson, the dubious distinction of being our representative eighteenth-century planter-libertine” (701). Byrd’s *Secret History of the Dividing Line* has frequently eclipsed its more sanitized counterpart, *History of the Dividing Line*, and when read alongside Byrd’s *London Diary*, which he kept in both England and Virginia between 1717 and 1721, and diary entries kept later in life (1739-1741), Byrd’s misogyny becomes the principal interest of scholarship. Kevin Berland synthesizes critics’ readings to aver that particularly in the *Dividing Line Histories*, sex is a “manifestation of the patriarchal urge for control” (32). Later in this chapter, I will explore how Byrd’s hypermasculinized persona in *History of the Dividing Line* is bound by the imperial natural history, and how Byrd’s creolism plays with these bounds.¹²² Biographies of Byrd also frequently focus on his intense discipline in the practice of daily writing—“for months at a time he never failed to record at least a few lines every day, no matter where he was” (Adams xi)¹²³—and his extensive, wide-ranging library—the largest in the colonies—with research like Kevin

¹²⁰ For a detailed description of how the survey line was physically drawn, including the tools used, see Berland, 15-20.

¹²¹ “Steddy” is Byrd’s self-assigned nickname (he gives the commissioners disparaging names like “Firebrand” and “Meanwell”).

¹²² Byrd’s creolism and what Berland calls the argument for his “anxiety” about this creole status, plays a large role here. See Berland’s summary on page 39 of critics who have studied the relation between this anxiety and his imperial orientation.

¹²³ Percy Adams cites Marion Harland who related the legend of Byrd as someone whose “minutes were sometimes jotted down in in cipher upon the pommel of his saddle, sometimes penciled by the glare of the watch fire while his comrades slept on the bare ground around him.” Adams adds that Byrd “felt compelled to keep a record of everything that was significant and much that was intimate” (xi). Likely, this diligence in record-keeping was for the same reason as Pinckney’s: he envisioned a legacy to be crafted, and chose not to relinquish this control to another. Like Pinckney, he felt his voice belonged within global discourses.

Berland's exploring how that library (3,600 volumes) influenced his textual composition.

Berland's project in his annotated edition of *The Dividing Line Histories of William Byrd of Westover* (2013) is to map the "accretional" quality of these narratives by tracing Byrd's textual, popular, cultural, and political influences.

For many years, it was believed that the raunchy *Secret History* was composed concurrently with the expedition, and that *History of the Dividing Line* emerged from that ordinary, parodical text. Berland argues convincingly that there is nothing "undeveloped" or "unsophisticated" about *Secret History*, and that evidence shows that both were composed many years later, simultaneously, through extensive revision of a common first draft (46). The impression of "on-the-spot" composition, the narrative as one piece of untainted "eyewitness testimony" that was later sterilized, while in reality each is a carefully-crafted rhetorical work aimed at a distinct global audience, lends itself to my assertion that Byrd is writing natural history. While *Secret History* contains more natural history descriptions than *History of the Dividing Line* (Johnston 5), my focus in this chapter is on the latter, which I argue is functionally itself a natural history.

History of the Dividing Line and The Letterbook as Natural Histories

William Byrd's *History of the Dividing Line* was drafted and revised over the course of many years, and he intended to commission accompanying illustrations,¹²⁴ envisioning for his work a global readership and a generic project in the vein of Hans Sloane's. Byrd's natural history interests were far-reaching, as they were for so many virtuosi of his day. David Johnston finds that Byrd identified twenty species of birds in the course of his work (9), and that he

¹²⁴ "In a letter to Peter Collinson, Byrd wrote in 1736 of his wish to commission some illustrations for a manuscript he was preparing and wondered whether perhaps Mark Catesby might undertake the task. No evidence remains to indicate whether Byrd or Collinson approached Catesby, but it is safe to assume that Byrd envisioned his completed *History of the Dividing Line* as an illustrated volume" (Byrd to Collinson, July 18, 1736, Correspondence II 494) (Berland 61).

fostered friendships with colonial naturalists like Mark Catesby, John Banister, John Bartram, and John Clayton. Johnston believes that it was through Byrd that Catesby became familiar with his first set of colonial birds; the two remained friends and collaborators for seven years (8). Maude Woodfin outlines the various exhibits Byrd contributed to the Royal Society, including a live rattlesnake and a live opossum from Virginia, as well as botanical and zoological observations about Virginia. Other gifts included Native American medicinal plants and herbs (114), as well as ginseng (118).¹²⁵ On July 20, 1697, recorded in the *Journal of the Royal Society* is this “Account of a Negro Boy dappled in Several Places of his body with white spots” related by Byrd:

There is now in England in the possession of Capt Charles Wager a Negro Boy of about eleven years old who was born in the upper Parts of Rappahanock River in Virginia. His father and mother were both perfect Negroes, and servants to a Gentleman of that Country one Major Taylor. This Boy—[when] he came to be Three years old, was in all Respects like other Black Children, and then without having any Distemper, began to have several little white Specks in his Neck, and upon his Breast, which with his Age have been soon to [emerge] very much, both in number and bigness, so that from the Upper part of this Neck (where some of his wool is already turned white) down to his knees he is every where Dappled with white Spots, some of which are broader than the Palm of a Mans Hand, and others of a smaller proportion. The spots are wonderful white, at Least equal to the Skin of the Fairest Lady, and have the Advantage in this, that they are not lyable to be Tann’d. But they are I think of a Palor White, and do not show Flesh and Blood so lively through them as the Skin of White people, but possibly the Reason of that may be

¹²⁵ Byrd used every opportunity to argue for the benefits of ginseng, including sending samples to the Royal Society and devoting a section of *History of the Dividing Line* to this medicinal plant (190-191).

because the skin of a Negro is much thicker. The Boy never had any Sickness, but has been all along very Sprightly and active, and has more Ingenuity too, than is Common to that generation. His Spots grow continually larger and larger, and tis probable if he lives, he may in time become all white, But his face-Arms and Legs are perfectly Black.

The highly imagistic quality of this description, alongside racialized medical inferences, is replicated in *History of the Dividing Line* itself, and speaks to Byrd's entrenchment in institutional scientific discourses. He certainly dons the imperial hat here, using the genre to establish difference (not his own), to become the disinterested observer well-versed in medical description. Ironically, this account buttresses climatist theories of New World degeneracy, even as it clearly marks Africans themselves as contaminated. The boy's "wonderful white" skin, on par with that of the "Fairest lady" is not transparent, not exposing of veins and bodily circuitry—but rather "thick," unknowable, as is the boy's albinism.

In other examples, Byrd repurposes climatist theory to once more mark difference elsewhere, rather than in his own creolism. Here, he connects the poor health of Carolinians to their lack of industry: "The trouble wou'd be too great to climb the Tree in order to gather this Provender, but the shortest way (which in this Country is always counted the best) is to fell it, just like the Lazy Indians...By this bad Husbandry, Milk is so Scarce in the Winter Season...[and] why so many People in this Province are mark't with a Custard-Complexion" (88). Elsewhere, Byrd suggests that laziness, "complexion," and climate are intertwined: Thomas Spight's family, living in close proximity to the Dismal Swamp, "are devoured by Musketas all the Summer, and have Agues every Spring and Fall, which corrupt all the Juices of their Bodies, give them a cadaverous Complexion, and besides a lazy creeping Habit, which they never get rid of" (98). Yet again, the toxic effects of exposure to the Dismal do not extend to him, as

Virginian. Virginia is region par excellence: the Virginian creole is the highest gradation of white, immune to the environmental degeneracy that dangerously registers on Carolinian and black creole bodies. Byrd's instinct to preserve Virginian racial purity is an assertion of white European hegemonic understandings of race and an iteration of regionalism through a "lobal" orientation. His creolism is asserted through difference, or process of elimination, not through definition. Byrd is still, therefore, unstably and creatively mapping region through racial and cultural distinctions that are complexly rooted in the local *and* the global, and that are far from conceptually determinative, just like his own creole identity.

These local and global roots manifest in further natural history generic elements, such as a focus on medicinal botany, whose applications on the survey abound, and a preoccupation with eyewitness testimony. Medicinal botanical descriptions are frequently related both through the validation and dismissal of native knowledges. Of all natural history descriptions in Byrd's texts, and within the genre more broadly, native knowledges are most frequently enmeshed with questions of eyewitnessing—since herbal treatments are usually introduced and sometimes administered by natives, the eyewitnessing takes the form of authentication or invalidation, rather than the form of discovery.¹²⁶ Berland warns that we should be cautious of believing Byrd's "eyewitness" testimony because of the intensely "accretional" nature of his work. Not

¹²⁶ For example, take this scene, which exemplifies how medicinal botany in the genre plays with native validation and eyewitnessing: "We found in the low Ground several Plants of the Fern Root, which is said to be much the strongest Antidote yet discover'd against the Poison of the Rattle Snake. The Leaves of it resemble those of Fern, from whence it obtain'd its Name. Several Stalks shoot from the same Root about 6 Inches long, that ly mostly on the Ground. It grows in a very Rich Soil, under the Protection of some tall Tree, that shades it from the Meridian Beams of the Sun. The Root has a faint spicy tast, and is prefer'd by the Southern Indians to all other Counterpoisons in this Country. But there is another Sort prefer'd by the Northern Indians, that they call Seneca Rattle Snake Root, to which wonderful Vertues are ascrib'd in the Cure of Pleurisy, Feavers, Rhumatism, and Dropsy; besides it begin a powerfull Antidote against the Venom of the Rattle Snake" (130). While Byrd's team "found" the plant, he gives the privilege of discovery to natives. His relation of knowledge is purposely ambiguous, in that it fails to distinguish whose knowledge is really being related. Is the description of the stalks, location, and taste his own, based on the plants he found, or is it knowledge passed to him by the natives, as is that of the medicinal benefits of the root? I would venture to argue that this knowledge is not truly "eyewitnessed," or Byrd would not obscure it in this way. Rather, he would say, as he does elsewhere in the text, "thus much I can say on my own Experience" (125).

only is he using native knowledges in the service of this accounting, but is also post-facto, incorporating—sometimes lifting—natural history observations from contemporary or earlier naturalists like John Ray and John Lawson. Berland calls this kind of chronicling under the guise of eyewitnessing “only loosely anchored to the day-to-day events of the expedition” (24), but definitionally this disconnect between experience and the written performance of that experience constitutes natural history as genre. The eyewitness account is always corrupt; it is always, as is the genre itself, and in Carolyn Miller’s words, “a social action,” tied to its contemporary cultural contexts. When juxtaposed with Byrd’s imperial instincts to the right of discovery—for example, expressed in his proclivity for naming natural wonders—the passive language around his relation of native knowledges—“the places where such Desolation happens, are call’d Poison’d Fields,” “The [bear] Paw...is accounted a delicious Morsel” (132)—would have been cue enough for his generically well-versed readers to understand that not all knowledge related is eyewitnessed, interpreted, and produced by the naturalist himself. This is true even when knowledge appears to be highly localized and idiosyncratic and when Byrd’s verbiage is active and his voice assertive: “the certain way to catch these sagacious Animals is thus, squeeze all the Juice of the large Pride [testicle] of the Beaver, and 6 Drops out of the small Pride. Powder the inward Bark of Sassafras, and mix it with this Juice, then bait therewith a Steel Trap, and they will eagerly come to it, and be taken” (134).¹²⁷ This astonishing method follows the description of a plant Byrd admits he misidentified: “It put forth several Leaves in figure like a Heart; and was clouded so like the common Assa-rabacca, that I conceiv’d it to be of that Family” (133). The close proximity of

¹²⁷ This description is repeated almost word for word later in the manuscript, and on the second occasion, interestingly, Byrd properly gives credit for the discovery: “‘Tis rare to see on them, and the Indians for that Reason have hardly any way to take them, but by laying Snares near the place, where they dam up the Water. But the English Hunters have found out a more effectual Method, by using the following Receipt. Take the Large Pride of the Beaver, squeeze all the Juice out of it, then take the small Pride, and squeeze out about 5 or 6 drops; Take the inside of Sassafras Bark, Powder it, and mix it with Liquor, and place this Bait conveniently for your Steel-Trap” (202). Repetition is a hallmark of the natural history genre.

narrative doubt and certainty, Byrd's negotiation of humility and hubris, is a convention of the natural history too, and reminds the initiated reader of the genre that "on-the-spot," "from life," are illusions.

The literariness of the natural history descriptions in the first half of *History of the Dividing Line* is not as pronounced as in other generic examples; however, after the defection of the Carolina commissioners, these descriptions become voluminous and prominent, overtaking the details of the survey. Concerned primarily with disparaging the Carolina commissioners until they quit the survey, Byrd's descriptions are more prescriptive and concrete, his persona more the disinterested scientist, the leader of the expedition. His superiority must be asserted over the Carolina commission. This colonizer role shifts to the landscape, its flora, fauna, and natives, once the Carolina commissioners have decamped. Here, Byrd begins to take literary liberties, fully catapulting *History of the Dividing Line* into the realm of the natural history. Simple descriptions begin to take on the violence of the local ecology: Baboon "Scouts," if they "shou'd [happen to] be careless at their Posts, & suffer any Surprise, they are torn to pieces without Mercy" (141). "The Testimony of mine own Eyes," when explicitly stated, makes for more powerfully vivid descriptive practice: the opossum has "seven or eight Teats" which "fall off, like ripe Fruit from a tree" (175). The generic convention of anthropomorphism as metaphor abounds, as for example when a flock of cranes "took this Country in their way being as rarely met with in this part of the World, as a Highwayman, or a Beggar" (141).¹²⁸ Byrd's curious use of reverse anthropomorphism levelly registers throughout the text to powerfully unify the local landscape and colonizers in one ecology. If early colonists had intermarried with Indians, "the

¹²⁸ Other moments of anthropomorphism: "this beautiful Vegetable [cane-reed] grows commonly from 12 to 16 feet High, and some of them as thick as a Man's Wrist" (144), "we spy'd a Bear sitting upon one of them [heaps of small Stones] looking with great attention on the Stream" (151), "one of the Southern Mountains was so vastly high, it seem'd to hide its head in the Clouds" (166).

Country had swarm'd with People more than it does with Insects" (120); for a lost man, "*Famine* was...the more frightfull because he fancy'd himself not quite Bear enough to subsist long upon licking his Paws" (162); at camp, "The Indian kill'd a stately fat Buck, & we pickt his Bones as clean, as a Score of Turkey-Buzzards cou'd have done" (175). This unification of survey party and wilderness is imperfectly channeled by the second half of *History of the Dividing Line* into extensive commentary on Native American traditions, botanical remedies, hunting, and superstitions. As the Carolina party ceases to be Byrd's object of derision, so too do Carolinians themselves take less of an important role in the narrative, and emphasis shifts to Bearskin, the commission's guide, who is given voice, through Byrd, to tell of his traditions. These narratives, as per the genre, are annotated by Byrd derisively, effectively severing the unification created by reverse anthropomorphism.

The larger ironies that frame the work are at times subjugated to the literary use of irony, so pervasive in the text, and just one of the many literary craft elements Byrd employs that simultaneously thrust *History of the Dividing Line* into the natural history genre. Ironic humor is central to Byrd's mockery of North Carolina, as here, when a senator comes to visit with the expedition "swore he was so taken with our Lodging, that he would set Fire to his House as soon as he got Home, and teach his Wife and Children to like us in the open Field" (90). Everyone Byrd meets is a potential object of this irony, as is the "Dreamer of Dreams" who brings "Honour [to] our Expedition, that it was grac'd not only with a *Priest*, but also with a *Prophet*" (176). What is astonishing about Byrd's sarcasm is that it follows upon the heels of a hyperbolic, but earnest description of the opossum's reproduction, which Byrd credits through validation of native knowledges and his own eyewitness testimony. Literary ironies then also work to build tension between the local ecology and the occupying surveyor, even as this ecology admits the

surveying party into its secrets. This tension is equally erected by self-conscious transitions into digressive natural history in the first half of the text. By acknowledging the interruptive, interjectory nature of natural history description, even within the genre of natural history itself, Byrd draws exaggerated attention to his own presence in the local. After describing their encampment on a Colonel Mumfords' plantation, Byrd interrupts the description of that scenery with, "By the way one of our men kill'd another Rattle-Snake with 11 Rattles having a large Grey Squirrel in his Maw, the head of which was already digested, while the Body remain'd still entire" (128).

Byrd's use of the literary is focal to my claim that he is writing a natural history; that he sees the need to apologize for the literary, only substantiates this claim. Though description, metaphor, metonym, and sensory language were an integral part of the eighteenth-century institutional scientific project, the wave of eighteenth-century descriptive practice sometimes swayed towards taxonomy, or as Joanna Stalnaker posits, towards "omission." Byrd is clearly not working under the Linnean model of omission towards a universalization of nature; on the contrary, Byrd's description serves to individualize New World nature, in some capacity returning his readers to the experiences of marvel and wonder inherent to natural history practice in early colonization literature. This individualization ultimately morphs into a colonial exceptionalism that in turn can be read as proto-nationalism, and a local exceptionalism that can be read as "colonial regionalism." Unlike Bartram, Byrd asks his readers leave to retreat into the literary: "this carry'd us over a broad Levil of exceeding rich Land, full of large Trees, with Vines marry'd to them, if I may be allow'd to speak so Poetically" (153). He likewise acknowledges a public demand for this descriptive storytelling: when the group's horses can go no further, it gives Byrd a "just Excuse for not animating our Story with greater Variety" (165).

In many places, Byrd indulges his reader, engaging proto-Romantic language—describing trees “frequently shiver’d quite down to the Root, and sometimes perfectly twisted” by lightning (180), and the “loss of [a] wild Prospect” as “smoake continued still to veil the Mountains from our sight” (161). While Bartram engages the Romantic and pastoral modes consistently, Byrd’s text neither quite channels the immersiveness in the sublimity of the landscape that came to constitute the Romantic mode, nor portrays an untouched wilderness, if only by virtue of the interruptive hybridity of his narrative, which never lingers on one scene for long, or ever disembodies the landscape from Byrd’s experience of it.

Byrd begins his *History of the Dividing Line* with a fairly lengthy introduction, which is functionally a natural history preface. In it, he automatically positions Virginia as originary colony. He pays obsequiousness to Queen Elizabeth, the royal family, and “the British nation” (65). As he narrates the story of settlement in Virginia, he is first omniscient narrator, and then authority on successful colonization, weighing in on the debate around Indian-white intermarriage and concluding that “if a Moor may be wash’t white in 3 Generations surely an Indian might have been blanch’t in two” (68). He expresses his opinion here on many matters, including on the questions of why New England prospered more rapidly than Virginia (due to the superiority of Puritan morality over the “profligate morals” of the Virginians (69)). After several pages of loose “history” on political and religious conflicts in which Virginia was implicated, Byrd proceeds to the origination of the survey, in which he sets himself and Virginia on the moral high ground. Although he uses language like “The Truth of it is” (72), Byrd’s preface actively avoids postulating truth and honesty, as most natural history prefaces do. Instead, he bathes the preface in contemporary rumors, which he compounds rather than refutes, and irony is quickly established as the rhetorical method of the text. At the same time as he pretends humility,

he claims personal acquaintance with the motives of those he both praises and critiques: this latter quality of the text is transparently working within generic convention.

* * *

Though Eliza Lucas Pinckney does not appear in the annals of the Royal Society, nor was her work exchanged with luminaries in scientific circuits, she was exposed to these networks peripherally through self-edification and through friendships, like one with Dr. Alexander Garden. She otherwise corresponded actively on matters of education, politics, war, business, and family with friends across the Atlantic. Correspondents and collaborators in the colonies included Martha Logan and Henry Laurens, both botanists of repute and connection (Ravenel 228). Pinckney's public and private affairs blend seamlessly within her letters. As a colonial planter, gardener, and traveler, she was versed, as was Byrd, in medicinal botany, a lifelong interest that began in her childhood in Antigua and continued into her old age. On December 29, 1780, her grown son Charles Cotesworth Pinckney writes that he has "finished the ounce of Elixir of Vitriol you were so good as to send me...and have begun to take the Camomile, Hoarhound & c which you recommended." He also asks his mother to accept a gift of "English Pease to plant" from his young daughter Maria, already trained in specimen exchange. Pinckney's "Receipt Book" mixes cooking and medicinal recipes, the latter of which are collected from local lore, her own experiments, doctors' orders, and published journals. To cure the croup, Pinckney cites "the journal of health"; "for a Pain in ye Face," "Take a good deal of Fever few, a very little hogs lard; and corn flower enough to make it into a poultice, and apply it hot and to ye face."¹²⁹

Early in *The Letterbook*, young Eliza Lucas writes to Mrs. Boddicott in England about her

¹²⁹ This selection of items in Pinckney's receipt book, gathered in Schulz's digital edition, gives a sense for the range of her recipes: "Orange Marmalade," "Little Pudings," "Rusks," "For the Flux," "For an Old Sore," "To Dobe a Rump of Beef," "To Make Snow Cream," "For ye Gout taken from Part of an Advertisement," "For the Hiccough," "A Preparation of Ippoe," "For a guinea Worm," "To Prevent ye Jaw fallen in Children," "For Rubbing Furniture," "To make Anchovies."

debilitating migraines, and gives gratitude for the receipt of “Doctor Meads prescription with the medicines made up accordingly” (May 2, 1741 14). Richard Mead was both physician and naturalist, active virtuoso in England, and through young Eliza Lucas’s contacts, curing her headaches across the ocean. Pinckney’s long and involved attention to medicinal botany was from early on transcontinental, giving her a stake in colonial medicine in her later years.

Though she did not export writing and art as science, Pinckney did send and receive plant and animal specimens, crop shipments, and food. Letters sent to friends and her children abroad after the death of her husband in 1758 are mired in grief, but rarely neglect to note an enclosed shipment of fruit, like pomegranate, or a colonial delicacy, like turtle, which she says “show my friends in England that I think of them” (To Mr. Morly, undated 174). The quality of this foodstuff is of great import to Pinckney, and she emphasizes time and again her effort in cultivating or preserving the contents of the shipments, as well as her “country’s” plentitude. To her children’s headmaster, she writes as a solicitous mother wishing for her children to have the very best nourishment, almost as compensation for the grief she imagines them to feel over the loss of their father: “I have sent a large barrel of rice which their dear father had ordered to be the best and to be sent to you. The children love it boiled dry to eat with their meat instead of bread. They should have had some potatoes of this country but they are not yet come in” (To Mr. Gerrard, undated 96-97). To George Morly in August 1758 she writes instructions that she repeats in variation to several others:

There are 4 large and one smaller Turtle. If they all or any number of them come safe, the largest [is] to be sent to Mr. King...and all the Summer Ducks and Drakes and 2 or 3 Non parriels; but if there should be but one Turtle come safe, that to be sent to Mr. King; if more, one to Mr. Edwards..., on to Sir. N. Carew..., and one to Mrs. Peter Muilman...;

and if all the large ones got safe, the small one for Mr. Chatfield; but the 4 first named must be served. And I beg Mr. Morlys acceptance of all the rest of the birds, how many I cant say. There was a great many when I left town. (99)

The precision with which she approaches the distribution of the turtles attests to their status as exotic rarity (not unlike Merian's pineapple); the improbable odds of any of the turtles surviving the transatlantic voyage make it only more so.¹³⁰

Naturalization, Pinckney admits, is not as simple as the desire to please that attends it. Like Byrd's, Pinckney's intentions are more than just friendly—she hopes to convey the richness of the North American continent, to lay claim, as protagonist, to the story of the settlement of the colonial landscape. She writes to Mrs. King in May of 1759: "'Tis the Pennento Royal; it bears the most noble bunch of flowers I ever saw. The main stem of the bunch is a foot and half or two foot long with some hundreds of white flowers hanging pendant upon it. 'Tis a Native of this Country, but I doubt if they will do out of doors in England'" (119-120). In February 1760, she writes again to Mrs. King about her method at deriving the "wax from the berrys [of the Myrtle Seed]" and notes in her memorandum that "I chuse to send a few seed at a time fresh, rather than wait to get a compleat collection as there might not then be an opportunity till they were too old" (139), betraying an anxiety that the seeds may not grow in England.

Having now been commissioned to send seeds by Mr. King, Pinckney writes again to Mrs. King on July 19th, 1760 with all the civility of the working naturalist, deferring to Mr. King's knowledge as a generalist while retaining her right, as creole, to the privilege of local knowledge. She writes: "[If] there is any in particular that may Escape me I hope he will be so good to mention them. Our talest trees are Oaks, which we have of Various sorts; fine Magnolia

¹³⁰ Pinckney confesses in a May 1759 letter to Mrs. King that "we were very unluckey not to get one Turtle safe out of 6 fine ones all in good order, and that had been kept above a month in Tubbs before they went on board" (119).

which in low moist land such as Ocham Court grow to a very great height...Nither the Acorns or cones are got ripe enough to gather or I would send them in this ship, but will certainly do it by the first good opportunity after they are ripe” (156). This commission Pinckney was unable to execute as she would have liked, having spent several months gravely ill, but despite this illness, she sent seed orders to her plantations that were improperly filled. She takes this failure so seriously that she laments:

I am a good deal mortified at the disappointment as there will be a year lost by it, but please God I live this year, I will endeavour to make amends and not only send the Seeds but plant a nursery here to be sent you in plants at 2 year old. And I think I know a method that will preserve the trees very well, by which means I imagine you will save 2 if not 3 years growth in you[r] trees, for I believe a tree will grow as much in 2 years here as in 4 or 5 in England. (162)

Her faith in her own method—based in years of experience as a planter—as well as her subtle assertion of the superiority of North American soil and climate (perhaps specifically of lowcountry soil and climate) for healthy plant life suggests that by the years that conclude *The Letterbook*, 1758-1762, she is self-identifying as a local, is framing her longstanding project as natural history.

The vibrant record of Pinckney’s seed exchange works tellingly alongside concerns about Native American conflicts. This hybridization in the regional context of South Carolina once more situates Pinckney’s project within both global and local contexts. By attending to her summaries of these conflicts, we can make an important distinction however; Pinckney does not make any observations about Native Americans she personally knows, as most traveler-naturalists do, including Byrd. Rather, she decries tensions with Native Americans as both

outsider *and* insider. She condemns Indian “barbarity,” invoking an indisputable hierarchy that raises her creolism to colonizer status,¹³¹ a move that instantly equates her with her English correspondents. Simultaneously, she is deeply critical of colonial mismanagement in the Cherokee conflict¹³² for which “the greatest warriors in the world,” the Mohawks, are the “solution,” and her lack of inhibition in saying so to correspondents such as Mrs. King (April 13, 1761-1765), demonstrates her unapologetic self-identification as colonial by the 1760s. She relates a rather callous report to Mr. Morly sometime in 1762 that likewise draws attention to her colonial difference through its pronoun selection: “I know not what to tell you of our affairs in the Indian Country on which to found any real satisfaction. Our army are still there. We have destroyed Several of their Towns, but when you consider what Indian Towns are, and how soon rebuilt, you will think we need not be too much elated with the success we have had hitherto unless we had killed more Indians” (173). Pinckney remarkably plays colonial difference to her advantage, alternately emphasizing it to give her knowledge weight and erasing it to flatter her English readers. Pinckney’s Indian reports are also “accretional” in that they interpretatively synthesize published and word-of-mouth news; her fluency in regional discourses lends her accounts credence, and establishes her authority as a local.

Eliza Lucas Pinckney skillfully uses conventions of the natural history to illuminate principles in education, politics, and business. Pinckney invokes the botanic metaphor for correspondence on female and African education, for example. In a February 1762 letter to Mr.

¹³¹ Goudie’s work discusses how North American creoles turn the narrative of “creole degeneracy” to “creole regeneracy” in order to hierarchically position the white creole above the West Indian creole. Nevertheless, argues Goudie, the white creole is navigating his creolism by alternately identifying as both colonizer and colonized.

¹³² In letters dated July 19th, 1760 to Mr. Morly (154) and Mrs. King (155), and a letter of April 13th, 1761 to Mrs. King (164-165). Previously, she calls the Cherokees “insolent” and says “’tis high time they were chastised” (To Mr. Morly November 3, 1759, 125-126). To Mrs. Onslow, on November 4, 1759, she writes that the Cherokees are the province’s “savage Enemy” (127-128). In that same letter to Mr. Morly in 1760, she records that “16 hundred men including rangers marched into the middle Cherokee Towns and destroyed 5 towns, which raised the spirits of people much” (154).

Keate, she describes her young daughter Harriott's brain as "tractable," and comments: "For, I thank God, I have an excellent soil to work upon, and by the Divining Grace hope the fruit will be answerable to my indeavours in cultivation" (181). In this usage, cultivation is a metaphor for molding the polity through education (Mulry), repeatedly invoked throughout *The Letterbook*, including in the early letters. This usage frames the self as representative of society and emphasizes the fecundity of the "Country," or land. Young Eliza Lucas tells us she has "a fertile brain at schemeing" (To Miss Bartlett, c. 1742 35), fusing herself with the land she is cultivating. Another one of these "schemes" that she outlines in this same letter is that of teaching two young African girls—we can assume that they are enslaved at Wappoo—to read so that they may then teach the other children, a plan that extends her influence in much the same way a gardener's does (plant the seeds, attend to them, watch them grow). In another derivation of this metaphor that invokes the mother-gardener figure, she encloses grapes along with her letter to Mrs. Pinckney, Charles's first wife, and writes: "I herewith beg you will accept an offering of the first fruits of my Vines...the fruit of my labours" (To Mrs. Pinckney, c. 1743-1744 64). Here, young Eliza Lucas is mother of the Earth she is cultivating. The strategic use of the word "labours" adds an economic dimension; she is, after all, at the time of this letter, 1743-1744, running her father's plantations. That she sees the global marketplace and motherhood as bonded endeavors is a transparent motif in *The Letterbook*.¹³³

The same literariness that characterizes Byrd's work is present in Pinckney's. She too deploys ironical humor and suggests that abundant descriptiveness—though she is master of it—should not be indulged. She flirtatiously writes to Charles Pinckney, before she is his wife, after having in great detail related a story of her caged Mockingbirds and their wild friends: "the dear

¹³³ Friendships too need active attention as does a garden or plantation: "I am much obliged to your Ladyship for so agreeable an acquaintance which I shall do all my utmost to cultivate" (to Lady Carew, c. 1754 83).

girl forgot she was not writing to little Polly when she indulged her descriptive vien and [] the subject of her birds is too trifling a one to engage your attention...as my Ideas are trifling my subject must be conformable to them” (To Mr. Pinckney, c. 1744 67). Pinckney’s use of irony is only artificially self-deprecating, instead highlighting her cleverness, her quick turn of phrase. Description is central to epistolarity; therefore, her awareness that there is something “unscientific,” perhaps even naïve or juvenile, in extended description suggests that through her own reading and writing practices, she is paying attention to scientific discourses that privilege omission and taxonomy. This in turn suggests that she does not simply write her letters as self-contained rhetorical pieces, but that she envisions a larger project within which her letters belong, a project I argue she sees as natural history.

Within the heightening tension between taxonomy and narrative in the genre as the eighteenth century unfolds, Pinckney chooses the narrative strain—necessitated of course by the epistolary form—while simultaneously gesturing to the taxonomic, in and of itself a convention. Byrd does it. Bartram does it. Stedman does it. The hybridity of genres employed in Pinckney’s work, while embodying the spirit of the eighteenth-century natural history as host to varied disciplines in conversation, problematizes her use of description. Consider how and where Pinckney deploys extended descriptive practice. It is almost always in the service of natural history.¹³⁴ In Chapter Two I argue that for Jane Colden a careful balance of Linnean and Renaissance descriptive practice is her method of illuminating the local within the taxonomic constraint and simultaneously of rejecting the exhaustive model of the natural history; for Eliza Lucas Pinckney, extended description is her method of engaging this exhaustive model within the constraint of the culturally-sanctioned letter. That she gestures to this debate around

¹³⁴ See Pinckney’s letter to Thomas Lucas dated May 22, 1742 (39-40) or to Mrs. Pearson dated June 30, 1742 (44). The first in particular is an extended description of Eliza’s new home, including geography, food, flora, fauna, people, and climate.

description, and attempts to replicate the precision of natural history description in eyewitness accounts, even going so far as to avoid texture and smell,¹³⁵ suggests that the project of *The Letterbook* is natural history.

Central to this project is audience. Rhetorical flourishes like transitions and varied sign-offs illuminate a refined rhetorical mastery of civility and tone, suggesting that Pinckney's intended audience was broader than the letter's recipient. She consistently finds ways to incorporate philosophical musings on books she has read, from Locke to Richardson to Cervantes, to law books to newspapers, and she consistently places herself in figurative conversation with these authors in ways that move her social standing beyond that of elite reader. About Thomas Wood and his *Institute of the Laws of England* (1720), she writes that "this rustic seems by no means to court my acquaintance for he often treats me with such cramp phrases I am unable to understand him; nor is he civil enough to explain them when I desire it" (To Miss Bartlett, c. June 1742 40-42). Ironically, about Samuel Richardson's *Pamela*, she writes: "She is a good girl and as such I love her dearly, but I must think her very defective and even blush for her while she allows her self that disgusting liberty of praising her self" (To Miss Bartlett, c. 1742 47-48), which naturally, Pinckney does in all her letters—civily, of course. Like a virtuoso with a broad spectrum of interests, Pinckney uses her letters to showcase her versatile knowledge base, her range of learning, intermingled with her personal observations about the South Carolina landscape. She is a great deal more careful about crediting her sources than her male counterparts, like Byrd, but in particular her musings on Christianity are morally

¹³⁵ See my discussion of description in the genre in the Introduction. Joanna Stalnaker notes that description in Foucault's definition was a formal "system" of sorts (and hence, a discipline) in which every naturalist, every describer, followed the same set of rules that "stripped nature of most of its qualities—notably taste, smell, and texture—and imposed a taxonomic structure that transformed nature into a language even before describing it" (8).

generalizable.¹³⁶ Institutional science is not out of reach for young Eliza Lucas either. In a letter to her younger brother George Lucas, studying abroad, she cites Robert Boyle in order to argue that skepticism and the real are as much a part of science, as they are of religion. She footnotes her citation with “Thus farr Mr. Boyle and I can perceive” (To George Lucas, c. 1742 53-54), equating her scientific observation with a published natural philosopher’s.

Autobiography in the Natural History

In their introduction to the second edition of *Reading Autobiography* (2010) Sidonie Smith and Julia Watson invoke Rhetorical Genre Studies, and specifically Carolyn Miller, when they frame the autobiographical as social action, centralizing “what it does, not what it is” (18-19). All autobiographical writing is “true” in the sense that it reflects back on the writer, on the writer’s notion of the self, on how her interpretation of “history” impacts her life (16, 14).

Autobiographical texts, which Smith and Watson subcategorize into autobiography, life writing, life narrative, and memoir, are always self-referential, but are generically differentiated in terms of their canonicity, or their adherence to, or departure from, canonical conventions. While “autobiography” as genre is established and governed by generic conventions—just before the Enlightenment and beyond, what Ireneusz Opacki would call a “royal genre”¹³⁷ —“life narrative’s” boundaries are open to include any “act of self-presentation,” even if not in written form, while “life writing” also works towards inclusion of less dominant written forms, like the slave narrative, for example (2).

It is most appropriate to call Eliza Lucas Pinckney’s *The Letterbook* “life writing,” even as I call it natural history. The hybridity of the natural history makes room for other generic influences—even those as weighty as autobiography—while still retaining its integrity as natural

¹³⁶ For more on Eliza Lucas’s education, and the role Christianity played in her education, see Harriet Williams, 265-268.

¹³⁷ See my discussion on genre in the Introduction for more on “royal,” or dominant, genres.

history. William Byrd's *History of the Dividing Line* is closer on the spectrum to natural history than to autobiography, but because its work is heavily autobiographical, because Byrd is so intimately concerned with self-presentation—more so than in the typical male imperial natural history, even—it is appropriate to call his work “life narrative.” That both “act” socially in the interest of the self is indisputable. Both works also behave as “history,” or historical record, which Smith and Watson caution should not be the only way to read autobiographical texts (*Reading Autobiography* 13). It is indeed more apt to say that although certain events chronicled by both writers have become what Jeremy Popkin calls part of the “collective” (qtd. in Smith and Watson 13) American historical imagination, Pinckney and Byrd were filtering those events through their experiences and perceptions certainly with consideration for, but no knowledge of, what would “make history.”

In my Introduction, I discuss the epistemological and poetic discursive threads around descriptive practice as central to the formulation of the science/literature divide. The empirical and the abstract in natural history description, and its concomitant implications of nature's universality and randomness, respectively, would appear resolved with the widespread acceptance of the Linnean model. In practice, however, no single natural history—and as I show, not even the most seemingly taxonomic of floras, like Jane Colden's—adheres to this divide. As the autobiographical frequently behaves like fiction (Smith and Watson, *Reading Autobiography* 9-10), and deals in abstractions like the self, memory, and history, while simultaneously residing in the concrete, random experience of the individual, it is implicated in Enlightenment-era discourses around description. In turn, autobiographical and scientific practices are not distinct in the eighteenth century. In fact, as the century progresses, more and more natural histories of the narrative strain, and consequently of the autobiographical strain, are produced, like John Gabriel

Stedman's *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam*, published in 1796, an exemplar of the hybridity of both "genres" that had come to be commonplace in the genre by late century.

Further, Smith and Watson's sketch of the autobiographical narrative can be superimposed onto the natural history:

In autobiographical narratives, imaginative acts of remembering always intersect with such rhetorical acts as assertion, justification, judgment, conviction, and interrogation. That is, life narrators address readers whom they want to persuade of their version of experience...memory is a subjective form of evidence that cannot be fully verified externally; rather, it is asserted on the subject's authority. (*Reading Autobiography* 7)

For narratives like Byrd's, composed after the fact, largely from memory, but also from an existing draft as well as from secondary sources, this definition is particularly apt. How does Byrd gain the "subject's authority"? Through a complex mixture of natural history conventions: claims of eyewitness accounting, records of place names, markers like swamps and mountain ranges, distances, concrete measurements, native knowledges, and sourcework that lends authoritative accounting. But this definition is appropriate for Pinckney too. Though letters are by nature written in a historical moment about that moment, they are not isolated or disconnected performances. In Pinckney's self-conscious project, shaping "memory" does not mean writing a post-facto narrative account within which the self is complexly entangled, but rather being attuned in each new entry to the transformative presence of memory. This memory is comprised of, over many years, narrative accounts shared and received; these accounts, in turn, build to form the image she projects; as political and cultural situations rapidly change, Pinckney adjusts these accounts to fit the larger narrative of colonist-naturalist who meets trial after trial with an

unwavering sense of self. In this respect, Pinckney embraces her creolism, turning it presciently forward towards the “regeneracy” narrative.

The definitional fragmentation of her letters and their restorative linearity align Pinckney with both women’s and men’s autobiographical practices in the eighteenth century, respectively, and it is through both transformation and steadfastness that she asserts the “subject’s authority.” Any change wrought in the self is necessitated by conditions of the local, but these changes never deviate character at the core: Pinckney is always moral, rational, civil, discerning, dutiful, religious, and curious. As for Pinckney’s narrative of an exalted relationship with nature, Pinckney’s work in praising nature, as Susan Scott Parrish notes, is “as much about casting a positive environmental identity for herself as it [i]s about naturalizing obedience” (208), or protecting a global code of civility that is supported by the expressive writing of nature. Because Pinckney most likely did not return to her early letters when she ceased to keep a formal letterbook, we know she must only have been building forward. This form of composing is indeed atypical for the natural history genre, even for those works which took many years to complete, but it does not preclude reading her work as such, particularly when natural history is so frequently framed as a journey or travel. And of course, what other metaphor than that of travel could be more apt for life writing?

* * *

In Pinckney’s and Byrd’s work, the self is invested in the land in a new way: as creole. The colonial landscape is not exoticized, but inhabited—a home that it is within the rights of the dweller to evaluate. The self gains authority over the landscape through creoleness—an almost-native status at the moment when colonization and plantation culture are growing exponentially on the North American continent. Place is integral to self-formulation. In 1741, Eliza Lucas

muses on selfhood on her return to Wappoo, site of her labor in cultivation, or her colonial home, from the Pinckney estate at Belmont, the symbolic metropole where wealth and society are enjoyed in abundance:

At my return hither everything appeared gloomy and lonesome. I began to consider what alteration there was in this place that used so agreeably to sooth my (for some time past) pensive humour, and made me indifferent to everything the gay world could boast; but found the change not in the place but in my self, and it doubtless proceeded from that giddy gayety and want of reflection which I contracted when in town; and I was forced to consult Mr. Lock over and over to see wherein personal Identity consisted and if I was the very same self...I am now returned to my former Gravity and love of solitude and hope you won't conclude me out of my Witts because I am not always gay. I, you know, am not a proper judge in my own Case. I flatter my self you will be favourable in your opinion of me—tho' 'tis become so much the fashion to say every body that is grave is religiously mad. But be it as it will, those unhappy people have some times intervals, and you may be assured I am in my right Sences when I subscribe my self. (19)

To young Eliza, identity is intractable. While place may alter it momentarily, returning “home,” in this case, to a pastoral nature, and to the “Gravity and love of solitude” that attends communion with nature, restores her core identity, which she defines as reflective, introspective, serious. Distraction, or “want of reflection,” she frames as a disease that is “contracted.” She certainly invokes the pastoral when she claims that it is city life that breeds this kind of distraction.¹³⁸ To define malleable subjectivity as an “Identity” as Eliza Lucas does here means forming and molding this subjectivity into something established, delineated; reflection is at the heart of this project. Eliza redirects each moment of self-alteration, bound up always with place

¹³⁸ Susan Scott Parrish enlarges on Pinckney's use of the pastoral mode, 202-205.

and how place changes, towards her creole “Identity.” Natural history as genre serves this goal well: its authors are rooted in institutional discourses that centralize both the distinctiveness and conformity of the naturalist’s identity, just as it does for the region the naturalist describes. Sometimes this distinctiveness became the naturalist’s exemplarity,—and especially so for women—a label whose complex resonances on the global stage both freed and constricted the naturalist from innovating in the genre. Eighteenth-century women’s life writing, like natural history, is often governed by “social relations [whereby writers] believe in a sameness that makes them like all other human beings, as well as in a difference that guarantees their individuation” (Nussbaum, *The Autobiographical Subject* xxi).

Many of Eliza Lucas’s early letters and memorandums of letters, from 1739-1746, highlight her business acumen, which in the context of the lowcountry, was not in fact so exemplary. She gives detailed reports of her experiments with indigo and news from South Carolina. A typical memorandum of a letter to her father emphasizes her political acuity, and reveals that she took action on business matters as her father’s deputy, without his prior approval.¹³⁹ In 1742, she writes Miss Bartlett:

Wont you laugh at me if I tell you I am so busey in providing for Posterity I hardly allow my self time to Eat or sleep and can but just snatch a minnet to write to you and a friend or two now. I am making a large plantation of Oaks which I look upon as my own property, whether my father gives me the land or not; and therefore I design many years hence when oaks are more valueable that they are now—which you know they will be

¹³⁹ For example, an entry from September 20, 1741, says: “Wrote to my father on plantation business and concerning a planter’s importing Negroes for his own use. Colo. Pinckney thinks not, but thinks it was proposed in the Assembly and rejected. [He] promised me to look over the Act and let me know. Also informed my father of the alteration ‘tis sposed there will be in the value of our money—occasioned by a late Act of Parliament that Extends to all America—which is to dissolve all private banks, I think by the 30th of last month, or be liable to lose their Estates, and put themselves out of the king’s protection. Informed him of the Tyranical Government at Georgia” (22).

when we come to build fleets. I intend, I say, 2 thirds of the produce of my oaks for a charity (I'll let you know my scheme another time) and the other 3rd for those that shall have the trouble of putting my design in Execution. I sopose according to custom you will show this to your Uncle and Aunt. 'She is [a] good girl,' says Mrs. Pinckney' ... 'Tell the little Visionary,' says your Uncle, 'come to town and partake of some of the amusements suitable to her time of life.' Pray tell him I think these so, and what he may now think whims and projects may turn out well by and by. Out of may surely one may hitt. (38)

In this remarkable letter, Eliza Lucas makes clear that she has been given the freedom to run her father's plantations as she sees fit. She makes light of her claim that she is "providing for Posterity," but indeed she is actively doing so by "scheming," planting, and cultivating her legacy in her letterbook. She is confident that one of her business "amusements" will turn profitable; it is indigo that does so, not oaks, though in later letters, she recycles the argument that wood is profitable when she suggests paying Dr. Garden's debts by selling her wood (Eliza Lucas Pinckney to Alexander Garden, May 14, 1782, *The Papers of Eliza Lucas Pinckney*). She imagines an audience response, and prides herself, clearly, on an enterprising spirit and maturity that will come to constitute the heart of the "Identity" she seeks to maintain and convey in her work.¹⁴⁰ In other letters, she playfully teases Miss Bartlett that her friend's compliments may make her "vain," and that "so high an oppinion of my trifleing attainments" is unwarranted, that Miss Bartlett must "chuse a subject for the future more worthy of your muse than a penejerick on Yr humble Servt. E Lucas" (January 1742 and c. 1742 27-28). In the tone of these letters, is deep

¹⁴⁰ Darcy M. Fryer reads this letter performatively as well, focusing on Eliza Lucas's desire to "guide her reader's response" to her words (230).

pleasure that her friend verbalizes the very self-image she works to project; her feeble words of protest are merely a rhetorical use of civil irony.

Ingrained from her early education with the notion that a path to life is set in youth, Eliza Lucas sees that path as governed by “the Xtian scheme” (To George Lucas, c. 1742-51). While this phraseology is repeated in letters to her younger brothers, her children, and after *The Letterbook*, to her grandchildren, the word “scheme” interestingly resonates with its frequent use in reference to her own autonomy as planter. Just as God has a plan for her—including illnesses, deaths, wars—so too does Eliza Lucas have a plan for herself. She confesses that her “Christian fortitude” was but an illusion as she crumbles under the weight of grief after her husband’s death (To Dr. KirkPatrick, February 1760 131-134), and yet even this confession does not deviate from the linear narrative of identity she has constructed: after all, humility and admission of mortal weakness are essential to the proper practice of faith and morality in the colonial period.

In his introduction to the *Dividing Line Histories*, Kevin Berland quibbles with what he calls the “psychohistorical” approach scholars have taken to William Byrd’s complex navigation of identity. The common strain in this scholarship, notes Berland, is that Byrd “struggles” to assert an identity in the face of deep-seated “anxiety” about his own creole status. Scholarly focus on this anxiety in turn pigeonholes Byrd as “agent of empire,” his survey as automatically colonizing (34-36). Berland argues that Byrd flourished by standards of the colonial patrician elite, and that his work does not always support the theory of creole “anxiety” (40); even when exposed, anxiety does not subsume the careful “rhetorical artifice” (37) Byrd consistently employs. Indeed, Byrd’s creolism is central to his identity construction in the text. Framing Byrd’s creolism as intrinsic to his “lobal” perspective, to his mapping of region, rather than as a source of anxiety that consumes the text, however, reorients *History of the Dividing Line* as

moving towards a more complex navigation of the creole identity, rather than away from creolization at all costs. It also repositions region as a mutable entity that embodies positive, as well as negative, environmental forces.

Reading *History of the Dividing Line* as both natural historical and autobiographical in tandem, then, reveals much about Byrd's complicated creoleness. The constant rotation of "I," "we," "our," "they," points at once to anxiety around the establishment of authority and simultaneously to the careful deflection of responsibility and blame. At times in the text he is commissioner only, and does not belong to the company of working surveyors. At other times, he is part of or head of the party, including the surveyors, North Carolina's commissioners, and the Native American guides. He sometimes participates, then retreats, gives an observation, withholds an observation, all within the same passage:

On our way the men rous'd a Bear which being the first we had seen since we came out, the poor Beast had man Pursuers. Several Persons contended for the Credit of killing Him: tho' he was so poor, he was not worth the Powder. This was some Disappointment to our Woodsmen, who commonly prefer the Flesh of Bears to every kind of Venison. There is something indeed peculiar to this Animal, namely that its fat is very firm, and may be eaten plentifully without rising in the Stomach. The Paw (which when stript of the hair looks like a Human Foot) is accounted a delicious Morsel, by all, who are not shockt at the ungracious Resemblance it bears to a Human Foot. (132)

The effect of the narrative distancing that begins with "we," moves to "our Woodsmen," then to a disinterested natural history observation about the "firm[ness]" of the bear fat, and culminates in the passive construction "The Paw...is accounted a delicious Morsel," is disorienting. Is Byrd part of this expedition as actor, eyewitness, scientific observer, or mediator of native knowledge?

His own reaction to the bear paw is not registered; his fellow travelers in the course of this passage become specimens. Natural history commonly plays with each of these identities, reveling in the inconsistencies, in the shaky, undefinable self of the narrator. Here, this self is complicated by Byrd's creolism, and the same passage entreats us to ask if Byrd is colonizer of this landscape, traveler, explorer, or inhabitant? Though Byrd is largely the subject of his own "life narrative," he is in passages like this one trying on and casting off cloaks of subjectivity, painting the illusion that others may speak, when in reality himself filtering all knowledge. By doing so, he creates a complicated tension between his imperial and colonial creole identities.

Byrd's "lobal" perspective is fueled by an investment in masculinity. To construct the masculine self—an identity, like Pinckney's, that is carefully built up and fleshed out by place—Byrd becomes actor ("I"/"we") in moments of conquest over nature. This conquest is ultimately framed as human-nature unity, like here, when Byrd reverse anthropomorphizes his party as animals whose natural habitat is swampland: "However the Swamps and Marshes, we were lately accustom'd to, had made such Beaver and Otters of us, that no body caught the least Cold" (89). In fact, Byrd and his commission have colonized the swamp. When given the option to stay in a plantation house, Byrd ironizes, "Yet as great a Curiosity as a House was to us Forresters, yet stil we chose to lye in the Tent, as being much the cleanlier, and sweeter Lodging" (205). Byrd portrays himself then as both commissioner who does not have to complete the unsavory task of moving *through* the swamp with poles in hand, and yet "manly" enough to not only confront, but also to commune with the wilderness.

Byrd's disdain for North Carolinians and their representatives, the commissioners of the survey, reserves this illusion of human-nature communion for Virginians, the good colonials. Much of Byrd's identity in *History of the Dividing Line* is shaped by this regional distinction.

He lays blame for the survey's difficulties, illegal "borderer" practices, like harboring enslaved people and criminals (89), the dispersion of Native American tribes, and the erosion of landscape, on the feet of North Carolina. North Carolina is always "they" and "them"—the Other. Byrd says the "slaughter" of the Usheree tribe is largely due to "the Intemperance and Foul Distempers introduc'd among them by the Carolina Traders" (207). In a fascinating rhetorical move that presages Bartram, Byrd immediately injects a restorative upon leveling this accusation: "It is a charming Place where [the tribe] live, the Air very wholesome, the Soil fertile, & Winters ever mild and serene" (207). The contrast makes the crime of the Carolina Traders more heinous. This restorative is then followed by a lengthy natural history description of the Alligator (that foreshadows Bartram and enters in conversation with Catesby), in whose capture the Indians play a starring, heroic role: "However as fierce, and as strong as these Monsters are, The Indians will surprize them napping, as they float upon the Surface, get astride upon their Necks..." (207). The Catauba tribe is, according to Byrd, receptive and courteous with Virginia traders, and wary of the Carolina Traders, who frequently live among them "and use them with all kinds of Oppression." In response, "The Indians open'd the War by knocking most of those little Tyrants on the Heads" (207). The emasculating of these traders who are naught but "little Tyrants" is representationally enacted by Byrd through his Indian protagonists. Native Americans play a complicated role in Byrd's natural history. Often they are "Savages" (210), but here, they channel the autobiographical impulse by behaving as proxies. Natives in this lengthy passage enact a masculine heroism that conquers indolence and oppression (ascribed here to North Carolinians) while maintaining a fundamental unity with nature and the conditions of the local landscape. Byrd wishes his readers to make a leap, to see in him that same masculinity based in the local, that same communion with the natural world, though, as a white

colonial, he can no more “knock...little Tyrants on the Head” than he can wrestle an Alligator. This desire, the idolization of these acts of “barbarism,” and their justification in cases that suit Byrd’s own agenda—against North Carolina, conquest as part of nourishment—is integral to the multidimensional creole identity he constructs.

Proto-nationalism in the Autobiographical Natural History

A byproduct of the autobiographical in the creole-authored natural history is an incipient proto-nationalism. In particular, Eliza Lucas Pinckney has been read as an early patriot, a reading largely crafted by overzealous descendants. Instead of reading Pinckney’s work anachronistically, I ask how her negotiation of the creole self in the context of the natural history facilitates a proto-national reading. While I do not call *The Letterbook* “nationalistic,” or Pinckney herself a “patriot,” I read her work as promoting what came to be foundational early republican principles. It is for this reason that I call it “proto-national.” This espousal is a condition of the natural history genre when written by a creole, an evolutionary framing of the self as invested in the land Pinckney, by the end of *The Letterbook*, begins to know as home. The most significant elements of this framing are investments in colonial principles around family and marriage: her young sons are early revolutionaries, she sees marriage as the linchpin of industry and wealth (and later of the early Republic), and her maternal devotion epitomizes what critics now call “early republican motherhood.”

For Byrd, the claim for proto-nationalism is even more fraught. Weighted in the inverse, a natural history that I’m also reading as a life narrative, rather than life writing that I’m also reading as natural history, as with Pinckney, *History of the Dividing Line*’s attempt to concretize an abstract landscape through the survey parallels Byrd’s move to the autonomous colonist. As Byrd’s narrative progresses to a full embodiment of the natural history genre after the North

Carolina commissioners' defection, *History of the Dividing Line* becomes his, rather than the Crown's. The central intent of the second half of the volume is to showcase Byrd's versatility of natural knowledge—his sources are self-chosen, assembled, and interpreted, and his observations, opinions, and eyewitness accounts are filtered for particular rhetorical purposes. Though this versatility plays into institutional constructs and is heavily influenced by natural history generic conventions, it is the unique use of these influences through which Byrd carefully constructs an autonomous self. Place is at the beginning of *History of the Dividing Line* an abstraction. Byrd's "mapping" of the boundary line between Virginia and North Carolina is an attempt to concretize the landscape, but ironically the dividing line itself remains abstract in the end. The line's symbolism resonates beyond the physical space it occupies. Though this symbolism lays the foundation for nationhood, Byrd's is not a "charting" of region, and certainly, at this very early date in colonial history (1728-1736), national unity is not Byrd's intention. However, that Byrd personally purchased some of the land around the Dismal Swamp outlined in the survey with hopes of establishing a Swiss colony, and that he afterwards proposed a plan to drain the swamp, suggests that, as he composed the *Dividing Line Histories*, he actively imagined a political purpose for the survey larger than that commissioned, and naturally, hoped to play a starring role in this purpose.

A common evidentiary piece in early republican arguments, like Jefferson's, for the superiority of the North American continent, is the plenty the land provides, or its rich potential for cultivation that becomes the basis of the agrarian ideal. Byrd performs this argument in *History of Dividing Line* by commenting, for example, on the superiority of Buffalo meat and the energizing effects of this nourishment, whether eaten cooked or dried. Byrd's suggestion is to breed the buffalo, and use it for farming (for milk and labor) (200). Each day's journey is

punctuated by a report of miles and poles by which the dividing line is extended; in Byrd's final estimation, the commission travel six hundred miles (216). This precision of measurement, accompanied often by reasons for more or less measurable progress, becomes a visual map, or even artwork, that within the boundaries of the *New Science*, both particularizes and universalizes the topographical and the narrator's experience of it. The takeaway is always that the wilderness provides bountifully and sustains spiritually. Byrd's textual descriptions function as do Colden's, effectively eliminating the need for detailed art, here guiding the reader-cartographer through a metaphoric herbarium, in which each of the landscape's parts, like a plant's can be identified:

The Course from Roanoak to the Cataubas is laid down nearest SW, and lies thro' a fine Country, that is water'd by several beautiful Rivers. Those of the greatest Note are, first *Tar River*, which is the upper Part of *Pamptico*, Flat River, Little River, and Eno River, all three Branches of *Neuse*. Between Eno and Saxapahaw River, are the Haw old Fields, which have the Reputation of containing the most fertile high-land in this part of the World, lying in a Body of about 50,000 acres. (206)

This plotted land is ripe for cultivation, and as Byrd is the first to publicly map it, he is exercising the right of the colonizer by opening this land to further settlement. First colonizers, though commissioned, are functionally autonomous by virtue of their physical distance from the kingdom they serve; so too Byrd, whose colorful observations blur boundaries of autonomy and service. By emphasizing plenitude and cultivation and simultaneously deriding the indolence of the North Carolina settlers, Byrd is establishing regional difference that is yet only colonial difference, both positive and negative, and is thereby laying the foundation for the agrarian ideal.

Byrd lays this foundation semantically as well. In his appendix, Byrd foregrounds Carolina's first 1663 charter by Charles II in order to emphasize Carolina's status as "Province" rather than "Colony." The province was awarded to eight "Lord Proprietors" and their heirs, and remained in their control until both North and South Carolina became official colonies in 1729, though the province had technically split in two in 1712 (Cain). The charter is remarkable in its imprecision around terminology. Carolina is alternately called "Province or Territory" (Byrd 218), "Province, Territory, Inlets, and all and singular other the Premises" (219), and "the said whole Province or Territory, or of any distinct or particular County, Barony, and Colony, within the same" (220). Similar linguistic ambiguity makes clear Carolina's relative sovereignty compared to the Colony of Virginia: "provided nevertheless, that the said Laws be consonant to Reason, and as near as may be conveniently, agreeable to the Laws & Customs of this our Realm of England" (221). Byrd follows this document with a 1710 complaint by Edward Southwell, a Lord Proprietor in Carolina, against the Carolina commissioners, who have, in his words, "obstructed" the survey and caused "trifleing delays" (230) due to self-interest (he asks for the appointment of a new commission). And indeed the survey did not get off the ground for another eighteen years! This document compounds the sense that Virginia's status as "Colony" provides for efficiency and transparency, elevating it to a moral high ground. The narrative of Virginia's ethical approach to the survey is developed with Virginia's proposal to establish the parameters of the survey, the King's order, the Virginia governor's order, and the Carolina governor's order, which interestingly, demotes Virginia to a "Province" (237). By succeeding these official documents with Carolina's notice of defection and Virginia's rebuttal, Byrd rhetorically positions the sovereignty afforded the "Province" as liberally providing for mutiny and immorality.

How then does individual sovereignty differ? Byrd's criticism of the ambiguity inherent in a system where boundary-sharing territories are governed by different mandates, freedoms, and restrictions, presages the idea of "nation" (and of regionalism in the service of a unified nation). He sees the centralized British government as crucial to Virginia's successful settlement, to its ethical purity. That divisive interests attempt to govern Carolina clearly give it lesser status. Since Byrd composed *History of the Dividing Line* some time after both North and South Carolina achieved colony status in 1729, he had to mentally revisit the sentiment that divisiveness within one province and between territories disallows the unification of the landscape. Interestingly, Byrd contributes to the story of this conflict, unlike later regionalists, not attempting the erasure of difference towards unification. The story he crafts is one in which the concrete—the lines, the poles, the place names—and the abstract—the swamp, the surveyors themselves, the future of settlement¹⁴¹—are in permanent tension. The more Byrd asserts his individual right to pull those abstractions towards definition, the more he asserts the right of the explorer-colonizer. Crucially, because he is a creole and after his travels, lives in and cultivates the local landscape he explores, we should read this impulse proto-nationally, rather than imperially. Also, as a condition of the natural history, we should read this impulse as semi-autonomous—at the very least, as a struggle to claim autonomy.

* * *

¹⁴¹ In their "Protest of the Carolina Commissioners, against our proceeding on the Line without them," commissioners Moseley, Gale, Little, and Lovick say, "when we were ready on our parts to have gone with the Line to the utmost Inhabitants, which if it had been done, the Line at any time after might have been continued at an easy expence by a Surveyor on each side; and if at any time hereafter there shou'd be occasion to carry the Line on further that we have now run it, which we think will not be in an Age or two, it may be done in the same easy Manner without the great Expence that now attends it" (Byrd 238). The abstract language "in an Age or two" is highly contested by Byrd, who sees it as a reckless obstruction of further settlement: "And tho' the distance toward the great Mountains be not precisely determin'd, yet surely the West Line shou'd be carry'd as near them as may be that both the King's Lands and those of their Lordships may be taken up the faster, and that his Majesty's Subject may as soon as possible extend themselves to that Natural Barrier" (239). The only thing concrete here, Byrd seems to say, is the Mountain range.

So much research around Eliza Lucas Pinckney is inordinately concerned with lineage and ancestry, painting Pinckney as a prominent Charlestonian, a devoted South Carolinian, and ultimately, a republican mother and consummate patriot. This legacy was carefully molded and shaped by numerous descendants, mostly women, including her great granddaughter, Harriott Horry Holbrook, who in 1850 published some of Eliza's letters, another female descendant, Carolina Pinckney Seabrook, who hand-copied all of Eliza's correspondence, and her great-great granddaughter, Harriott Ravenel, who published a full biography with many of Eliza's letters in 1896 (Bellows 148-149). Further, Elise Pinckney edited the edition of *The Letterbook* still in use today and first published in 1972. Barbara Bellows traces other works of biography and history in which Pinckney is given prominence, but levels this astute criticism at the way Pinckney's legacy has been managed both by her descendants and independent researchers: "Rather than provide a corrective to the 'Great Man' approach to history, the current trend threatens to elevate Eliza Lucas Pinckney to the status of a singular 'Great Woman'" (150).¹⁴² As many have begun to argue, Pinckney was not so much exemplary as representative of a learned class of elite colonial women; in South Carolina in particular, her management of her father's plantations put her in good company with other "deputy husbands" (Fryer 232-233). What gave Pinckney this distinction of "exemplar" was far different than the institutionally-driven conditions that gave Jane Colden this label in her time. Pinckney became "exemplar" posthumously, as those charged with her legacy harnessed their own nationalism to rewrite her work in its model. An easy example is Harriott Ravenel's ardent assertion in her biography that Pinckney's early experimentation with indigo was conducted "with true PATRIOTISM," as she "devoted her whole crop of 1744 to making seed...this home-made seed she distributed as gifts to those

¹⁴² Fryer traces the origination and propagation of this narrative in "The Mind of Eliza Pinckney: An Eighteenth-Century Woman's Construction of Herself."

planters who would undertake to try it. This was really very liberal as the price of seed continued very high for years” (104-105). Pride in her region was easily extrapolated to the national scale and refashioned as national pride. I argue that Pinckney’s exemplarity lies not in some extraordinary patriotism presciently recorded, but in her vision of framing an epistolary project as both autobiography and natural history.

Pinckney’s focus on the self and its attendant *moral* exemplarity presages early republican principles and is largely upheld by emphasis on personal accomplishment, familial relations, and the virtues of civility. Eliza is simultaneously deeply embroiled in the private sphere of the home and the public spheres of regional and global relations. In an early national context, the “republican mother” was someone who by upholding the foundational virtue of the family structure, and specifically by raising patriotic sons, contributed to the national project. Ironically, Eliza’s sons raise *her* as a patriot.¹⁴³ She begins to see South Carolina as her home when her sons rejoin her in the colonies and begin to fight for the revolutionary cause; because they are war heroes and statesmen, and because Eliza’s moralizing and inhibiting parenting are so vividly on display in her letters, she is given credit for their patriotism. Though an anglophile for most of her life, we can see the evolving acceptance of, and even pride in, her creolism over the course of *The Letterbook*, as she moves from unmoored colonial to honorary Britishwoman to early American. Her later letters, between 1762 and her death in 1793, clearly demonstrate her allegiance to South Carolina, and her desire to enrich the image of her “country” (read, “land” or “region”) in the minds of her overseas correspondents. However, as Darcy Fryer notes, “there is

¹⁴³ Apparently, Thomas was called “the little rebel” in England (Ravenel 247). Thomas wrote his mother and others: “my heart is altogether American, & neither severity, nor favour, nor poverty, nor affluence can ever induce me to swerve from it,” “The freedom & independence of my Country are the Gods of My Idolatry,” “If I had a vein that did not beat with love for my Country, I myself would open it. If I had a drop of blood that could flow dishonourably, I myself would let it out. Whenever asked the question you mention, I will give it such an answer as is becoming and American officer” (qtd. in Ravenel 297).

simply no clear documentary record of the manner in which Eliza transferred her primary loyalty from England to South Carolina” (226). “She constructed her manifold projects not as patriotic endeavors but as civil pastimes or family duties” (Fryer 227), to which her indigo experiments belonged (229); “she never forgot that the family was an economic entity,” and that the children were “agents of a collective family entity” (233). Her work in constructing and preserving the family unit metaphorically lay the foundation for the greatness of the nation. It is no wonder then, that through this lens, she became a symbol of the early nation’s potential: its productiveness, its generativeness.

By the Revolution, Pinckney’s letters fully engaged this potential. Consider the many layers of revolutionary rhetoric on display in this excerpt from Pinckney’s letter to her grandson Daniel Horry, Jr, on April 16th, 1782:

How mortifying it must be to think all our expectations may be disappointed by a want of that resolution and cheerful acquiescence we expected from your good Sense. I know by my own feelings how much firmness is necessary to support properly the absence of those we love. At his moment my heart overflows with tenderness and a longing impatience to take you in my Arms and tell you how truly, how fondly I love you. Had I regard only to my own self indulgence I should wish you here too, but alas! My child, these emotions, though natural, must have bounds and not [be] suffered to soften us too much as to destroy matters essential to all your future prospects. Consider what you owe to your self, your Country and family. An Idle man is a burthen to Society and himself. How absurdly connected are those words *an illeterate* [sic] *Gentleman*. Indulge not then, my dear child, this discontented humour, but make use of the opportunity to acquire and enjoy the blessings which Heaven allows. Set about the work which lies before you, let

nothing be wanting on your part to render you a blessing and ornament to your family and Country. How many of Its valuable Youth has this cruel war in various ways taken off, and how many more from the same cruel cause are deprived of those advantages which are now within your power; and much will she want the abilities and *improved* Talents of the rising generation to aid her Second Infancy. (Elise Pinckney, "Letters" 168)

Though this extraordinary letter does not belong to *The Letterbook*, its ideas about duty to family and birthplace, family bonds and representation, emotion and reason, fortitude, and rebirth, do. In *The Letterbook*, Pinckney frequently uses the term "self indulgence" to refer to her own longing to be with her absent children, almost as a way to re-summon that strength of spirit that reasons the separation necessary. Here, her capitalization of "Country" bears a nationalistic connotation, as does her pronoun use, first a capital "Its," and finally a "her." In *The Letterbook* however, her liberal use of the word "Country," also often capitalized, is used interchangeably with "land," "province," or "territory." That her grandson must not "indulge" low spirits, lest he lose sight of his linear life trajectory, is precisely how she sees the negative workings of overwrought emotions; it is only in grief over the loss of her husband that she fully "indulges."

This lapse in reason she forgives herself and is forgiven her because of her rhetorical framing of marriage, which in the early Atlantic context underpins the project of colonial settlement, and drives management of the local landscape beyond practices of empire. Marriage is also the linchpin of the early Republic. To Pinckney, it is the knot that ties together each of her roles and life purposes—planter, property manager, naturalist, writer, matriarch, mother, and friend. Throughout *The Letterbook*, Pinckney moves easily from adulating, dutiful daughter to devoted partner-wife. Her numerous letters from the period immediately following Charles

Pinckney's death heap exalted praises upon Charles, and hyperbolize their conjugal bliss: "The Almighty had given every blessing in that dear, that worthy, that valuable man, whose life was one continued course of Virtue. I had not a desire beyond him, nor had I a petition to make to Heaven but for a continuance of the blessing I enjoyed" (To Mrs. Lucas, September 25, 1758 100), "a harmony [existed] between us which never was interrupted by the least domestick Jarr, or one word in anger the whole time (for more than 14 year) I was his happy wife" (To Mr. Keate, c. 1759 129). Place no longer matters because it is the institution of marriage that imbues place with meaning, making it home: "all Countrys are now to me alike" (To Mrs. King, May 1759 118), she laments. Her children are the lasting inheritance of marriage, set to carry forth the virtues inherent in the institution: "I love them tenderly as they are my own children, but much more as they are the remains of my beloved husband" (To Dr. KirkPatrick, February 1760 132).

While she is leaning on her friends, her outpouring of emotion in these letters is highly performative and rhetorically calculated. Once more, Pinckney uses her circumstances, here the horrible turn of fate that makes her a widow, towards the elevation of the self. In achieving the pinnacle of moral exemplitude, she simultaneously validates her natural history project. At the height of a rhetorical onslaught in which the autonomous self is now completely realized (through widowhood, she becomes fully creole), *The Letterbook* also transparently becomes natural history: as she wallows in her grief, she sends turtles, food, and specimens, and more openly and with greater conviction argues for the superiority of her local landscape. To conflate her autobiographical and natural history projects with the proto-national, then, invites a slew of critical questions about the versatility of the natural history genre as it rapidly changes hands and uses.

Gender and the “Lobal”

In Chapters One and Two I argue that women’s natural histories have more substantive investments in local American ecologies than do their male-authored counterparts. In this chapter, I pair Eliza Lucas Pinckney with William Byrd II precisely because their investments—and the arcs of these investments—are so closely aligned. Both Pinckney and Byrd are caught between service to the British empire and colonial personhood. Both navigate this fraught space by moving, in the course of their texts, *The Letterbook* and *History of the Dividing Line*, respectively, towards both natural history and the autonomous self, each of these moves embracing and eschewing institutional discourses bound within structures of empire and globalism. To complicate further, both of these moves are attended by proto-nationalist sentiment that actively evolves out of globalist discourses, but wishes to redirect to the local lived experience—uniquely from the perspective of a creole. Pinckney’s and Byrd’s creolism, or their liminality on global circuits, becomes the basis of their “lobal” orientation, or the perspective that shapes their treatment of local ecologies. The local is defined by imperial interventions, but it is not accurate to position these colonials as uncomplicated imperialists or their natural histories as unequivocally belonging to the imperial generic tradition. Their navigation of the local landscape begins with their permanent habitation in this landscape, and then exploits this landscape’s global purchase. Each “lobal” orientation is inflected by gender.

Natural history was a tool for Pinckney to engage in institutional discourses concerning knowledge production, cultivation, and gardening. We cannot apply Mary Louise Pratt’s trope of the “anti-conqueror” to Pinckney, as we can to the imperial naturalists: because Pinckney’s creole status denied her full European-ness, exertion of control over the landscape could never be veiled as “innocent.” As an inhabitant and stakeholder in this local ecology, it was visibly in her

interest to both record nature and alter it. Her residency in South Carolina was intimately tied to her time in Antigua and in England, and this global mobility in conjunction with her creole status ultimately secured her destiny as planter and cultivator, not as disinterested scientist. Pinckney was cultivating rice, indigo, flax, hemp, among other crops, for the global marketplace, and her more “innocent amusement[s]” (To Miss Bartlett, c. 1742 35) in gardening and early agronomy were exchanged both as specimens and as knowledge production on this same global circuit. Annette Kolodny reads Pinckney’s lifelong preoccupation with gardening, a narrative in which Pinckney fashioned herself “head gardener” (To Mrs. Onslow, February 27, 1762 185), as a projected fantasy: “Eliza Lucas wanted to see herself not as the agrarian entrepreneur she was but as a humble gardener at work amid the receding wilderness places of America” (Kolodny 51). While I disagree that Pinckney did not eagerly embrace agrarianism as intrinsic to her colonial identity, I concur that Pinckney was equally invested in demonstrating that she could beautify the lowcountry landscape through the feminine and “innocent amusement” of botanical practice. This practice also belonged to the pastoral ideal, which appears side by side with the agrarian ideal throughout *The Letterbook* and in Pinckney’s later correspondence.¹⁴⁴ Even as she consciously feminizes her contribution through the trope of gardening, she simultaneously embraces the masculine rhetoric of cultivation. Critically, everywhere, Pinckney is shaping, altering the local through her “lobal” perspective; in the case of gardening, she is actively selling the “improved” wilderness.

One of the difficulties in unpacking Pinckney’s project is attending to her negotiation of gender. She expertly gives allegiance to eighteenth-century conceptions of womanhood, to which a love of gardening belongs. Yet even this love of gardening does not neatly compartmentalize as

¹⁴⁴ See Susan Scott Parrish’s discussion of how Pinckney sold the pastoral Eden of Carolina to the royal family in England when she earned an audience with Princess Augusta (207) (Eliza Pinckney to Unidentified person 1753). Pinckney’s commodification of the pastoral was part of her “lobal” orientation.

woman's work. After all, she is "*head* gardener," implying a team. She elaborates that this piece of land required her to "clear" a forest, and that it belongs to a "hovel," in reality Belmont, her main estate, upon which enslaved labor is employed. Her moments of pastoralism frequently expose the contribution of labor, and should therefore more aptly be termed "georgic," particularly as they always revert to the ethic of "improvement." She concludes her letter to Mrs. Onslow by philosophizing on the great tragedy of felling trees: "Being a sort of anthusiaste in my Veneration for fine trees, I look upon the destroyers of Pyrford Avenue as sacrilidgious Enemies to posterity, and upon an old oak with the reverencial Esteem of a Druid" (185). Planted trees are symbolic for Pinckney, particularly those planted by her family (the one she laments, by her husband): they both "modernize" the landscape, and irrevocably alter it. It is significant that she populates the lowcountry with her own trees. As woman, she is a reproductive agent staking a claim that will parallel her human legacy.

A set of unique conditions in the South Carolina plantation zone made women like Eliza Lucas Pinckney, running their fathers' and husbands' plantations and business affairs, fairly common. Among these were enterprising husbands traveling to and from the West Indies and England, high rates of mortality due to disease, and the need to diversify crops and investments globally as families settled the yet unstable lowcountry (Anzilotti 239). Cara Anzilotti calls the eighteenth-century South Carolina lowcountry a highly "stratified" and patriarchal society in which "wives and daughters became essential to the survival of the social order [men] had so carefully imported and erected" (240). Anzilotti frames as choice women's acceptance of this mission, which entailed management of property, enslaved labor, and business affairs, in addition to running households and raising sons to take over management duties once of age. Women were "deputy husbands," designated as such in their husbands' wills (240). Young Eliza

Lucas performed this duty for her father, George Lucas, when her mother Ann Mildrum was incapacitated by illness. When Eliza Lucas became Mrs. Pinckney, for a time, she continued to manage her father's plantations, and most certainly her duties expanded as she became mistress of her husband's as well. The full scope of her power, here as "deputy father," is seen in this short letter from one of George Lucas's overseers, William Murray, in January 1745:

The boat came here ye 16. In ye morning brought two half-hides, two Iron ladels, one I have Returned it is too Short, and no Socket for a handel. They Set out Next morning carries 50 blls Rice, two deer, I would have Sent some Torkies but find ye man a Stranger to ye Suthard parts there are 100 blls Tarr at ye landing Since Christmass Week in Expectation of Coll Blakes boat and 50 more ready to roll, We Have beat but 100 blls Rice, Shall be Short of provisions will beat but 30 more till I have Your orders; The kiln of [40?] foot is finished but cannot burn it for want of Blls. (William Murray to Eliza Lucas Pinckney, January 1745)

Eliza's overseer cannot proceed without her consent: his language is technical and enumerative, for Eliza has expansive knowledge of plantation affairs. Circumstances in the climate and morbidity rates in the settlement of South Carolina gave Eliza and other women uncommon opportunities to hold economic freedom—in fact, these opportunities, including inheritances for widows, and the control of property as deputies, were unparalleled anywhere else in the colonies or in England (Anzilotti 241). This unusual economic freedom placed Pinckney in a position of power from which she devised a way to sell her local environment. To stretch the boundaries of the natural history, she needed to find a globally sanctioned rhetorical frame from which, as woman, she could do so. She found this form in epistolarity and proceeded under the guise of civil correspondence to exercise this economic freedom.

Because the South Carolina lowcountry was settled by “family groups” that, often through their wives’ close supervision, became family dynasties, gender constructs were reformulated. “Class interests and [family] positions within planter society were more important than upholding rigid notions of gender”; women skillfully managing business affairs typically the province of men were “acting within the socially prescribed definitions of female responsibility, not against them” (Anzilotti 247-248). Consider the range of tasks, elaborate attention to detail, and level of organization required of young Eliza Lucas in this memorandum of a letter to her father in 1743:

Wrote to my father a very long letter informing him I had received his relating the whole of that unfortunate and ill concerted expedition at Laguira. About plantation affairs: We made very little Indigo this year—the reasons why. Just received a letter from Mrs. Boddicott [on] my dear brother Tommeys Illness. Capt. West would not take any freight for the things he brought. Wrote to him on the Independent companys. On Mr. Cooks having droped his claim to the Southward lands. About settleing the Woppo slaves. Acknowledge the receipt of his letter dated at Port Cavlla with the papers of all the transactions there and at Laguira inclosed. (69)

Even as Eliza’s work subverted gender roles, it reinforced them in her local environment: Pinckney belonged to a class of women property managers that numbered an astonishing six-hundred (and likely more) in the lowcountry region during the colonial period, according to Anzilotti’s archival research (244). This class of creole women worked to uphold the patriarchal structure female deputy-autonomy was ideologically shattering. Though Eliza may not have been an anomaly as a female planter within her society, the project of the *The Letterbook* and its documentation of this nonconforming system does lend her exemplar status. It represents the

creative “mapping” of a highly idiosyncratic region by a woman creole, and finally reveals the “lobal” orientation that her inclusion in the lowcountry gender-subverting system predetermines.

Eliza Lucas Pinckney’s own sense for the role women could play in global and regional discourses and in the *New Science* as an extension of the female deputy-autonomy afforded her by circumstance, is made evident in numerous exchanges. In places, her comments feel proto-feminist; it is clear she is taking advantage of her unique position to speak in defense of women’s aptitude. Sometimes this defense is mild, and in line with eighteenth-century discourses on female education.¹⁴⁵ However, in this November 11, 1742 letter to her father, Eliza, as would a naturalist in conversation with other naturalists, invalidates the testimony of British soldiers returned from Jamaica: “The character [the soldiers] give of the women there must, I think, be exaggerated and therefore I wont enlarge on that head” (57). What matters here is Eliza’s own conviction that in her text, she has final authority on who speaks, especially about women. Based on the parameters of her own experience, she says, these men’s testimonies cannot be “truth.” By not even deigning to give their account a voice, she asserts her right to shape circulated knowledge about the Americas.

In a March/April 1742 letter to Miss Bartlett in which she discusses her observation of what she believes is Newton’s Comet (predicted by natural philosophers in 1741), she invokes the word “curiosity” in order to signal participation in the *New Science*: “By your enquiry after the Comett I find your curiosity has not been strong enough to raise you out of bed so much before your usual time as mine has been.” She then goes on to describe the comet’s appearance: “a very large starr with a tail and to my sight about 5 or 6 foot long—its real magnitude must

¹⁴⁵ For example: “women are [capable] both of friendship and business” (to Mrs. Evance, June 19, 1760 152), “’tis want of knowing how to imploy themselves agreeably that make many women too fond of going abroad” (to Master Mackenzie, c. 1760 141), “I take some pains, you see, to let you know my genius is not defective; any thing rather than that. Oh, vanity of female Youth!” (To Miss Bartlett, May 1743 62).

then be prodigious. The tale was much paler than the Commett it self and not unlike the milky way. ‘Twas about a fortnight ago that I see it” (31). Her account presupposes that Miss Bartlett has a general knowledge of the Milky Way, and uses its observation to hypothesize on the size of the comet. Her account then devolves—or perhaps, evolves—into metaphor:

The brightness of the Committ was too dazleing for me to give you the information you require. I could not see whether it had petticoats on or not, but I am inclined to think by its modest appearance so early in the morning it wont permit every Idle gazer to behold its splendor, a favour it will only grant to such as take pains for it—from hence I conclude if I could have discovered any clothing it would have been the female garb.

Besides if it is any mortal transformed to this glorious luminary, why not a woman. (31)

Eliza must have thought herself very clever to extend her metaphor by circling back to the dig at Miss Bartlett’s lack of “curiosity.” Indeed, she seems to say, not only do women have a claim to the culture of curiosity, but that perhaps they are the earliest risers, the hardest workers, the drivers of curiosity culture. Her metaphor also gestures to New Scientific discourses around feminized nature, which would likely have gendered the comet female, if at all. That her comet is simultaneously a “luminary,” as were scores of male virtuosi, turns this trope on its head, and asks her reader to consider the female-gendered comet not as object of male science, but as the embodiment of scientific discovery itself. She concludes her thoughts on the comet with a retreat to the qualified humility expected in natural history: “The light of the Comitt to my unphilosophical Eyes seems to be natural and all its own. How much it may really borrow from the sun I am not astronomer *enough* to tell” [emphasis mine] (31).¹⁴⁶ Eliza’s experimental spelling of “comet”—four different spellings in four mentions—also suggests her self-inclusion

¹⁴⁶ Newton first saw a comet in 1680-1681 passing behind the sun, which spurred his theory of gravity. He recorded his observations in *Philosophia Naturalis Principia Mathematica* (1687). Eliza appears to be referencing Newton’s account here.

in institutional discourses. Though she may not know its proper spelling, one of her tries will succeed, and through this success, she will symbolically enter the discourse. This courage of experimentation is an extension of her confidence as her father's deputy and is further manifested in her approach to indigo production.

The first article that demythologized Eliza Lucas Pinckney's role in the South Carolina lowcountry's indigo production was David L. Coon's 1976 piece entitled "Eliza Lucas Pinckney and the Reintroduction of Indigo Culture in South Carolina." Coon traces the origins of indigo in the Americas to the Spaniards, who were then followed by the British and French. By the mid-seventeenth century, there were operating indigo plantations in the West Indies. Indigo did come to the North American continent before 1700, specifically to Virginia and South Carolina, but failed, re-entering the market once more in the 1740s/1750s when The War of Jenkins's Ear (1739-1748) created deep challenges in rice exportation, South Carolina's staple crop (61-63). Indigo and rice were compatible crops, as the lowcountry had land on which both could be cultivated, in different seasons. Rice cultivation required proximity to swampland or water,¹⁴⁷ so those lands that could not produce rice, could produce indigo, and those that did, could double their crop output (64).¹⁴⁸ Between 1744 and 1774, South Carolina produced more than a million pounds of indigo, although there were several periods of rapid fall and rapid gain in between—in 1749, even requiring a Parliamentary bounty in order to stimulate further production.¹⁴⁹ This heightened production had waned by 1800, when cotton took over, but indigo remains in South

¹⁴⁷ South Carolina moved from upland rice cultivation (rainfall) from the 1690s to the 1720s, to freshwater swamp cultivation from the 1720s to the 1770s, and finally to tidal rice cultivation (proximity to rivers, controlled flooding of fields at intervals) ("Rice Culture and Trade"). For more on this progression, see Joyce E. Chaplin, 31-32.

¹⁴⁸ R. C. Nash's research shows that the largest contributions came from the large-scale plantations that were cultivating both indigo and rice, as they could sustain low yield and poor quality, and had the enslaved labor to build and run such plantations (379). However, by the early 1770s, indigo-only plantations were double those of indigo-rice plantations and were producing in greater quantity than the mixed plantations (381).

¹⁴⁹ For statistics on Charleston region South Carolina's production of indigo between these years—in relation to rice production—see Nash.

Carolina lore as pivotal in the province's, then colony's, significance in the global marketplace (64). What is clear is that Eliza Lucas Pinckney did not single-handedly, through the four years of trials she documents in *The Letterbook*, reintroduce indigo to the lowcountry region. Part of the legend is that her father had sent an "instructor" from Montserrat, Nicholas Cromwell, to help with the first planting, but that this man's secret intentions were to preserve the French monopoly on the indigo market. Eliza had discovered Cromwell to be impeding her progress and proceeded without him, with some help from her neighbor Andrew Devereux, a Huguenot who nevertheless placed his allegiance with the British province. She did manage to produce a small crop of commercial-grade indigo and seeds that she could replant and distribute. But, as Coon argues, so did several other planters in the same years: "the sudden interest of the South Carolinians in indigo was due more to exigency than to a venturesome spirit" (68). The English needed a colonial market or were subject to French price inflation; the British colonies in the West Indies were now almost exclusively sugar producers. The War of Jenkins's Ear made a new export a necessity (70).

The quality of this indigo was often very poor, especially in the early years. Its unfortunate reputation in the early days of production haunted the later product. Throughout its fifty-odd years of production, South Carolina's indigo never achieved the quality of French West Indian indigo, and never sold for as high a price. South Carolina planters withheld labor in cultivation and processing to save costs, and so settled on producing larger quantities of the lower-grade copper indigo, rather than the higher-grade flora indigo produced in the French Caribbean. Other factors included an incompatible climate, small plantations without a trained labor force, indigo as a secondary rather than primary crop, and careless curing (Nash 383-

385).¹⁵⁰ The 1749 bounty seems to have incentivized poor quality as it was consistently offered for low-grade product (Winberry 248). In the short period that indigo gained a foothold in the lowcountry, and perhaps because its low quality virtually guaranteed its impermanence on the global market, rice cultivation technologies continued to advance.

Attending these advances—and, in the later half of the eighteenth century, the move to tidewater plantations, or rice fields under systems of controlled irrigation from nearby river sources—was the growing reliance on enslaved labor. Joyce E. Chaplin calls this new system of tidal rice cultivation an entrenchment of slavery in the region, right at the time when there was serious consideration of blocking further slave trade, a system that “literally [dug] slavery deeper in to the lowcountry as slaves themselves dug new irrigation canals” (30). Among those objecting to slave embargoes was Pinckney’s son Charles Cotesworth Pinckney, who argued that “whilst there remained one acre of swamp-land in South Carolina he should raise his voice against restricting the importation of negroes” (C.C. Pinckney qtd. in Chaplin 30). Just as the region did not abide by eighteenth-century gender divisions, so too did it contain an uncommon system of enslaved labor and slave-master relations. Individual enslaved persons on rice plantations—as well as on indigo plantations—were matched with individual tasks. As opposed to group labor, in which slaves were largely expendable, task-labor rendered each laborer valuable to production. Enslaved people were also nominally more in control of their time. This created a network in which “planters recognized slaves’ power in redefining terms of labor,” where slaves had a lifeline to owners who frequently heard labor and production concerns (33). However, as Chaplin points out, “compared to other unfree peoples (serfs, peasants, slaves in the Caribbean and Latin America), lowcountry slaves did not win significant autonomy,” for they

¹⁵⁰ “Only one-fifth of appraised indigo was valued at rates that equaled or came close to the prevailing market price; two-fifths was valued at 50-80 per cent of the market price; while the remaining two-fifths was valued at 50 per cent or less, often at a mere fraction, of the Charleston price” (Nash 384).

did not have jungle to remove to, as did enslaved people in Surinam, nor could they gather communally, as they were too spread out (53).¹⁵¹ Their labor on tidal rice plantations involved building dams and directly water flow, clearing rice fields, and planting and harvesting the crop (36). Competition for the right kind of swampland—tidal swamp, rather than inland swamp—was fierce, and slaves were clearing this swampland and transforming it exponentially after the Revolutionary War (43-46).¹⁵² From the beginning, there was concern about the impact on the natural landscape and its flora and fauna as rice cultivations destroyed swampland and artificially irrigated plantations, as well as about how slavery had degraded peoples in tandem with nature (60).

Eliza Lucas Pinckney did not participate in these early environmentalist debates. While she frequently opined on the beauty of her surroundings, she saw gardening as an aesthetic, even pastoral, project (which had its own social and political purchase, as well as gender implications, Pinckney was very much aware of), planting and cultivation as economic enterprises. These views did in no way grow more nuanced as she aged; nor did her views on slavery evolve. Unlike Jane Colden, who elided slavery altogether, and Maria Sybilla Merian, who validated slave knowledges and acknowledged their critical role in her expedition's discoveries and art production, enslaved people for Eliza Lucas Pinckney, though the very foundation of the plantation economy on which Pinckney's family thrived, formed the often-invisible labor force of what came to constitute her local ecology—the plantation zone. She does register their

¹⁵¹ For more on slave autonomy in this region, see Chaplin, 54-61. Chaplin notes enslaved people's use of the Gullah dialect, the creation of black-only spaces, and the propagation of black drivers (overseers) as some examples of this autonomy.

¹⁵² War created anarchy on the plantations: "With slaves, enemies, refugees, *and* water flowing in and out of plantations in a chaotic fashion, damage spread." Many enslaved people had abandoned the plantations and cultivators had no one to perform the upkeep (Chaplin 38). After the war, "a slave could cultivate five or six times as much rice on a [] tidal estate as a slave had done one a pre-Revolutionary inland-swamp plantation. Coastal land values also rose. While improved inland swamp was worth only \$20-50 an acre, improved tide swamp sold for \$70-90—another indication that rice planting was no longer a prospect for men with modest resources" (47).

presence in rare pastoral moments that teeter on the brink of the georgic, but does not acknowledge the ways in which they corrupt any pastoralism she attempts. In the few mentions of enslaved people in *The Letterbook*, Pinckney paints herself as benevolent master, educating young slave girls (34), and in a show of civility for her correspondent, Mr. Morly, proclaiming that her slaves “rejoice at letter directed by you” (June 11, 1761 171). Pinckney’s labor force is rooted in the plantation, and as such, is an extension of her, to be transplanted, cultivated, exchanged, and spoken for. They belong to the local landscape only as profit; Pinckney does not anywhere concede the human cost of this contribution.

By the conclusion of *The Letterbook*, and certainly by the Revolutionary War, Pinckney begins to embrace her creolism, even to see herself as a native, an identity she continues to deny enslaved people. In a September 25, 1780 letter to her friend Miss Rebecca Raven Evance, she gives a rather uncomplicated view of slavery:

I would sell some of my Negroes that remain in my possession; and make Instant paymt of the £[200] I borrow’d of you with the Interest but the slaves in this country in genl. have behaved so infamously and even those that remaind at home so Insolent and quite their own masters that for his reason ye precariousness of the [province?] & want of money—there are very few purchasers & their value is so trifling that it must be absolute ruin to sell at this time. (Eliza Lucas Pinckney to Rebecca Raven Evance, September 25, 1780)

Though she acknowledges that the “precariousness of the province” is intricately linked to slave rebellion—and by extension, that enslaved people are living the effects of this regional instability just as she is (though in the inverse, according to her account, as they seem to be benefiting)—she maintains psychological distance, and reserves the right to include and exclude actors from

the local as she sees fit. Ironically, her own inclusion as actor is a circumstance of the local, a circumstance she exploits to write region both through the local and the global; her exclusion of enslaved peoples, however, is a byproduct of the global.

The basis of Pinckney's self-identification as exemplar even as she espoused codes of moral and civil conduct common to her generation lay with her father, whose experimental and enterprising approach to planting in South Carolina was defined by competition. Ultimately, her "patriotic" distribution of indigo seed may have been less selfless and more conscientiously legacy-building. Her father George Lucas no doubt inspired young Eliza to think in these terms, and indeed conditions of the local forced these morbid considerations. George Lucas writes to Charles Pinckney about the indigo seed on several occasions. While the governing sentiment is disappointment that his experiments have not been as successful as others' have been, he is sure to remind Pinckney that it was his ordinary seed (or rather, Eliza's) that spurred the success of other planters. In a December 22, 1744 letter, he voices his concerns about liberally distributing the seed he procured at a rather large expense from the Caribbean:

Mr. Ramsy informs me that my Neighbour Deveaux had made Indigo in Quantity...as good as any produce of the French Island & made by one of his own Negro's, If so I Imagine he must have had his Seed from mine, as it is rarely to be purchased in these Islands his Caution in not Publishing or Instruction in the manner of Making it, will give him the Start of us by a Crop & may Serve as a hint that we may make the same Advantage by being Sparing in Distributing Seed & Instruction in the Manufacture, Tho' I wou'd not be understood to intend a Withholding in such a manner as may be Charged with too much Selfishness or want of proper friendship which I am sure is neither your Disposition or mine.

Lucas's sentiment that he must preserve his self-interest while simultaneously maintaining the neighborly bonds that structure society could not have escaped Eliza, and indeed was passed down to her, contradicting her first biographer Harriott Ravenel's account that her seed distribution was openly "patriotic." In fact, what is proto-national about this sentiment is the reflective negotiation of individual self-interest and the collective good, which itself mirrors the pressure to reconcile individual region and unified nation. A year later, George Lucas reiterates this sense of hurt pride and asks Charles Pinckney to enlist Andrew Deveaux's help in planting the crop, which he "might reasonably Expected to have been the first reaper of that Comodoty thou I have been in that as in many other undertakings unfortunate": "I presume Mr. Deveaux could not well have denied his advice about manufacturing [the] weed, as his beginning was from my Seed" (Schulz, December 23, 1745). Indeed Andrew Deveaux actively aided Eliza's plantings of the crop, especially when Nicholas Cromwell, George Lucas's man from Montserrat, proved incompetent. It was Eliza, again exposing her "lobal" orientation, who encouraged her father to continue the pursuit of indigo production in particular, even though her letters detail simultaneous experiments with ginger, cotton, alfalfa, and cassava (Memorandum to George Lucas, July 1740 8). She tells him as early as 1741 that "I make no doubt Indigo will prove a very valuable Commodity in time if we could have the seed from the west Indias [in] time enough to plant the latter end of March, that the seed might be dry enough to gather before our frost" (Eliza Lucas to George Lucas, June 4, 1741 16). Eliza, like her father, had an on-the-ground grasp of environmental conditions that were mandatory for plantation management in this uncultivated region. She was also tapped into globalist discourses that demanded a colonial indigo market.

* * *

As a fellow creole, William Byrd shared the dual privileges of colonial and global knowledge producer. The survey gave him a profound understanding of conditions on the boundary line that could affect future land development and settlement. His orders were to establish right of governance over these territories, and as in the case of Pinckney, his interests as Virginian corresponded with his imperial dictate. He could sell the local as knowledge while retaining the right of the local inhabitant to shape this knowledge. Byrd's "Rule in Botanicks" illustrates this mediating position. It states that plants thrive best, retaining their medicinal and aesthetic properties, in their natural environments, that naturalization is an artificial and subsidiary process: "where any Vegetable is planted by the hand of Nature, it has more Vertue than in Places whereto it is transplanted by the Curiosity of Man" (138). Although ginseng was a plant Byrd sent abroad on numerous occasions, it did not travel well, and Hans Sloane in particular was not convinced of its "many Vertues" (Byrd 189, Iannini 116-117). This example is representative of Byrd's "lobal" lens. He begins with the local plant whose properties he has discovered through active use for place-specific medical purposes, attempts to transport both this root and knowledge transatlantically—giving the impression of an imperial frame—and then cycles back to its local use when the "Curiosity of Man" proves feeble substitute for "the hand of Nature." Ultimately, he proves the supremacy of (male) creole knowledges.

So much of Byrd's imperial lens in *History of the Dividing Line* is complicated by his tenuous identity as a creole. Take the ambiguous, mismatched use of the pronouns "our" and "we" here, which serve to simultaneously identify Byrd as British and creole colonial: "Our Country has now been inhabited by more than 130 years by the English and still we hardly know any thing of the Appalachian Mountains, that are no where above 250 Miles from the Sea" (182). In the next sentence, he compares the lackadaisical efforts of British sovereignty to the

enterprising ones of the French, whom he calls diligent explorers. He suggests that the British know comparatively little of the landscape and the French quite a bit more, but the colonials, whose “Country” has “been inhabited,” are excluded from this agency altogether. In other words, Byrd constructs his sentence such that what the creoles know is entirely left out, leaving the reader to infer whether creole knowledge situated in the local is equally lacking to that of the colonizing British and French, or greater than. Byrd strategically elides an answer to this question, using the whole of *History of the Dividing Line* to argue that colonials can produce knowledge that has value both locally and naturalized on the global market, while using attacks on North Carolina settlers to argue that ignorance and lack of curiosity characterize the province Virginia wishes to unseat of land. In several places, Byrd informs us how little the Carolina “locals” know of their own backyard: “[Mr. Wilson] lives within sight of the Dismal, in the Skirts whereof, his Stocks range and maintain themselves all the Winter, and yet he knew as little of it, as he did of Terra Australia Incognita” (93), “’Tis hardly credible how little the Bordering inhabitants were acquainted with this mighty Swamp, notwithstanding they had liv’d their whole lives within smell of it” (91). Colonial difference is again, then, both globally and regionally reflected.

Swampland in particular, with its racial resonances, signifies fear, incongruity, abstraction. The Dismal Swamp is practically impenetrable for the surveyors, and hence unknowable. That Byrd then develops a plan to drain the swamp and establish a Swiss settlement in that location suggests both the hubris of the male colonizer and the wielding of the creole’s privilege.¹⁵³ Complicating this dichotomy is Byrd’s “increasingly refined efforts to invent Virginia as a ‘distinct geocultural entity’” separate from North Carolina and the West Indies

¹⁵³ In later natural histories, this negotiation turned nationalistic: I discuss in Chapter Four how the creole dons the habit of the European colonizer, replicating practices that consolidate distinct regions towards national unity.

(Iannini 117), to strongly suggest that climate-based creole degeneracy belonged firmly south of the dividing line (Parrish 96). After having surveyed the swamp, Byrd believed that, as a Virginian, he knew more of it than did its immediate settler neighbors, and certainly more than its distant colonizers, who had no firsthand experience with swamps at all, even as the profitability and security of their West Indian colonies depended on this knowledge. In this same section, Byrd's description of the surveyors plowing through the swamp makes no mention of blacks or natives, minimizing the disorienting quality of the contact zone.¹⁵⁴ In contrast, Stedman's plate depicting soldiers trudging through swampland, which I closely read in Chapter One, makes powerfully vivid this disorientation. Byrd's elision is rhetorically purposeful, as it allows space for his own entrance into the scene, and later into the future of this swampland.

The question of who has a right to make knowledge is continually in play in *History of the Dividing Line*, and intimately tied to the natural history project, as well as to Byrd's self-presenting masculinity. Byrd strategically exoticizes Native Americans and validates their local knowledge in equal measure, in the first case positioning himself as disinterested observer, and in the latter, unifying creolism and nativeness. In some cases, natives are both specimens and knowledge-makers at once, and always, in this case, Byrd's masculinity is synthesizer:

[Bearskin] inform'd me, that if any Indian-Woman did not prove with Child at a decent time after Marriage, the Husband to save his Reputation with the Women, forthwith enter'd into a Bear-dyets for Six Weeks, which in that time makes him so vigorous, that

¹⁵⁴ Byrd's vivid passage reads: "However small this distance may seem to such as are us'd to travel at their Ease, yet our Poor Men who were oblig'd to work with an unwieldy Load at their Backs, had reason to think it a long way; especially in a Bogg, where they had no firm Footing, but very Step made a deep Impression, which was instantly fill'd with Water. At the same time they were laboring with their Hands to cut down the Reeds which were Ten-feet-high, their Legs were hampered with the Bryars. Besides the Weather happen'd to be warm, and the tallness of the Reeds kept off every Friendly Breeze from coming to refresh them. And indeed it was a little provoking to hear the Wind whistling among the Branches of the White Cedars, which grew here and there amongst the Reeds, and at the same time not have the Comfort to feel the least Breath of it" (93).

he grows exceedingly impertinent to his poor Wife, and 'tis great odds but he makes her a Mother in Nine Months.

And thus much I am able to say besides, for the Reputations of the Bear-dyets, that all the Marry'd men of our Company, were joyful Fathers within forty weeks after they got Home, and most of the single men had Children sworn to them within the same time, our Chaplin always excepted, who with much doe made a shift, to cast out that importunate kind of Devil, by Dint of—Fasting and Prayer. (177)

Part of the project here foretells Jefferson's. In emphasizing the largesse, power, virility, and local knowledges of Native Americans, Byrd is mounting a defense of his "Country." In many other moments, Byrd draws his readers' attention to the plenty of the land, to its enormous breadth of natural phenomena, including its astonishing animals, and the uncommon benefits they provide as nourishment. His focus is less on the beauty of the landscape or the flora and fauna found within it, and more on the formidableness of the bear, or the treachery of the swamp, or the enormity of the mountain ranges. This is clearly a move that resonates with institutional scientific discourses, but it can also be read through the lenses of Byrd's masculinity and proto-nationalism.

Conclusion

The creole self negotiates the natural history in a liminal, in-between space that is not fully imperial, not proto-ecologic. Not local, not global, not "glocal," but "lobal." The starting place for both Eliza Lucas Pinckney and William Byrd is their creolism. Because they are participating institutionally as producers of knowledge on the transatlantic circuit, their designation as creole precedes and informs the nature of their contributions. Their production should be understood as two-fold: first the material, concrete "things" produced (the indigo and

the survey), and second, the interpretive, abstract knowledge contained in their natural histories (the texts). Much as their material work was dictated by its value on the global market, this work was, by nature, rooted in the complex conditions of the local landscape, including impacts of settler colonialism, slavery, and Native American land dispossession. To reiterate, the “local” in my definition is the current state of nature as these naturalists encountered it, and even personally altered it, and includes the numbered violations colonization had wrought. Why this is still “local” is precisely because no one on the periphery of this contact zone, outside this geography, could “know” this landscape without the record of this eyewitness testimony—hence, the privileged, but tenuous status of the colonial in the natural history genre. Beginning in the local, Pinckney’s and Byrd’s textual productions were intricate rhetorical performances that engaged the local and that traveled outside of the contact zone, subject first to revisionary history and autobiographical practice by their authors, and next, to interpretive inferencing, synthesizing, comparison by their European readers.

In my previous chapters, I argued that Maria Sybilla Merian oriented her project “glocally” and that Jane Colden did so proto-ecologically. Eliza Lucas Pinckney’s engagement with her local ecology is certainly imperially-informed; however, it is her identity as creole that allows her to simultaneously evolve the genre away from the male mode of colonial conquest. It allows her to begin from the state of the local and extrapolate it to the global, rather than the reverse, which is convention in the imperial natural history. This “lobal” point-of-view differs too from the framing of the “glocal”—again, writing that “aimed to retain a self-sufficient and self-contained regional insularity without forfeiting economic growth” (Nussbaum, *The Global Eighteenth Century* 10-11). Merian was writing “glocally” because she was primarily invested in local, self-contained organic processes I read as proto-ecologic, but was trapped in the imperial

enterprise by virtue of her European-ness, her travel, her entourage of native and slave collectors, and finally, by her self-sought inclusion in institutional scientific discourses. Pinckney, on the other hand, saw no such holism in nature; nor did she seek it. Any Edenic visions—and they were not common—were wholly the province of the pastoral mode, itself implicated in the imperial enterprise, enabler of agrarian and proto-national discourses, a pastoralism that she sometimes genders female through her use of the botanic metaphor. Pinckney’s intensive focus on cultivation belongs to the subgenre of the georgic, exposing the labor behind the vision of a beautified landscape, while at the same time positioning agrarianism as nurture and herself as nurturing “mother” of the land. It was simply a matter of circumstance that born in Antigua, and settled in South Carolina, Pinckney “knew” those local ecologies firsthand, and learned, through a complex set of confluent factors, including her English education, role as deputy-daughter and plantation manager, elite colonial, correspondent, and wide reader, and her experimental cultivation, the ways in which these local ecologies had political, social, and cultural purchase beyond the South Carolina lowcountry. And she actively marketed them. While Byrd had a deeper and longer exposure to the metropolitan elite, and the freedom to explore multiple roles and identities, ultimately it was his creole status that gave him authority over the local landscape he surveyed and recorded, and ultimately, he too can be deemed to possess this “lobal” point-of-view.

Pinckney’s and Byrd’s proto-nationalism is a manifestation of this “lobal” orientation, itself a derivation of “colonial regionalism”: because these authors’ texts are recording the local, in all its problematic and contradictory nuance, we naturally read North America into their

work.¹⁵⁵ “Regionalism,” or regional writing—in any of its iterations—never constitutes a closed genre. Place is imbued with meaning by larger cultural influences, and in turn shapes the larger culture (Powell qtd. in Faherty 145). Duncan Faherty invokes the work of Raymond Williams and Douglas Reichert Powell to explore how regional writers, and regions themselves, become othered through canon formation and nationalist narratives (145), despite their sometime reflection of these forces. Likewise, colonial writers of region, like Pinckney and Byrd, placed in fervent conversation the local—as eyewitnessed by the creole, itself a tenuous identity—and the global, whose institutional scientific discourses were othering the local in order to promote the imperial agenda. Interestingly, both writers deduce this colonial difference to the colonies, distinguishing between regions in order to normalize or centralize their lived region in the global exploitation of local ecologies, at the expense of another region—for both, North Carolina. As Virginia and the South Carolina lowcountry are standardized for Byrd and Pinckney respectively, another—North Carolina—becomes regionalized, or othered. Borders are critical for this purpose, but largely ineffective in the context of an unstable colonial regional mapping: in fact, Byrd’s dividing line only physically manifests an effort to regionalize North Carolina that fails time and again, most obviously in the indeterminate language of “province,” “territory,” and “colony,” and in the indistinguishability of natural history specimens between the two geologically nondistinct regions. For Pinckney and Byrd, natural history as genre does not broker and propel imperial politics alone, but rather works in the service of a complex “colonial regionalism” that drives proto-nationalism.

It is not that *The Letterbook* is exemplary as natural history, as is Colden’s, or Bartram’s, or Merian’s, or Stedman’s, but quite to the contrary, and much like Byrd’s, it is apace with the

¹⁵⁵ The proto-national and the imperial in the eighteenth century necessarily align, for the same principles of morality, civility, cultivation that are inscribed onto the landscape by the imperial natural history become the basis of the agrarian ideal, of an early republican social order.

generic trend in natural histories of the Americas that begin from this “lobal” orientation. Pinckney is evolving the genre alongside other practitioners, like Byrd, embodying, through her creolism, natural history’s adaptation in the North American context in advance of the Revolution. That *The Letterbook* is hybrid and by nature autobiographical—further along the natural history spectrum towards autobiography than any other natural history I discuss in this dissertation—attests to the standardization of hybridization. However, as epistolary record, *The Letterbook* also funnels autobiographical practice into the natural history in entirely new ways: herein lies Pinckney’s innovation. It is fitting then to call Pinckney’s text a natural history because the genre’s evolving inclusion of autobiography parallels Pinckney’s own experimentation with this hybrid form. Pairing Pinckney and Byrd illustrates how a male and female colonial, writing at the same time about two different regions, independently adopt a “lobal” point-of-view based in a common creolism, enacting this orientation sometimes through autobiography, sometimes because of it. The proto-nationalism I read in their work is enormously influenced by their investment in the autonomous self; hence, an effect of their autobiographical practice. Byrd’s satire, as critics like Ralph Bauer and Christopher Iannini have noted, aids in hybridization and make clear that he is never fully, linearly, participating in the imperial project. His satire crosses genre bounds too, and is frequently itself a form of life narrative.

Finally, it is imperative to consider how Pinckney and Byrd are structuring identity and selling the illusion of interiority. Women’s life writing in particular exhibits a “multivoicedness” (Smith and Watson, *Women, Autobiography, Theory* 30-31) a complexity around “linearity of narrative and a unified concept of selfhood” (20), a “subordination [of] [women’s] histories of themselves to others’ histories” (24), a “postulation of an ‘other’ toward, through, and by whom

women come to write themselves” (17), and a “polarization of thought and feeling” (35), ascribing the first to men, the second to women. Pinckney defies each of these “conventions,” broadly conceived enough by scholars of autobiography to avoid essentialism. She is profoundly linear in her self-construction—remarkably, over her lifetime. Her own legacy and “history” is central to her natural history project. Her letters are aligned with eighteenth-century cultural conventions, as she very much takes ownership over conventions of candid friendship and civil correspondence; *The Letterbook* as project moves with natural history generic trends towards autobiographical practice, participates in institutional scientific discourses, and works in the registers of the local and global to enable a “lobal” orientation, facilitated by her creolism. And as Susan Scott Parrish notes, Pinckney “endeavors to prove that her environment has not enfeebled her mind” (205): indeed, she rejects the imperial narrative of creole degeneracy by upholding the moral virtues of the metropole and placing on display her formidable mind for business and intellectual undertakings.

Because theories of creole degeneracy posited that the climate of the New World determined physiological denigration, and applied both to those who traveled and stayed and to those born in the Americas, “human beings were now seen to be like plants, entirely dependent on their climate and soil...subject to its peculiar natural influences for an extended period” (Bauer and Mazzotti 5-6). As a creole, Pinckney is intimately linked and forcibly thrown into the local ecology she helps shape; though she suffers headaches and heartaches, and many climatically-induced medical problems in between, she never suffers physiological and psychological corruption. Where Merian and Colden elide the self—often rendering it invisible in the frame of the text or the plate—Pinckney’s open engagement with identity leaves no question as to the healthy constitution of her mind and body. Her self is a condition,

consequence, and circumstance of her region, but it is never a depraved self, never lesser than that of her European friends.

In one letter, Pinckney confesses that she loves letter writing as mode of expression, “for when I am voluntarily silent ‘tis to indulge my friends, not my self” (To Mr. Keate, February 1762-180). Ever the master of rhetorical civility, in this one statement Pinckney invokes discourses, both generic and cultural, around humility, individuation, and the centrality of women’s voices. Pinckney’s negotiation of autobiographical practice and natural history conventions evolves the natural history genre further towards hybridization and reveals her composition of *The Letterbook* to be a self-conscious project within the genre. She repositions her contextually solvent creolism towards a “lobal” orientation that in turn reads proto-nationally. When Pinckney implies that it gives her great pleasure to voice her experience, she enacts her own inclusion in globalist nature discourses. Throughout *The Letterbook*, she carefully constructs a self that boldly stretches bounds of female participation in the project of New World cultivation.

Chapter Four

Creole Nationalisms in the West Indies: Women's Natural History Appropriations in the Early Republican Novel

This dissertation has moved from the most obvious examples of natural history production to the least obvious. This chapter in particular departs from the others in that it explores the unstable generic category of “novel”—as written by early republican women—as a derivative of the transatlantic natural history, arguing that women appropriated natural history generic conventions in order to enter nationalist discourses about the West Indies. I trace here fragments of the natural history that lace Leonora Sansay’s *Secret History; Or, the Horrors of St. Domingo* (1808) and Susanna Rowson’s *Reuben and Rachel: Or, Tales of Old Times* (1798). These fragments both magnify gender and racial anxieties in nation-building, manifested differently in Sansay and Rowson, and attempt to reaffirm patriarchal principles of revolutionary republicanism through sentimentality, as in the case of Rowson. That these women chose to set their narratives fully or partly in the West Indies I read as a complex manifestation of the women-writing-natural history paradigm—just as European women and colonists enjoyed greater freedom in generic innovation when based in the geographically peripheral Americas, so too were early American women writing the Caribbean able to enter public discourses around creolization and North American-Caribbean “paracolonial”¹⁵⁶ relations in more nuanced ways. In other words, where formerly both the North American tropics (the South) contiguous with the West Indies *and* the Northern colonies’ budding cities acted as sites of colonial difference from the British metropole, post-American Revolution, for American subjects, the West Indies became marker of this difference, framed as distinct from the early nation attempting to get its bearings. The South, however, still felt dangerous—climactically allied as it was with the Caribbean—and

¹⁵⁶ Sean Goudie’s term for the international agreement that regulated the new nation’s trade with the West Indies alongside Britain, thereby providing the loophole the early Republic needed to remain morally untainted.

was frequently marked as internal other. “America,” in the explosion of print culture that the late eighteenth century witnessed, came to mean the Northeast/Mid-Atlantic region, not the entire North American continent as of yet. I argue that early republican women’s making of an American-Caribbean distinction is complicated, and ultimately, ineffective.

To be clear, what I call the “early American/republican/national novel” in this chapter is not a set, or coherent, genre, though it has sometimes been critically assumed such. As I discuss later in the chapter, this form borrows modes like sentimentality and adventure from the British novel and fuses an enormous breadth of generic influences. When I call Sansay’s and Rowson’s works “early republican novels,” I mean that they register, and contribute to, anxieties and ideas circulating in the early Republic. Additionally, Sansay and Rowson, as women whose generic choices were restricted, were likely selecting the nascent genre of the novel deliberately. The power of the novel lay in its broad appeal, in its perceived role as mediator between reader and nation—writing a novel was an “ideological choice,” says Cathy Davidson in her book *Revolution and the Word: The Rise of the Novel in America* (1986, 2004) (6). One of the reasons, then, that Rowson and Sansay chiefly framed their works as novels is because they needed this culturally sanctioned form in order to safely enter politically-fraught discourses about the West Indies. Rowson further accessed this cultural sanctioning through sentimentality; Sansay through her book’s dedication to Aaron Burr. Sansay chooses the epistolary conceit—the most common of all frames—I suspect for two reasons. First, to cushion the impact of the horrific violence she relates, a transgressive act for a woman that trumps even the eyewitnessing of this violence. Second, to soften her radically-ambiguous feelings about the viability and/or the good sense of expunging creolizing influences from the new nation. Rowson frames her text as history

education for young ladies “blended with amusement” (38), or historical romance. I explore the importance of history as genre to the early American novel later in this chapter.

The attempted othering of the West Indies in order to work through concepts of nationhood mirrors the male-authored natural history’s role in empire-building. However, the female-authored early American novel, just like the female-authored natural history, complicates these concepts, offering alternative orientations and enacting this complication through hybridization, through the placing of multiple generic traditions in coterminous relation. Central to this complexity is the natural history, rarely listed as a genre informing the early republican novel, or in particular Sansay’s and Rowson’s works, at all. Where early American scholars have commented on these writers’ mixing of history and secret history, romance, the captivity and Barbary captivity narratives, the epistolary, sentimental, gothic, and adventure modes, the domestic drama, and the biblical allegory, among other genres, natural history has been summarily excluded from this list. There is evidence, however, that the dialectical relationship of these genres within Sansay’s and Rowson’s texts turns on the appropriation of natural history conventions, which by definition, operate by creating tension between foreign and familiar, unknown and known—and the unknowable. Reading natural history into the early republican novel set in the West Indies exposes further registers of anxiety around racial amalgamation, creoleness and creolization, slavery, and Native American removal. Doing so for women’s early American novels also illuminates late eighteenth-century gendered negotiations of public and private in the context of republicanism and nation-empire, as well as women’s stakes in the ownership and disavowal of place, the governing “agenda” of women’s natural history writing, if any “agenda” could be said to exist.

A thorough investigation of natural history dissemination in early American print culture is perhaps necessary to fully understand what exposure Sansay and Rowson might have had to the natural history genre and which conventions in particular they may have chosen to appropriate in their novels.¹⁵⁷ It is safe to assume, however, that both writers—tuned in as they were to political, cultural, and economic discourses—would have consumed newspapers, novels, plays, poetry, and histories that themselves complexly integrated natural history. Early America, still largely operating under the vestiges of colonial structures, was highly cognizant of, and sensitive to, both intelligence and cultural discourses emerging from Europe, the West Indies, and Africa. Natural history never ceased circulating through the hemisphere, and as the nineteenth century began, gained new prominence as a genre, recycling in old iterations, and ushering in new ones.¹⁵⁸

One of the ways that natural history manifests across both novels is through the taxonomic impulse, redirected from nature study to the specimenization of women. As the West Indies grew to be knowable over the course of the eighteenth century, the tropics and their natural productions lost some of their exotic purchase. As an example, I discuss in Chapter One how Merian's rare pineapple becomes naught but food for the hogs in Stedman's late-century volume. By late eighteenth century home to white planters and colonials, Amerindians, and a diverse group of Africans, colonies like Saint-Domingue, finally Haiti, and "Hispaniola," or St. Domingo, retained their intrigue through accounts of the cultural and racial mixing of its inhabitants. The novelty, oddity, and complexity of this amalgamation was what writers treating the West Indies, like Sansay, capitalized on. No longer was nature the *only*, or even the *greatest*,

¹⁵⁷ See Jared Gardner, for example, for an in-depth study of early American periodical culture.

¹⁵⁸ Charles Darwin and John James Audobon, for example, are part of the natural history tradition that extends into the nineteenth century; the nature writing of Susan Cooper, Emily Dickinson, Henry David Thoreau, and later the work of local color regionalists like Kate Chopin and Sarah Orne Jewett, constitute derivative iterations.

source of marvel and wonder, for nature had been by that point largely transplanted, irrevocably altered, or outright destroyed, nor were involved descriptions of natives, who had largely been violently purged, prominent, but rather the naturalist's, now novelist's, gaze increasingly turned to enslaved peoples, whites, mulattoes, creoles. And women, as symbols of both reproduction and consumption, became both the specimens that embodied, and the mediators of, intricate social relations defined by race.

The inordinate concern with women's conduct, education, and virtue, and with the corruptive possibilities of naivete, seduction, and romantic love that female-authored early American novels routinely express is certainly the province of the sentimental mode. However, *Secret History* and *Reuben and Rachel* complicate these concerns by making the geopolitics of place, of the West Indies, central to the description of women. Reading classification through description—here, of women rather than of nature—as natural history practice rather than as feature of the seduction or sentimental novel, challenges us to further problematize the contradictions in dominant notions of early republican womanhood, notions that spanned the highly politicized rights-crusader to the virtuous matriarch of the private domestic sphere. It is easy to read the early American novel's women, separated by “type,” as symbols of republican ideals and anxieties, one-dimensional literary devices used to propagate a moral system based in patriarchy. If we ascribe greater subversive agency to the early republican woman novelist, however, we can read into these same “types” nuance made possible by what Sian Silyn Roberts calls a “dizzying” hybridity of genres (251). In just one such iteration, Sansay employs the myopia of the natural history's descriptions of natives in her descriptions of creole women: creole women, who “have an air of voluptuous languor” are “almost too indolent to pronounce their words,” therefore speaking “with a drawling accent” (70-71). Sansay's pseudoscientific

conclusion that the creole drawl is due to a natural “indolence” or “languor,” does indeed register anxieties around creolization, but it does not succeed in making a clear distinction between the French creole and the American, and therefore does not necessarily promote patriarchal republicanism.

Considerations of how early American women appropriated contradictory traditions within natural history descriptive practice are inextricable from considerations of place. Enfolding the natural history into the novel in the context of the greater Caribbean places in stark relation natural history’s obsession with the island colonies as well as the early republic’s fears of slave rebellion and racial contamination believed to originate in the West Indies, worries the natural history was registering for more than a century prior. These worries explode as paranoias in the early American novel. Though the West Indies could be effectively othered in European cultural production, historically, its geopolitical contiguity with the North American continent in global discourses of the Americas, the debate around its role as trade partner, and the crisis of its exiled refugees fleeing to American soil post-Haitian Revolution, made this othering all but impossible in early national cultural production. Women’s generic experimentation, then—especially in novels set in the Caribbean—asks us to consider in what ways attempts to mark the West Indies as culturally distinct succeed and fail. I argue that it is the appropriation of natural history in particular that clarifies the valences of these attempts.

While other novels like pseudonymous Unca Eliza Winkfield’s *The Female American* (1767), Helena Wells’s *The Step Mother* (1798) and *Constantia Neville* (1800), and Charlotte Smith’s *The Wanderings of Warwick* (1794) and *Desmond* (1792), hybridize the novel and the natural history in the context of the West Indies perhaps more obviously than do *Secret History* and *Reuben and Rachel*, the first’s early publication date, English publication, and anonymous

authorship preclude reliably reading the novel as negotiating nationalism, while the latter four novels are written by women who emigrated to England late-century. Leonora Sansay and Susanna Rowson are fit to pair in this chapter because their negotiation of nationalism takes different forms—Sansay challenges, while Rowson affirms, tenets of patriarchal republicanism. In *Creole America: The West Indies and the Formation of Literature and Culture in the New Republic* (2006), Sean Goudie discusses two strains of discourse circulating in the early republic about the West Indies, one promoting the new nation's economic entanglements with the Caribbean as necessary, and one denouncing these entanglements as corruptive to republicanism. While Rowson seizes on this latter strain, rhetorically enacting North American exceptionalism, Sansay, and her protagonists Mary and Clara, find themselves both agents and victims of the first strain. Despite the tragic consequences of this involvement, Sansay does not enact a recuperation of patriarchal republicanism at the end of the novel, nor does she see the creolizing influences under which Mary and Clara have been trapped as necessarily inconsistent with their American nationality. Both Rowson and Sansay work complexly through race and gender as constitutive elements of a social order that resists neat taxonomization. They both invoke natural history conventions to harness this taxonomic impulse, and frequently, nationality becomes an easier target of classification than race. The irony here is that creolization in the tropics makes race and nationality frequently indistinguishable categories, so that even nationality, as identity, is ultimately elusive. The natural history in particular surfaces in ways that complicate the terms of nationalism and the categories of identity therein. In Sansay's and Rowson's projects the novel becomes an extension, or a descendant, of the natural history.

Locating American Creolisms

In Leonora Sansay's *Secret History*, the assumption of first violence is shared between the French, the creoles, and the black revolutionaries. Because Sansay's epistolary narrator Mary has arrived with her sister Clara, and Clara's husband, St. Louis, in Saint-Domingue during the throes of the Haitian Revolution's final, bloody years (1802-1804),¹⁵⁹ Mary's first letters expose a state of indiscriminate violence enacted on all sides.¹⁶⁰ Revolutionary atrocities are at once vaguely alluded to through secondhand accounts—"creole ladies...relate their sufferings in a manner which harrows up the soul" (70)—and intricately described in the style of omniscient narration—"climbing over rocks covered with brambles, where no path had been ever beat, [the fleeing white women's and children's] feet were torn to pieces and their steps marked with blood" (62). A gruesome scene in which a jealous white creole wife decapitates a slave girl she believes her husband to be attracted to—"perhaps I can give you something that will excite your appetite...she rose and drew from a closet the head of Coomba"—immediately precedes an anecdote of a rebel slave "whom [the master] had always treated as his brother" leading the execution of a white creole woman's family. This latter account makes Mary "laugh heartily in the midst of my tears" as the woman includes in her horrid tale the minor detail of a devoted slave who had rescued her "madrass handkerchiefs," an "idea [that] seemed to console her for every other loss" (70).

Elizabeth Maddock Dillon argues in her essay "The Secret History of the Early American Novel" (2006/7) that the white creole appropriation of madras handkerchiefs—legally imposed

¹⁵⁹ For a succinct summary of the Haitian Revolution and the Sansays in Saint-Domingue during the Haitian Revolution, see Drexler's Introduction to the Broadview edition of *Secret History*.

¹⁶⁰ Michael Drexler notes "the widely circulated and serially repeated tales of black violence are second-order relations in Sansay's text, a text in which the secret revealed is the comparative strength of black collectivity when measured against a creole, New World community constructed on racial fantasy and communal perceptions of victimization" ("Brigands and Nuns" 189). Andy Doolen finds that "historical narratives that told only tales of black antagonism helped to repair a white nation's border violated by imperial conflict, fever, and racial anxiety" (105).

on African, black creole, and mulatto women to mitigate the sexual threat they posed—are symbolic of a “counter-discourse of creolism in the novel...that represents the creole as an individual of great resources...capable of social reproduction under conditions of duress—rather than a sterile figure” (89). Defining “social reproduction” as the work of producing people who then constitute the workforce that sustains capitalism, Dillon calls the work of the early novel the reproduction of the family unit (83). When the family unit is instead consumed, the responsibility of this “social reproduction,” whose form is now ambiguous, rests with the survivors: in Sansay’s case, almost exclusively women, and often, creole women. The unnamed white creole woman who escapes her family’s tragedy, but is reunited with her handkerchiefs, is implied to have survived due to her “great resources,” including an ability to stretch and mutate racial and cultural bounds, evading at the same time delimiting identity markers and capture/death. By surviving, she in turn enacts another form of reproduction—that of reproducing cultural confluences. In another example, Mary notes that Pauline Leclerc, General Leclerc’s languorous wife, and Napoleon Bonaparte’s sister, appropriates the madras handkerchief; Dillon also reads this appropriation as evidence of Saint-Domingue’s claim upon its own creolized “social reproduction” (89). In this same scene of Pauline Leclerc’s description, Mary tells the reader that Leclerc’s “transition to this country, in its present state, has been too violent” (Sansay 67). This violence is unattributed and generalized, establishing as an ethos of the text a disorienting refusal to take sides, or rather an acknowledgment of the ways in which racial, political, cultural, and economic interests in revolutionary Saint-Domingue bleed into one another, and continue through their uncontainable admixture to reproduce. The European inability to assimilate and the instability of these categories both contribute to this failure. What becomes clearer as the drama

of the novel unfolds is that the early Republic cannot remain uncontaminated by these influences; and therefore, that the West Indies cannot be effectively othered.

For Rowson, North America is framed as fundamentally different from the West Indies, South America, or Europe. *Reuben and Rachel* begins in a secluded castle retreat in Wales. The outer narrative embeds a historical narrative that begins, in letter form, with Columbus traveling amongst several European powers seeking sponsorship for a proposed voyage to what he believes will be Asia. The first scene of native-colonizer contact, in St. Salvadore, or present-day Bahamas, is glossed with a very brief natural history description of the “humane, social, and tractable” natives who “wear [precious stones] in their hair and about their necks...decorate their temples with them, intermixed with gold and silver.” He comments in the manner of a disinterested scientist on the “gold dust,” “pearls,” and “diamonds” to be “easily procured” and on the natives’ idolatrous worship of the Sun (58-59). Hispaniola, where Columbus leaves a fledgling colony sometime after landing in St. Salvadore, appears formally in the narrative only after Peruvian contact has been made. The tale of Columbus’s contact with the native Tainos of Hispaniola (ultimately divided into Saint-Domingue and St. Domingo, now Haiti and Dominican Republic) is further embedded within the narrative of his return (now three layers of narration). Each of these embedded narratives—all but the outer one that follows Columbus’s granddaughter Isabelle Arundel and her daughter Columbia, exiled in Wales—is conveyed through epistolarity, or the conceit of Columbus’s own letters to his wife Beatina and son Ferdinando. Columbus, upon returning to Hispaniola, finds, to his great dismay, a colony in violent upheaval: Francisco Roldan, governing in Columbus’s absence, has instituted dictatorial rule over the trusting natives. Columbus’s attempts to right Roldan’s wrongs, and his naïve belief

that Rolden could be stirred by the precepts of Christian morality, constitute the majority of the lengthy episode.

It is Columbus's first contact with Peru that becomes the moment on which the novel pivots. Cora, the elderly servant of Isabelle, metonymically describes the Peruvians' sense of marvel when Columbus first anchors his fleet. The native people, Orrozombo, his queen, the princess Orrabella, and Cora, then a young attendant to the royal family, "gazed in silent wonder" as "a monstrous fish or bird, for it was impossible to tell which it was its body was black, its wings white; it was coming quick toward the shore...stopped on a sudden, and dropping all its wings, a burst of fire and smoke issued from its side, with tremendous noise" (61). Indeed, the fleet's representational monstrosity ushers in the Incans' destruction, but not before Orrabella and Ferdinando's marriage originates the ancestral chain that ends with Reuben and Rachel and "their posterity" (369). It is worth noting that in addition to allowing for Indian-European miscegenation,¹⁶¹ Rowson also inverts the wondrous gaze, giving the right of first sight, or perspective, to the Peruvians (even though Cora's account of this perspective glorifies Europe and infantilizes the natives). For Columbus's remaining storyline, he moves fluidly and transatlantically between Spain and the New World, hopping between Peru, Hispaniola, Ecuador, and presumably, various un-mentioned islands.

That Rowson chooses to commence her chronology in Peru, rather than in the West Indian islands, is significant. Discourses around creole degeneracy and threats of racial, social, and cultural taint whose sources resided in the Caribbean, were in full bloom in the 1790s. The exemplary moral rectitude of Rowson's white characters, descended from a mix of European upper-class and South American royalty, remains impermeable from the ambiguously deleterious

¹⁶¹ Colonials like William Byrd II and some early Americans argued that Europeans might have embraced this practice from the first, preventing an endless cycle of conflict to ensue for centuries.

effects of creolization. Orrabella is cut of the highest moral fiber, a convert to Christianity; so are Isabelle, Orrabella's daughter with Ferdinando, and Columbia, Isabelle's daughter with Thomas Arundel. These women's virtue forgives conversions, including Isabelle's from Catholicism to Protestantism, and sustains them in trials of the heart, including Columbia's devotion to Sir Egbert Gorges despite seemingly insurmountable obstacles. The creole as a concept explodes in the eighteenth-century natural history, and then the early American novel ambivalently claims it; however, Rowson shields her early republican characters Reuben and Rachel from the charge of creolism by displacing—inaccurately, for it was Pizarro who landed in Peru in 1524—Columbus's contact with (read, conquest of) various Caribbean islands to Peru, which remained putatively outside the bounds of the West Indies.

In fact, there is no proper creole anywhere in the book, unless we consider the Dudley family, descended from Columbia, who settle outside of New-Hampshire in the year 1645, but conceptually, creolism would have been anachronistic for Rowson to apply to the Dudleys. Still, to be sure, Edward Dudley, his wife Arrabella (equally virtuous as the original Orrabella), and their children, are not coded creole, but rather, as are all characters on the family tree of the eponymous twins whose story concludes the book, as ancestral "Americans," already repositories of republican virtue, practitioners of the agrarian ideal, a century and a half before the Republic came to be. The Dudleys' settlement in the North, rather than in the South of the continent or in the islands, is meant to foreclose the possibility of creole encoding. The notion of creolism, then, through its erasure, is whitewashed, rendered both nondistinct from, and completely alien to, early republicanism. The active and continuing process of creolization is stemmed at its point of flow. Although "Indianization" was seen as a form of creolization and

creole degeneracy,¹⁶² Rowson elevates the characters of William and Rachel Dudley, Edward and Arrabella's children taken captive after an Indian raid on their property, and William's grandson Reuben Dudley, descended from William's union with Narragansett princess Oberea, and captured on an ill-fated trip to Philadelphia, to the moral righteousness that would immunize them from the taint of creolization.

Finally, Rowson conducts her protagonists back and forth across the Atlantic as a form of retreat and recuperation, a permanent roadblocking of creolism as identity. Edward Dudley and Arrabella come to the colonies to escape religious persecution, and Arrabella returns to England, broken and old, to live out the rest of her tragic life in peace with her daughter-in-law Oberea, her grandson Reuben, and her daughter Rachel, who, upon the death of her Indian warrior-lover Yankoo, resigns herself to spinsterhood. Eventually, Reuben Dudley, William and Oberea's son and Reuben and Rachel's father, embarks for Philadelphia to build his fortune; his triumphant return to England, his elderly aunt Rachel, and his children, however, is symbolically thwarted by a raging storm. His almost-arrival spurs Reuben's and Rachel's journeys of misery, Reuben's taking him to Philadelphia to claim his father's fortune, and ultimately, into destitution and Indian captivity because of inconstant "friend" Jacob Holmes, who has stolen Reuben's claim. This travel serves the dual purpose of making England site of seduction and corrupt business and legal dealings¹⁶³ in order to set America in contradistinction, and of foreclosing the possibility of creolization. Until the resolution of the novel, no branch of the family stays long enough among

¹⁶² Susan Scott Parrish equates this perception of "Indianization" with "animalization," and defines it as explicitly racialized and gendered (sometimes "effeminacy" accompanied these descriptions, for example). "Skin tones—either too light or too dark—were only one among many pejorative features of creolization, and natives and African slaves were viewed inconsistently," Parrish says, and notes that these confused notions of race are what made naturalists and readers in the metropole "open to the testimonies and the intelligences of Indians and Africans" (102).

¹⁶³ Rachel Dudley's near-ruin is spurred by her secret marriage to Hamden Auberry, who cannot disclose the union to his aunt for fear of losing his fortune. The devious agents of elder Reuben Dudley's business, Mr. Allibi and Mr. Atkins, take delight in dispossessing the children of their livelihood.

the corruptive influences in the colonies, however they manifest, whether through Indianization¹⁶⁴ or through morally bankrupt colonists.¹⁶⁵ It is not until these influences are expunged from the lineage through narrative breaks that constitute transatlantic travel, removal, restoration, and return, that Reuben and Rachel, the exemplary early republicans, can make a true home in America. And as though to make it perfectly clear that Reuben and Rachel and their descendants will not be infected, or creolized, the protagonists refuse an enormous surprise inheritance of English land, rejecting the accompanying titles, “distinctions nothing worth, and should by no means be introduced into a young country.” Their sons “are true-born Americans, and while they strive to make that title respectable we wish them to possess no other” (368-369); in other words, they are *white* Americans, not even creole colonists, having renounced both their English aristocratic lineage *and* their Native American one. Their late arrival to America has effectively erased a colonial history that would have seen them negotiating creole status. Their settlement in the North, and the perfect erasure of Africans—they are not planters, but farmers who presumably do not use African help—buttress this illusion.

In Sean Goudie’s influential *Creole America* (2006), he argues that these strains comprise a disagreement in literary and cultural productions about whether the new nation can enjoy “paracolonial” relations with the West Indies without contaminating national character. Goudie defines “paracolonialism” as mercantile trade with the West Indies alongside European trade, rather than through restricted circuits controlled by European powers, a status that, in the absence of an explicitly colonizing and political presence in the Caribbean, symbolically both preserved the new nation’s purity and embodied the dangerous potential of replicating colonizing practices.

¹⁶⁴ The notion of corruptive Indianization is why William must die, and Rachel must be restored, and why Reuben can no longer be suffered to marry Eumea, a Native American, by the time the story reaches the eighteenth century, though Rowson condones miscegenation at the start of the novel.

¹⁶⁵ Like the inn proprietors Reuben meets, or Jacob Holmes, who must die in order for Reuben’s claim to be restored.

Certain cultural productions conveyed the viewpoint that West Indian trade relations, especially unencumbered trade, as some advocated, endangered republican stability, “alternately obscuring, mystifying, abstracting, displacing, and altogether denying U.S. participation in the West Indian trades and the Republic’s complicity in perpetuating the plantation economies there” (13). This contingent, typified by Jefferson and his camp of agrarian idealists, wished to pursue “internal colonialism” (2), to symbolically exclude the West Indies from the agrarian empire, and yet “the United States operated to a considerable extent as a paracolonial nation” under Jefferson’s leadership (12).¹⁶⁶ Rowson’s *Reuben and Rachel* lives within this symbolic exclusion and subscribes to what Goudie calls a “poetics of creoleness” that promoted a white American identity, rather than a “poetics of creolization,” that branded inhabitants of the tropics degenerate. Except Rowson altogether eludes the term “creole,” extirpating even the most obvious of correlations: all white “Americans” were also creoles. Goudie cites Edward Glissant, who “has held that ‘creolized’ people ‘do not need’ the idea of Genesis because they do not need the myth of pure lineage” (Goudie 209). Though Rowson’s lineage is not “pure,” as in perfectly white, the novel works to draw a clear line from the moral purity of Reuben and Rachel’s ancestors—both Native American and European—to the exemplary early republicans. This “myth” is “needed” in order to overwrite creolization, to make distinct the white American and the creolized other.

The ultimate inability of the new nation to extricate itself from West Indian trade saw American shores inundated with goods and peoples, refugees both white and black from the

¹⁶⁶ This was far from a neat exclusion, however. Christopher Iannini argues that Jefferson understood the necessity of reconciling the agrarian ideal and the new nation’s troublesome relationship with the West Indies: “Even as he elaborated the mythology of a racially purified yeoman empire, Jefferson labored to incorporate the Caribbean plantation and plantocracy within the body of the Republic. Just as the new nation could never close its borders with the Greater Caribbean, Jefferson could never efface the region from his rendering of American nature” (251). In 1806, a trade embargo served to limit U.S.-Haiti trade, setting the two new nations in ideological opposition (Dillon and Drexler 9, 14).

violence in Saint-Domingue, and in 1793, carriers of the Yellow Fever which began Philadelphia's epidemic. A camp of supporters for continued trade with the West Indies included John Adams and Alexander Hamilton, who argued that the new nation could not pursue hemispheric commercial dominance without West Indian trade relations. Goudie explores Hamilton's role in the ultimately prevailing rhetoric of U.S. commercial empire. Hamilton contended that a "decentered, extracontinental empire for commerce...[would] inject global markets with an acquisitive, liberalizing U.S. commercial 'spirit' under the guise of spreading freedom and liberty to the hemisphere's still colonized spaces—not only on land but in the trading 'spaces' of the Atlantic and Caribbean Seas" (16). Extending the American frontier to the West Indies was a clear necessity if America was to prosper. Ironically, this precise ideology—the spread of what were seen as dangerous republican notions to the colonized islands—was, in addition to fears that Americans would demand trade routes with Europe and Africa too, what most gave European powers pause in America's appeals for free trade, and why this trade was never fully granted (3-6). Part of initial peace negotiations after the American Revolution were arguments, like those made by Adams, that inversely, restricting access to the West Indies could incite revolutionary activity, that allowing this access would keep West Indian plantations focused on their operations, rather than on seeking sources of trade, and hence dependent on European power (4). Adams and others acknowledged, however, that both open and restricted access left the European colonizers in control. Certain other literary and cultural productions, then, "embraced paracolonialism as consistent with the nation's character, spirit, and founding values and principles...a necessary, if precarious, transitional mercantile economy, one to be adopted until a not-too-distant moment in the future when the United States may emerge as the dominant military and commercial power in the hemisphere" (13). While Sansay's *Secret*

History engages in this discourse by virtue of its characters' economic entanglements in Saint-Domingue, the novel far from affirms their benefits; nor does it reject these associations outright. Instead, it complicates them, borrowing more however, from this affirmative, rather than from the negative strain Rowson clearly endorses.

Sansay's complex registering of the forces of creolization acknowledges the creole identity's multivalent nature, its historical shapeshifting as the eighteenth century wore on. Goudie traces how American colonists in turn "internalized, resisted, and/or transformed" these discourses (7), sometimes "embracing [the term] as a sign of political resistance against the European 'center'" (8-9), and ultimately appropriating the label to denigrate West Indian colonists, planters, and mulattoes in order to build the fiction of American exceptionalism (9). Nationalist discourses attempted to disassociate an "American" nationality from a "creole" identity, to establish a clear dichotomy between a "creole regenerate U.S. America" and a "creole degenerate West Indies." More accurately, however, creolism manifests in the plural—the fluidity of creole-American identities, not any binarism, Goudie argues, is the governing source of anxiety behind the framing of exceptionality (9). The West Indies acts as "a surrogate, a monstrous double for urgent political, cultural, and economic crises, not least among these slavery" (10), a "shadow" of America (9).¹⁶⁷ Americans' tortured negotiations of their layered creole identities Goudie calls the "creole complex," which "defies any univocal, triumphant or stable understanding of the national character" (19). Later, I discuss how Sansay's epistolary narrator, Mary, both actively resists her own creolization and cannot confidently claim her own American nationality, essentially epitomizing the "creole complex."

¹⁶⁷ Supporting American-West Indian trade also came to represent a tacit support of slavery, further fueling anxieties about creolization.

The Haitian Revolution (1791-1804) further problematized the “creole complex.” That revolutionary values extended to enslaved Africans held ramifications for how early republicans saw their own creole status. Americans felt that they had to protect the new nation from further degenerate creolizing influences; Goudie maintains, for example, that the abolitionist cause suffered due to fears that the national character would be “blackened” or “West-Indianized” (15). The need to imaginatively creolize the very same values that spurred the American revolution both admitted the new nation’s own creole roots and served to “reproduce[]...Europe’s oppression towards the West Indies” (15).¹⁶⁸ In *Creole America*, Goudie goes on to argue the varied ways in which early Americans tested the boundaries of this imagined difference. He argues that *Secret History*, for example, pits the “poetics of creoleness” up against that of creolization through the Mary-Clara doubling (209), figuratively enacting the West Indies as “shadow double” of the new nation. While Mary maintains a narrative and psychological distance from first Saint-Domingue, then Cuba, where she is in exile, and then Jamaica, where she awaits news of her sister Clara who has secretly fled her abusive husband, Clara is an “impure figure of postcolonial creolite,” internalizing cultures and languages as she moves between island colonies. Her movement represents her own fragmentation (209), her “forg[ing] [of] a creolizing sensibility marked by her intricate relations with oppressed peoples across the islands of the West Indies” (211). Clara’s travel also mimics the dispersal of Africans themselves—as Philip Morgan notes, “about one in ten Africans moved from on island to another or to the mainland,” and of course, Saint-Domingue as “the most dynamic market in the second half of the eighteenth century” (62) produced large numbers of African exiles.

¹⁶⁸ In *The Haitian Revolution and the Early United States: Histories, Textualities, Geographies*, Dillon and Drexler align Saint-Domingue and the U.S. so: “tension between revolutionary politics of republicanism and economy fueled by slave labor was a constitutive one in the Atlantic world” (4).

Negotiating Nationhood

This dispersal, or fragmentation, is registered in *Secret History* by what Sian Silyn Roberts argues is a disruption of the Enlightenment model of sociability, of the autonomous self in “contractual relation” to the nation-state (252). The Enlightenment model is unsustainable in a geography like Saint-Domingue, where national affiliation and individual interest are rendered moot by the intermingling of ethnicities who have been “creolized by distance, cultural acclimatization, or the forced extraction of labor” (265). Indeed, as her time away from home wears on, and as the situation in Saint-Domingue becomes more dire, Mary finds maintaining the illusion of a perfect Americanness, even to herself, increasingly difficult. At dinner with a company of Spanish soldiers, Mary plays with an active disavowal of her nationality, pretending to be a Frenchwoman who does not understand Spanish. An Irishman asks her “if I spoke English? I shook my head; and he observed to his companions that he had never so much regretted his ignorance of the French. They laughed; and he continued lamenting the impossibility of making himself understood.” The next day, this officer discovers her ruse: “Ah! He said, you speak English, and were cruel enough to refuse holding converse with a stranger and a prisoner. I speak so little, I replied. No, no, he cried, your accent is not foreign; I could almost swear that it is your native language” (133). Mary’s American “nativeness” is unveiled in a kind of game that the soldier expresses as a triumph of globalism: because he has traveled the world, he is uniquely positioned to identify nationalities, and in fact, to “make himself understood.” That Mary is suddenly not so sure what it means to be in possession of her American nationality is symbolically expressed in its spontaneous concealment. Mary falters, and so does the ideology of American exceptionalism. One form of natural history practice Sansay engages is shaping Mary as relayer of information about the island and its peoples rather

than as crafter of a stylized narrative of individual growth. Roberts calls this interest one in “a system of exchange that privileges contact between populations and ethnic groups over individual experience” (264). Mary narrates this contact as she shrouds her nationality at the dinner table, painting a scene of linguistic exchange from which she removes herself. She enacts a similar invisibility throughout her letters, where she is correspondent, naturalist, and sister, among other ambiguous identities, rarely turning the narrative lens on herself, as she does in this scene, and here, only to efface herself. Ironically, Mary’s privileging of group exchange over the autonomous self is performed in the context of the autobiographical conceit and the autobiographical source of the novel.

American nationality, while unstable, is exempt from the scrutiny both the brutality of the French and the diasporic African rebels receive in equal measure. Generals Leclerc and Rochambeau in particular are painted as possessed of dangerous weaknesses (lack of courage and sexual appetite, respectively) that are implied to inure them to violence. “The pusillanimous General Le Clerc” attempts escape from the colony after a failed mission in which African rebel leaders betray his trust (68-69), and General Rochambeau takes on a starring role in the drama of Clara’s marriage to St. Louis. Rochambeau, a reckless philanderer, pursues Clara with little care for consequence, nearly causing Clara’s death or disfigurement by the hand of her jealous husband. Mary pointedly gives her first impression of Rochambeau thus: “his person is bad, he is too short; a Bacchus-like figure, which accords neither with my idea of a great General nor a great man” (73). This unattractive character likewise ends his reign badly by making “a shameful capitulation with the negroes”; he attempts to flee, but is captured by the British and held as a prisoner-of-war (121). In Mary’s account, Dessalines’s army behaves with impunity, and Mary details the great horrors perpetrated by the rebels, such as in the account of a black chief who

persuades a mother and three daughters to stay in the Cape, only to murder them all, the eldest, who refuses to become his “wife,” “hung by the throat on an iron hook in the market place, where the lovely, innocent, unfortunate victim slowly expired” (125). Similarly, the French colonizers daily execute captured rebels, and though these scenes of execution are slightly less barbarous—for example, a chief and his wife are shot (91-92)—the specter of slavery’s brutality hangs ominously over every letter in the novel.

Mary’s conflation of white-on-black and black-on-white racial violence “de-essentializes hierarchies between a creolized center and a barbarous periphery” (Goudie 211). In the creolized space where racial difference paradoxically both blurs and signifies, it is crucial that Mary renders difference through nationality instead. Mary and Clara are the only significant American characters in the book. While Clara slowly creolizes, her virtues, which Mary lays out in her first letter, including an “elegant mind, stored with literary acquirements” and a “proud soul” (Sansay 64), are never corrupted, never made degenerate by her fluid movement between cultures. Mary herself pines after her “native shores, and...the society of my friends” (86). Her only personal wish is to return home to Philadelphia, to peace, and her self-effacement makes room for Clara’s story and for the account of Saint-Domingue, both presumably making up the “secret history.” Mary’s framing of anecdotes and events that are steeped in horror highlight her own infallible code of morality, and thus, her exceptional Americanness, and yet as an identity, “American” does not remain stable even for Mary. Though there are few other Americans mentioned in the text—Burr, to whom the work is dedicated and the recipient of Mary’s letters, an American consul (118), a nameless American soldier (68), American merchants who hide white inhabitants (122)—she gives space to the story of a Frenchman who is rescued from a bloodthirsty mulatto by a savvy American merchant and “a girl of colour” (131-132). The heightened terror in this

hostage situation is made stark by the contact zone the American merchant's home becomes. In this hierarchy, the American and the "girl of colour" stand equal in moral principle, the Frenchman is helpless and supplicant, while the mulatto is barbarous. Again, where racial difference appears determinative, it is suddenly shaken and dislodged by the moral goodness of the black creole woman. Only the Frenchman stands outside the bounds of this fusion, and thereby, is by default, different. In other words, it is not the American and the African or the white creole and the black creole who are so obviously different here, but the American—who holds power—and the Frenchman—who holds none.¹⁶⁹

Scholarship in early American Studies in the last decade has shifted from reading the American Revolution as a defining moment of nationhood and the emerging United States as postcolonial. In fact, those like Malini Johar Schueller and Edward Watts argue in their Introduction to *Messy Beginnings: Postcoloniality and Early American Studies* (2003) that the process of early American formation was largely "extra-national" (6), the early republic operating as both European colony and exceptional nation, and of course as empire itself. "The extraordinary plurality of colonial-imperial projects in pre-1800 America" (7) is what most nearly describes—without the ability to define—how early republicans imagined the local, the global, the national. In Andy Doolen's *Fugitive Empire: Locating Early American Imperialism* (2005), he argues that republicanism justified empire, which was central to U.S. formation (xiii). British-French conflict in the 1790s placed America in a position of "neutrality" that saw the two European powers exporting goods from the Caribbean to the neutral U.S., who would then send them on to Europe. This profitable position for America further embroiled the new nation in Caribbean markets and spurred greater anxieties around contagion, "dirty money," slave

¹⁶⁹ In Rowson, this difference is binaristically expressed by the "requisite high-born villain," who needed to be British and cannot be "accommodated" in America, even in a sentimental novel (Davidson 325).

rebellion, and permeable borders (78-83). The impossible epistemological reconciliation of republicanism and slavery created a “racialized republicanism,” a necessary framing of the Republic as white (187). This knottiness, and the agenda that emerged as a result, is likely why Rowson elides slavery altogether, with nary an African character anywhere in her book.

Women occupied an anomalous space post-Revolution in which their contribution to the new nation’s political life was instrumental. In *Revolutionary Backlash: Women and Politics in the Early American Republic* (2007), Rosemarie Zagari traces women’s welcome political involvement during and immediately after the Revolution, including canvassing (23), behaving as “deputy husbands” (64), and mediating between political husbands and their constituents (67), through to 1830, when movements for more inclusive suffrage and the advent of a two-party system turned the tide of public opinion against women’s increased politicization. Women during the period after the Revolution consumed newspapers, ladies’ magazines (some edited by women), and books, through which they became deeply invested in public political discourses. Though land continued to be coded female, nationhood began to take on explicitly masculine qualities (110). Eventually these same discourses relegated women’s political influence to the domestic sphere; however, under the guise of female education, writers of the late eighteenth and early nineteenth centuries on both sides of the Atlantic, like Sarah Trimmer, Sarah Bowdich, Priscilla Wakefield, and Susanna Rowson, continued to explore women’s political influence through generic experimentation that typically invoked practices of natural history. Early republican female authors, when entering the public sphere, still did so transatlantically, the implications of which had its own resonances in nationalistic discourses.

Sansay, Rowson, and the “Novel”

In her influential *Revolution and the Word: The Rise of the Novel in America* (1986, 2004), Cathy Davidson argues that the early American novel is both expressive of, and central to, women’s political power. Novels conflated forces, impulses, and desires that didn’t make it into the Constitution, like “a political role for women”; Davidson calls novels “the rough drafts for a range of problems vital to everyday life, both in and out of the public sphere” (5). Davidson, like Roberts, argues that the “collective,” or here the “national,” takes precedence over the individual—or rather, that the individual is inextricable from the national, even in, or maybe especially in, novels of “seduction, picaresque aimlessness, or gothic horror” (6). Novels generally imagined greater and broader democratization, even as they conformed to generic or thematic mandates like “female education,” particularly pre-1820 (6, 134). Although Rowson frames her novel as historical education for women, most of its mothers are dead or absent, and those who are exemplary, meet with tragic fates (like matriarch Arrabella Dudley); at the novel’s end, there is only vague reference to “our sons” and “posterity” rather than a delineation of the fruits of women’s domestic labor. The erosion of “republican motherhood” in *Reuben and Rachel* (Castiglia 151) complicates the neat generic label of “female education” concerned primarily with the very construct of “republican motherhood.”

As I mention earlier, Sansay’s route to the cultural sanctioning of the incipient novel form was through its dedication to Burr, who is also Mary’s invisible correspondent. Fictional Burr troubles the epistolary conceit by virtue of his silence. In contrast, Leonora Sansay’s extramarital affair with Aaron Burr is widely critically noted.¹⁷⁰ After her marriage to Louis Sansay circa 1797, which Burr, already involved with Leonora, had encouraged, the Sansays

¹⁷⁰ See Drexler, “Brigands and Nuns,” 186-189 for a detailed summary of Sansay and Burr’s relationship and her involvement in the Burr conspiracy. See also Drexler’s introduction to the Broadview edition of *Secret History* for a fuller biography of Sansay.

traveled to Saint-Domingue to attempt a recuperation of St. Louis's plantation. From there, she wrote letters to Burr, which became the sources of the letters in *Secret History*. After returning to Philadelphia without St. Louis—as Clara does in the novel—Leonora rejoined Burr and assisted in his scheme to take possession of western lands. Michael Drexler reads Sansay's open dedication to Burr, who had by the publication of the novel in 1808, been tried for treason and banished to Europe, as a "reli[ance] on Burr's notoriety to draw an audience for her novel...lur[ing] readers with the hint of scandalous intrigue" ("Brigands and Nuns" 186). Drexler ties together Sansay's active role in the Burr conspiracy and her witnessing of revolutionary activity in Saint-Domingue as models of "collective action"; her work "used gender to triangulate her comparative insights and speculated about the pros and cons of modes of women's collectivity" (186), a central concern of the early American novel. Having witnessed deviant versions of collective action—slave revolt in Saint-Domingue and political conspiracy in North America—Sansay's work searches for alternative modes of collectivity (194). It is perhaps in her exploration of creoleness and creolization that we find these deviant alternatives. Mary and Clara together, on parallel journeys that imperfectly disallow and allow creolization, respectively, form a collective that rejects marriage in favor of sisterhood, female mutual protection, and shared suffering. The French creole white women living on Saint-Domingue effect sexual liberation in marriage by keeping lovers. The story of the madras handkerchief—of black and mulatto creoles who effectively go on strike, only to emerge having reappropriated the handkerchief as a symbol of sexuality that white creole women in turn adopt—demonstrates women's collective action that reverberates outward and changes the cultural makeup of the Cape.

Susanna Rowson was born Susanna Haswell in England in 1762, spent her childhood from ages five to sixteen in Massachusetts, and returned to England in 1778 with her Loyalist family. In 1793, she arrived in Philadelphia, by then already a successful novelist in England (having published *Charlotte Temple* in 1791), to join a theater company (she was also an actress).¹⁷¹ Scholars have generally seen Rowson as a rehabilitated “American,” invested in principles of early republicanism; however, she was a British national until 1802, and some, like Jenny Heil argue, that she “resist[ed] a U.S. nationalism founded on a break from Britain” (624). Although *Reuben and Rachel* does operate by establishing difference between the U.S. and England, the characters’ transatlantic entanglements are central, and not broken until the final resolution; in Volume One especially, the new Republic and the old colonizer remain inexorably linked as “Anglo,” while in Volume Two, Rowson’s reliance on the sentimental mode allows for a seemingly neat, but illusory disavowal of the Old World. Rowson’s pursuit of American publication, even of those novels published in England, was a strategic move to heighten her transatlantic visibility (Homestead and Hansen 620) but probably also to assert her American nationality. This contradiction is further complicated by Rowson’s engagement with the Caribbean and South America in the context of Spanish colonization in *Reuben and Rachel* (1798), and with Barbary captivity in her 1794 play *Slaves in Algiers; or, A Struggle for Freedom*, when her own transatlantic mobility did not include the West Indies or Africa. In other words, her participation in the discursive strain that painted the West Indies as contaminatory to early republican principles was heavily reliant on this strain’s predecessor: European notions of creole degeneracy. Rowson exemplifies, through her own transatlanticism, and through her novel, that there is no pure American nationality.

¹⁷¹ See Homestead and Hansen for a fuller biography of Rowson and a history of the publication of *Trials of the Human Heart*, Rowson’s first novel published in America, and of *Charlotte Temple*.

Rowson registers national anxieties about creolization both through her characters' miscegenation and through her final erasure of the possibility for transformative Native American-white unions. The question of national belonging is complicated further by her idolization of Columbus and her simultaneous vilification of Spanish occupation, which Heil reads as "an articulation of the Black Legend—a trend in Anglophone historiography that demonized Spanish colonization by conquest in contrast to the supposedly benign form of Anglo colonization by cultivation," (625), a polarity Rowson further emphasizes by sending Columbus to Peru, "merg[ing] the tragedy of Columbus's death in obscurity with the tragic fall of the Inca Empire" (631).¹⁷² The resulting confusion—since after all, Columbus is Italian, but by adopted nationality still Spanish—is made moreso by the recycling of names amongst Catholics and Protestants, amongst characters of all races and nationalities. Heil sees this as a pedagogical method to shape an Anglo ancestry by having readers "associate Spanish, South American, British, and North American characters with an Anglicized past and future" (635). Much like Sansay then, Rowson depicts national difference—as complicated as it is to untangle this difference in the creolized spaces of the Americas—as more fundamental than racial difference. But race is still central to national belonging. While the expansive lineage Rowson invents in her "historiography" is racially fluid, this ancestry only becomes constitutive of "American" nationality when it is whitewashed.

"Histories" in the Early American Novel

Within the enormous breadth of generic hybridity exhibited by both *Secret History* and *Reuben and Rachel*, we must include the history. Other genres, including the gothic, seduction, sentimental, and adventure plots, as well as Biblical allegory, do the work of exposing varying

¹⁷² Jenny Heil expounds: "Scholars have argued that early national depictions of the Spanish conquest of South America allowed them to funnel their anti-British sentiment by identifying with the oppressed Peruvians (e.g., Wertheimer 26)" (632).

anxieties—from racial to sexual—around the formation of the new Republic. I posit that history in particular finds itself in conversation with natural history in ways allowed by the experiment of the early American novel. For women, the writing of history was a political act (Harris), and yet its probing of “the vagaries of human nature,” as eighteenth-century female historian Mercy Otis Warren put it (qtd. in Harris ix), or its interest in morality and interiority, also designated its work the province of women. History as an unstable generic category generated room for creative reimaginations, like Rowson’s,¹⁷³ and within the very semantics of the term “historical narrative,” the early American novel became ideal for recording this “history,” or for crafting embellished “historiographies.”¹⁷⁴ The sense that many women historians and educators were living history, having lived the Revolution, colored tellings of earlier histories, which were acceptably interpretatively altered (x). Though the intimate relationship between the history and novel forms partly explains works like Sansay’s and Rowson’s, the natural history bridges a similar dichotomy: the naturalist is part historian, part eyewitness interpreting the history of nature. Eyewitnessing is both a buoy for scientific objectivity and a literary device for expressing subjectivity; it is similarly so in the historical novel, for women who eyewitnessed the turmoil of the revolutionary years could lend the impression of eyewitnessing to non-lived histories too.

Writing the captivity narrative within a work of history, or *as* history, is a choice that bespeaks this same desire to shape the borders of contemporary lived experience. The multiple captivity narratives in Rowson’s *Reuben and Rachel*—both Indian and English—“dehistoricize

¹⁷³ Jenny Heil argues that Rowson inventively reconfigured land and water geography in Columbus’s voyages to “put Spain and South America at a distance from England and North America in an effort to project an Anglo future onto the continent.” Rowson’s division is not hemispheric but latitudinal, “separate[ing] North from South America and adjoin[ing] the Old World and New” (628).

¹⁷⁴ History is both personal and collective, tying the individual once more to nation. Sharon M. Harris cites, for example, women’s history textbooks meant for female education. Emma Willard’s method moved from local to national to global, and suggested that each student should consider her parents’ family and immigration histories in relation to the date of American independence (xvii). Mercy Otis Warren framed her histories through characters’ morality (xvi), registering the same 1790s anxieties about American national stability that I discuss earlier in the chapter.

the experience of constriction” (Castiglia 143-144), simultaneously globalizing, nationalizing, and regionalizing captivity, which in the new Republic, becomes a governing metaphor for women’s oppression, enacted ironically by the same republicanism that ideologically promises women freedom (141). The living history tradition, and its implications for women’s freedom from allegorical captivity, is central to Rowson’s teaching philosophy: this is why her novel revises Indian-white miscegenation and aims, in its preface, to conflate for her female students “the history of their native country” and their own “taste... understandings... a love for piety and virtue” (Rowson 8, 39). Accordingly, Christopher Castiglia calls the captivity narrative “the only sanctioned form of history that also contained women heroes” (140),¹⁷⁵ whose sovereignty Sansay’s *Secret History* enacts through Clara’s marital captivity and subsequent escape. In the context of the Haitian Revolution, *Secret History* functions as a form of both life narrative and allegory through which Sansay suggests that women must seize the freedoms promised them by the American Revolution. The impression she gives of Mary writing the living history of the Haitian Revolution as it unfolded meant projecting the American revolutionary ideals that inspired the Haitian uprising into an uncertain future for her book’s characters. *Secret History*, therefore, leaves ambiguous whether Clara’s linguistic and cultural accumulation as she moves through the colonized Caribbean—effectively, her creolization—bolsters or threatens her nationalism once she returns to Philadelphia. No doubt foretelling continued restrictions to women’s political and social lives, Sansay must have known that she was writing an already dehistoricized historical (and historic) moment; she did not, like Rowson, need to write an entire century to arrive at the understanding that history is local, national, hemispheric, global, and universal all at once.

¹⁷⁵ In generic terms, Rowson’s women and Native Americans experience “economic and social losses” that equate them and that are “signified by the generic change *Reuben and Rachel* undergoes” from frontier romance to sentimental novel (Castiglia 141).

The “secret history,” a genre that peaked in the early eighteenth century and was almost out of use by 1808 when Sansay published her novel, stood as “just before or just outside of what we know as the novel” (Woertendyke 255-256), and again, is in dialogue with the natural history within the early American novel. Luring the reader with the promise of publicly revealing private secrets, usually about prominent individuals, the genre leaves open to interpretation the impact these secrets—and which—make on the public’s understanding of a particular history. The oxymoronic designation “secret history” automatically signals novelization: the act of making public that which is private is highly mediated, and therefore highly interpretive.¹⁷⁶ The visceral quality of the word “horrors” in *Secret History*’s subtitle, *The Horrors of St. Domingo*, additionally mediates between the reader and the “history” of Saint-Domingue itself. Here again, Sansay’s early republican novel draws from the early English novel, which as much as two centuries prior, emblemized the debate between what Michael McKeon calls the “claim to historicity” and “verisimilitude.” In its origins the English novel encapsulated this debate by reflecting “the pattern [that] mark[ed] the climax of the early modern revolution in narrative epistemology...the naïve empiricism of the claim to historicity purports to document the authentic truth; the extreme skepticism of the opposing party demystifies this claim as mere ‘romance’” (48). The “claim to historicity” itself is a convention of the early modern novel (47), and is picked up by the natural history genre.

In *The Origins of the English Novel: 1600-1740* (1987), McKeon discusses the ironic way in which “pseudohistorical forms” like the “secret history” achieve historical stature by using public skepticism to validate “claims of historicity.” The more famous the person or persons whose secrets are to be exposed, the more shrouded in mystery their lives are portrayed to be, the more public skepticism, or even attempted censorship, propagates the impression that

¹⁷⁶ For a brief historiography of the “secret-history-as-novel,” see Gretchen Woertendyke.

these exposures are “true” (54-5). William Byrd II’s *Secret History of the Dividing Line* relies, for example, on the anticipated protest of the Carolina commissioners to the gross licentiousness ascribed them, and even the sanitized *History of the Dividing Line* plays with this exposure, aiming to apprise the public of the survey’s hardships and of the Carolina commissioners’ cowardice. By writing two versions which differently interpolate one experience, both revelatory, Byrd suggests that there are many levels of secrecy to be peeled away. Sansay’s *Secret History* relies on Burr’s reputation to elicit intense interest, skepticism, and even revulsion, linking the horror of slave rebellion and the panic incited by the Burr conspiracy through fears about well-concealed secrets. This link becomes especially fraught when we consider that “secret histories” often “revealed” a person’s racial lineage, or “hidden taints that would then be backed up by physical, explicit codes of law” (Iannini 258). As in the natural history, the very instinct to disbelieve is what fuels the claim to authentic truth.

This delicate dance between truth and fiction, between “the claim to historicity” and verisimilitude, fuels the natural history. As I discuss throughout this project, truth was verified, paradoxically, through oddity; eyewitness accounting gave an observation enough probability to leave the door open for truth. This probability was expressed literarily, or “romantically.”

McKeon summarizes it this way:

The Baconian scientific program contains two contrary movements. An optimistic faith in the power of the empirical method to discover natural essences points in one direction; a wary skepticism of the evidence of the senses and its mediating capacity points in quite another. And what Bacon’s rhetorical genius was able to hold together becomes separated out into controversy once the new philosophy becomes institutionalized under the auspices of the Royal Society... ‘natural history’ represents the ideal of narrative

perspicuity, the means by which the truths of nature will obtain an unimpeded mediation. And the negative standard to which natural history is opposed is very often the credulous mystifications of ‘romance.’ (68)

This divide is what I speak of when I parse the “literary” from the scientific in my close readings. Ultimately, as McKeon attests, “probability” overrides “certainty,” the “literary standards of verisimilitude over[ride] the claim to historicity” (70). When examining natural histories of the West Indies, all of these elements—the literary, the empirical, verisimilitude, and history—intermingle. Christopher Iannini speaks of “Caribbean accumulation,” or the combination of forces—“economic, ethical, epistemological” represented by colonialism, slavery, the sugar plantation, globalism, and specimen collection and exchange—that synthesize in the West Indies from the late seventeenth to mid-nineteenth centuries and that result in a “temporal compression” (255). Institutional science, filtered through the natural history, and traveling circumatlantically, “challenged Enlightenment notions of historical progress and chronology” (256).¹⁷⁷ There could be no neat “history” of the West Indies, or less so even, of West Indian nature, in other words—only historical “narrative.” Where there is narrative, truth claims are suspect; hence the rhetorical maneuvering so many natural histories practice to assert truth even as they mask it. The novel, the history, and the natural history then, are but generic mutations of each other.

The Early American Novel Appropriates the Natural History

In one fascinating moment in Volume Two of *Reuben and Rachel*, a melancholy young Rachel Dudley, involuntarily reciting verse at a young man’s grave, meets Dr. Lenient, the

¹⁷⁷ Iannini gives these examples of how “Caribbean accumulation” disrupts the very concept of history: “Sloane’s and Catesby’s perceptions of the West Indian plantation as a space of accelerated historical change that is at once modern and barbarous...Crevecoeur’s and Jefferson’s fantasies of Caribbean slave revolution as the collapse of New World republicanism” (256).

village apothecary, and her sometime-mentor. As the narrator briefly introduces the reader to Dr. Lenient, whose sympathetic character complements his name, we learn of his longtime kindness to motherless Rachel:

Our heroine was a great favourite with the good man. Studious from her infancy, of an inquiring genius, eager in the pursuit of knowledge, and attentive to the conversation of those who had the power to impart it, Rachel at the age of twelve had preferred a conversation with the doctor, to a ride or a ramble with her young companions. Charmed by her ardent thirst for instruction, the old gentleman would answer her questions, correct her errors, direct her studies, and labour to give her an unaffected turn for literature and the polite arts.

When Rachel painted or worked flowers, the Doctor would assist her in arranging her shades with propriety; describing, as he sat beside her while she worked, the natures, properties and use of every plant, shrub or flower. If she read, he corrected her pronunciation, and taught her how to convey the full sense of what she read to her auditors, by a pleasing modulation of voice. If she wrote, he would point out the errors in her style, and often has been heard to say, It was a great pity she could not speak and read Latin. (231-232)

Rowson's heroine is not simply interested in a circumscribed female education, under which the history of the American Republic ostensibly falls, and which Rowson announces in her preface as the *raison d'être* of the novel. Rather Rachel is "eager in the *pursuit* of knowledge," and is of an "inquiring genius." She is an active agent in her education; she asks questions; she thinks. Just a sentence later, the narrative offers a corrective, informing the reader that in fact she is, befittingly for her sex, receiving "instruction," or being properly guided in her studies. But the

slippage remains, particularly as we are told that Rachel's instruction consists of botanical illustration, taxonomy, and medicinal botany. The resonance of the word "knowledge" in transatlantic cultures of science is powerful; it is even moreso in the context of botany. Rowson is drawing on this resonance: Rachel is not a passive receptacle of her botanical education, but rather a knowledge-maker, painting interpretatively, "working" flowers for their properties in order to taxonomize them. Even though in the late eighteenth century this work was still sanctioned for women as an "innocent amusement," it is simultaneously, paradoxically, acknowledged as "work." Again, the next sentence cycles back to receptive instruction, but it is the last sentence—before the narrative returns the reader to the present moment in the cemetery—in which the "pursuit of knowledge" triumphs over a "thirst for instruction." Women, then, should not fail to pursue aberrant routes that may enable the acquisition of knowledge, including the study of Latin, typically foreclosed by institutionally-imposed gender divisions. For the pursuit of botanical knowledge in the age of Linnean taxonomy, Latin is indispensable; Dr. Lenient implies that Rachel's "genius" is suited to this study, and through Rachel's allegorization, Rowson suggests that women's genius more broadly is so suited. Moreover, the study of Latin—and by extension, other subjects open only to men—should be made accessible to women.

In a lengthy letter to his son Ferdinando in which Columbus bemoans Francisco Roldan's tyrannical reign in St. Domingo, Columbus tells the story of Bruna, a lovely Indian princess who has been raped by Roldan's man, Diego. Bruna is, as Christopher Castiglia notes, Eumea's parallel. They are the tragic Indians who frame each volume, who both commit suicide having been wronged by the Europeans. As in the passage above, Columbus underscores the magnitude

of Bruna's loss through flashback. In his previous voyage, Columbus was kindly hosted by Bruna's father:

Bruna at this time was a lovely child of about twelve years old; she was wild and untutored; but there was something so engaging in her manner, so fascinating in her vivacity, that I could not see her daily without becoming insensibly attached to her. Her curiosity was unbounded; and the surest way to become a favorite with her, was by gratifying a propensity which in general was directed to laudable objects. I was charmed with her artless thirst for knowledge, and employed my leisure moments in instructing her. But though eager to learn, that very eagerness counteracted her wishes. She was too hasty and impetuous to allow herself sufficient time to become a proficient in any thing; therefore all my attention could do, was to give her a trifling knowledge of the Spanish language. For when I spoke to her of the customs and manners of the European world, she would laugh, and declare her own country manners were best; for she could not possibly think any duty obliged us to conceal our thoughts, or that any custom whatever could make it laudable to speak one thing and think another. I give you this slight sketch of her character, that you might not be surprised at what I have to relate concerning this Indian heroine. (68)

Though this scene and the previous are separated by almost two hundred pages in the narrative, their parallels—and their differences—are fascinating. Once more, Rowson plays “knowledge” against “instruction.” Where Rachel’s “instruction” succeeds in laying the groundwork for her “pursuit of knowledge,” Bruna’s “instruction” is in tension with her “*artless* thirst for knowledge.” In other words, Bruna’s lack of discipline, her inability to understand that knowledge acquisition requires work, impedes her from “becom[ing] a proficient in any thing.”

Though her guileless honesty—indeed her naivete—is lauded as a quality of purity, innocence, and virtue, it also exposes her to evil, the full force of which readers feel when Columbus immediately juxtaposes this passage with Bruna’s public suicide. Rowson conspicuously uses the word “curiosity” in Columbus’s flashback in order to signal Bruna’s entrée into, and failure to command, the realm of science (gifted her by a European, of course).¹⁷⁸ Rachel, in contrast, exhibits an “inquiring genius” for scientific study, only lacking Latin to continue her education. Both Bruna and Rachel are instructed by older men themselves coded as scientists—Columbus is explorer-naturalist (also, for Rowson, “anti-conqueror”¹⁷⁹), Dr. Lenient is apothecary-naturalist—who grow “insensibly attached” to these young women, closely following their fates. Rowson suggests, then, that the mantle of knowledge production must be passed cautiously through generations: though women are not exempt from carrying this mantle, it is only the white American woman who can manage this responsibility properly. Rachel, of course, invests her “genius” in the agrarian ideal and renounces aristocratic values; since Bruna cannot relinquish her “country manners” or make room for new customs, she is excluded, through death, from the work of producing new knowledge.

“Curiosity,” used in the passage above, weaves through the novel, taking on different meanings in different contexts. Rowson uses the word to mean a thirst for knowledge (38, 68), an intense desire to hear a story (49, 97), an inquisitive interest in discovery (57, 120), a wish for inclusion in information exchange (76). Each of these uses signals natural history, as do other small linguistic allusions to the genre. For example, Hamden Auberry achieves “ocular proof” of his wife Rachel Dudley’s infidelity when he witnesses her early morning departure from the

¹⁷⁸ In Peru, “Science” is bestowed upon Orrozombo and his people as a gift: “For the Spaniards had taught his subjects many of the useful arts; and Science, by their means, began to unfold her beauties to the delighted monarch and his court” (63).

¹⁷⁹ Mary Louise Pratt’s term for the “innocent” naturalist functionally working for empire.

home of an ailing Mr. Courtney, whom Rachel has been innocently nursing back to health. All contact between husband and wife had been thwarted by the evil machinations of a jealous landlady, Mrs. Varnice, and after a series of missed connections, Auberry locates his now-destitute wife. Choosing to spy on her rather than confront her directly, Auberry assumes the position of a disinterested scientist, whose observations—and their interpretative value—substitute an immersion that in the natural history is impossible, but that is instinctive in the novel concerned with human relations. Auberry is so distraught by this “ocular proof” that he faints, frightening Rachel, who dodges past the prostrate figure of her long-lost husband. Here ensue further missed connections, including one that leaves an ocean between the lovers. That “ocular proof” represents indisputable truth is made manifest in Auberry’s loss of faculties. Rowson’s clever appropriation of institutional scientific language in the sentimental mode works twofold. First, like the rarest of specimens observed and described as eyewitnessed in the natural history, the idea that Rachel, a paragon of purity, would commit adultery, is so strange, so unbelievable, that only absolute “ocular proof” could verify it. Second, after gaining his proof, Auberry departs for America, transporting his account transatlantically; should Rachel not have followed him, his account would have remained “true” and unchallenged, though based in faulty assumptions. Though natural histories of the Americas were in constant, evolving dialogue that offered correctives for previously-accepted, false information, Rowson sheds light on a deep flaw in the “strange and witnessed, therefore true” paradigm: “ocular proof” tells us only that truth is never transparent. Rowson, then, places her entire project—and its “claim to historicity”—in question, asking her female readers to, like Rachel, “pursue knowledge,” rather than simply receive it.

Drawing from the natural history exemplified by William Bartram, Rowson invokes the pastoral mode to promote the agrarian ideal, or an ethic of cultivation. The novel opens with Isabelle Arundel, her sprightly daughter Columbia, and her daughter's attendant Mina living in an abandoned Welsh castle. Columbia's childhood is bathed in the beauty and simplicity of the country, and Columbia grows into a child of nature:

The fine auburn tresses of Columbia were bound up with a garland of corn flowers, and autumnal daisies, whose glowing tints vied with the colour, whilst the consciousness of their becoming effect gave an additional brilliancy to her eyes. Her dress, which was composed of light grey satin, she had lightly and elegantly ornamented with festoons of oak leaves, whose dark native green was at this period of the year enlivened by the bright yellow, and glowing scarlet hue, they had caught from the chilly breath of autumn. Light as the gossamer they bound over the turf, dancing to the notes of their own harmonious voices. (44-45)

The anthropomorphism of the oak leaves, which have "caught" color from "the chilly breath of autumn," and which dance and sing with "harmonious voices," act alongside the corn flowers and daisies to adorn Columbia's hair and clothes, but also to unite person and nature. Nature here does not signify place, or the local—its description is generalizable—but rather a pastoral ideal. Similarly, a pastoral ode to nature that anthropomorphizes a universal nature opens the second volume: "Nature! dear goddess! how beautiful thou art, when, chaste and unadorned, thou appearest in the vestments of simplicity; when the undeviating features portray but the feelings of the heart; when the tongue, uncontaminated by vice, unversed in the practice of deception, gives utterance only to what those feelings dictate; then, who can resist thy eloquence?" (196)

The pastoral mode can still accommodate a rapidly-developing new nation, and in fact, Rowson

seems to say, the ethic of cultivation can be harnessed within the pastoral ideal. Inside this fiction, Rowson locates the roots of a white America.

Rowson's investment in the agrarian ideal is laid with Columbus, who upon returning to St. Domingo, walks and muses on "the improvement agriculture had made on the face of this beautiful fertile continent" (68). The fusion of the pastoral and the agrarian ideals continues with the story of the Dudleys, who make their home in New-Hampshire, mid-seventeenth century, and through "industry" transform their "uncultivated land" into an "extremely delightful" home. Arrabella is the chief cultivator, and her mindful building of her habitation—and by extension, America itself—is symbolized by her garden. The myth of the garden, circulated in early American discourses to justify the westward spread of cultivation, and originally derived from the plantation myth (Henry Nash Smith), is invoked here alongside the pastoral. The myth's imperial undertones in nationalist rhetoric work in conversation with Rowson's invocation of the natural history's gardening metaphor. In the context of the early American novel, this metaphor exposes the complex entanglements of the new nation still operating as both colony and empire. Arrabella Dudley has "knowledge in agriculture." She is both agronomist, who carefully cultivates "young vegetables" and gardener of empire, "having sown a few flower seeds which she had brought with her from Europe." Her gardening practice "afforded her the most innocent satisfaction...she gleaned at once employment, health and amusement" (167). The language in this scene draws on natural history rhetoric that propagated the act of gardening as an act of humoral strengthening, both of the body and the of the body polity (Mulry). Just as Arrabella cultivates "young vegetables," she cultivates the young minds of her children, whose own children's children will one day be future republicans. Indeed this cultivation does reap a crop of "true" Americans three generations later, despite tragic disruptions and transcontinental retreat:

that of Reuben and Rachel and their families. Arrabella's European seeds naturalized in the reverse—here, in the New World—do flower, but symbolically, with the destruction of their habitation in an Indian attack, meet their end on that small spot of land.

Rowson's novel also conjures the tropics that are so central to the natural history, imaginatively superimposing the climatological peculiarities of the Caribbean islands onto Peru. As I discuss earlier, Rowson purposely muddles the question of Columbus's first landfall, only briefly describing first contact with natives in St. Salvadore, and instead magnifying contact with the Incans, itself a historical inaccuracy. This geographical displacement is fortified with Beatina, Columbus's wife's, vivid description of a hurricane during Columbus's second expedition to Peru, when in reality, hurricanes rarely, if ever, reach Peruvian shores. The hurricane, the ur-symbol of the tropics, becomes a convenient narrative device that effectively wipes out the banditti leader Garcias Du Ponty and his entire murderous crew, responsible for the deaths of Orrozombo and the devastation of Orrabella's people. Alzira, younger sister of Orrabella and victim of Du Ponty's seduction, too meets a befitting end as she dies in the rubble frantically trying to save her traitorous seducer. Although all of the "good" Europeans survive nature's wrath, two of Orrabella and Ferdinando's children perish before Beatina's eyes.

The ruin and its attendant terror, followed by a perfect peace, parallels Bartram's description of a hurricane in *Travels* (1791). As M. Allawaert contends, the tropics force an uneasy ecologic relation of naturalist, environment, and enslaved people. By appropriating the natural history trope of the tropical hurricane, Rowson illuminates how the fragmentation created by narrative interstices, transcontinental storylines, multiple generations of characters, and generic hybridization, can be reordered through nature. Though Orrabella's homeland will never be the idyllic kingdom of peace it was before Columbus's fateful landing, the hurricane, it

appears, forces a renewed relation, indeed an uneasy ecology, of European, native, and land. Finally, however, the hurricane is nature's ireful reminder that even this new ecology is unsustainable—an omen of the grief Orrabella's people will continue to suffer. Orrabella's "severe losses" are curiously branded as "hers" (92), rather than equally belonging to Europeans, who have become agents of environmental and human destruction. Rowson's Columbus is disassociated from European rapacity, and though he is the ancestor with whom Rowson's lineage begins, his moral exemplitude—and the hurricane that preserves his life and kills the treacherous Castilians—erases his complicity in the contemptible consequences of his voyages.¹⁸⁰

At the same time as *Reuben and Rachel* practices a complete elision of slavery, it contains a sustained engagement with the question of Native American assimilation and removal. The eighteenth-century natural history contends with this issue in highly varied ways, ranging from native as object/specimen in the more conventional natural history like Hans Sloane's, to the admission of native knowledges by Maria Sybilla Merian and Jane Colden, to the narration of Native American-colonial relationships in William Byrd, to the relation of native-settler conflicts as in Eliza Lucas Pinckney. Rowson draws on themes later explored by authors like James Fenimore Cooper, on genres like the captivity narrative, and on tropes like the "noble savage." She calls "revenge [] a principle inherent in human nature," and the "untaught savage, whose territories had been invaded by strangers" guilty only of paganism (169). Ironically, Rowson, herself a Christian, does not resist the impulse to revenge, punishing her evil characters and elevating her good characters time and again, and finally, at the conclusion of the novel, fully rewarding goodness—but not until sniveling Mr. Allibi and his employer Mr. Atkins are triumphantly mortified.

¹⁸⁰ This same scene of disassociation is enacted in St. Domingo, through the Roldan affair.

Projecting her Euro-American values onto Native Americans, Rowson imagines “noble savage” Yankoo’s speech upon William’s death. Yankoo, (elder) Rachel’s betrothed, was only just called “monster! barbarian!” by his sachem, William Dudley, Rachel’s brother, as he flung an ax into William’s shoulder. The blow, meant for elderly Mr. Dudley, is intercepted by William, who at that very moment recognizes the visage of his long-lost European father. And yet now Yankoo mourns the same sachem who revealed, in his final moments, his hidden disdain for the race that adopted him and made him their leader:

Thou art gone, brave chief! (turning as he spoke towards the body of his friend) thou art gone; and where shall thy equal be found to supply thy place? Thou wert bold and daring as a young lion, and like him, generous and noble, exerted not thy power against the feeble and defenceless. Firm and unshaken in asserting the rights of innocence, as the mountain whose foundation is in the centre of the earth, and whose top reacheth unto the clouds; yet gentle as the south-west breeze on an evening in the blossom season, and complying as the willow, that inclines its head as the breeze passes. Thy voice was the voice of wisdom. Thy words taught lessons, which thy example enforced. But thou art gone! And where shall thy equal be found to supply thy place? Thou wert glorious as the sun at his uprising, mild and beautiful as the beams of the moon, when it dances on the bosom of the lake which the wind gently agitates. In the chase, fleet as the young stag, and the arrow from thy bow never missed its aim. (189)

In the refrain of “thou art gone,” Yankoo becomes poet. His paean inverts anthropomorphism: not only does nature speak, listen, move, but nature is within humans. William is “generous and noble” and morally upright—ironically, values that Rowson bestows upon white and Indian communities alike. Arrabella’s “heart is consoled” (190) as she listens to her long-missing son’s

eulogy, for her values are Yankoo's. Notably, Yankoo forgives—or puts aside—William's rejection, and claims William for his race. Now that Rachel has reunited with her white family, Yankoo cannot be assimilated, and therefore dies, living on in the instruction of Rachel's charges, young Reuben and Rachel. Rachel privileges Indian unification with nature over the white exploitation of its material value when she tells the children that William's "palace was chiefly composed of the bark of trees; [] his bed was the skins of wild beasts" (200). Because she cannot be fully white after having loved interracially, she embraces spinsterhood. By Rowson's present-day, the white American and the Indian have radically diverged. While the Indian remains wild, like Eumea, who is unhinged by her unrequited love for Reuben, the white American is civilized. The final tragic nonunion between Eumea and Reuben—with little remorse shown by Reuben for his role in Eumea's fate¹⁸¹—culminates "the growing indifference to the state of the Indians," a development in the novel that "coincides...with the removal of white women from the wilderness" (Castiglia 149). Only Eumea's mother remains, but she is erased from the historical narrative as completely as is her daughter in death.

Rowson registers the natural history debate about description in her novel. She opens Chapter XI, "Across the Atlantic," with an invocation to the muse "Variety," whom she envisions as a goddess adorned in gold with "auburn tresses floating in the wind" (like Columbia's): "History, Fiction and Truth, blended so soft as to relieve each other; ethereal vision, come; I wait thee here. For many is the painful hour thou hast soothed; many the heart-ache thou has lightened. Weariness has fled at thy approach, and the still hour of night has been as cheerful as the full blaze of day" (279). Rowson's fascinating definition of "Variety"—or the

¹⁸¹ In Eumea's highly literary death by drowning (366), Rowson draws on the trope of the drowned woman to highlight the desperate situation in which Native Americans now find themselves as the new nation takes shape. While this desperation is acknowledged and lamented by Reuben, who is the cause of Eumea's madness and death, her suicide is quickly swept aside in the interest of Reuben's "uninterrupted series of felicity" (367).

fusion of “History, Fiction and Truth,” with each loaded term its own generic mix—designates the project of natural history as much as it does that of the historical novel, significantly positioning description at the center of both projects. The purpose of employing the tools of “Variety,” or of generic hybridity, for a writer, and for a reader, is to cure boredom, loneliness, and pain. The novel, then, speaks openly in an emotional register that is accessed through descriptive practice. So too does the natural history. Immediately following, Rowson rhetorically performs a corrective to this indulgence of description in much the same way naturalists do, by apologizing to an imagined, empirically-minded reader: “‘But, madam, if you please, we would prefer a little less of the figurative, and a little more plain matter of fact.’ Pardon me, gentle reader. I forgot I was writing the history of Reuben and Rachel, and was giving you the history of my own feelings. A poor substitute, you say. I acknowledge the truth of the observation, and therefore return to my hero” (279). Coded words like “truth,” “observation,” and “fact,” signal dialogue with empiricism through the projected reader, who in the context of a historical narrative, would theoretically be more interested in plot than in description. The chapter title “Across the Atlantic” signals the travel of “observations,” or the exchange of “facts,” in this case the “true” story of Reuben’s arrival in Philadelphia, and the attendant exposure of the false Jacob Holmes, juxtaposed with Rachel’s story, which now turns to tragedy, as only the reader knows the “facts” motivating Rachel’s behavior. Because the narrative will travel back to Rachel in England, then back to Reuben in America, where Rachel and Jessy Oliver finally join him, plot comes to consist of the information exchanged transatlantically and relayed to the “curious” reader. This information, however, is inflected by description, and made interesting by “Variety.”

Rowson's novel relies heavily on plot as a kind of taxonomic device. For example, the novel's retreat into the sentimental mode, within which the basic strokes of the plotline are essentially predetermined, engages the taxonomic impulse to characterize, define, and categorize. The novel, in other words, narrows rather than expands: beginning with a culturally, racially, and geographically expansive tale magnified by a fifteenth-century ocean's distance, it concludes in an idealized location with the predictable domestic happiness of a morally-untouchable cast of characters. The "bad seeds" have been expunged; the naturalist-novelist has presented her reader with the genus, class, and species of the bad, and that of the good. The demarcation of characters by type is certainly a feature in frequent use within the eighteenth-century sentimental and gothic modes, but we might consider that the early American novel is also looking backwards to the Linnean natural history, meeting it in an interstitial space where its preoccupation with generic hybridity mirrors that of the natural history, even as it absorbs natural history generic influences. *Reuben and Rachel* in particular is inordinately concerned with female prototypes in the context of ancestral lineage. The image of the multi-branch family tree, shooting off in multiple directions, but ultimately narrowing as it zooms in on the present-day, is the meta-visual of the book. Just as the plot narrows, the setting stabilizes, and the characters constrict, so too does the lineage funnel down to Reuben and Rachel, the first "true" Americans in the book. The concept of lineage—or a "line" that can be drawn, albeit crookedly, from ancestor to descendent—is inherently taxonomic, and is the foundational premise of Linnaeus's botanical system. In a taxonomy, omission is as important as classification, and Rowson's archetypes channel this descriptive practice. In order to illuminate particular qualities, she suppresses others, achieving a universalization of character that emphasizes social order, just as selective empirical description emphasizes generalizability and nature's intrinsic order.¹⁸² In the section below, I discuss how

¹⁸² Joanna Stalaker poses the problem of separating these descriptive systems as the tension between the individual,

women begin to substitute for nature specimens, especially in the context of the West Indies and the new nation's fraught relationship with creoleness.

Women's reworking of natural history conventions into the early republican novel form evolved the natural history genre, repositioning its concern with the West Indies for example, nationalistically. The epistolary novel opened space for further novel-natural history hybridization; as a frame for first person narration, the protagonist(s) could incorporate natural observations without "plot" disruption. In the context of letter exchange, natural history becomes seamlessly interwoven with the autobiographical (whether of the fictional or real correspondents). In fact, what Ann Shteir calls a culturally-sanctioned "familiar form" became a way of veiling female scientific participation, especially after 1820, when botany codified as science; since letters were ostensibly private and circulating between women, they were not deemed public threats to male spheres of institutional science. The epistolary novel, then, stands at a critical juncture where its implied female readership functions as both institutional exclusion and self-inclusion: because it is authored by women, the epistolary novel cannot by definition express scientific truths, and yet it opens natural history to women, enlisting participation and investment in science. This subgenre then worked to change the terms of the natural history, too, not just of the novel, or of the autobiography. In Sansay's *Secret History*, her setting in Saint-Domingue enlists women in early American discourses around the entanglements of West Indian and American nature and creoleness.

In his introduction to the Broadview edition of *Secret History*, Michael Drexler notes that racial taxonomer Moreau de St. Mery catalogued "a staggering 128 racial categories to discriminate all conceivable gradations from white to black" acknowledged in Saint-Domingue

in all his/its detailed particularity (full description illuminates nature's randomness) and the holistic, with all the individual pieces cohering into an overall picture (selective description illuminates nature's universality). See the Introduction for a full discussion.

(17). Sansay works through several of these racial categories in ways Drexler says “draws relations between multiple fluid categories,” simultaneously destabilizing geography, politics (power struggles and partisanship), marriage, social order, the public and private (26). This fluidity is underpinned by the Haitian Revolution’s inversion of power, a shocking reversal that disrupts easy classification (26). The attendant turmoil creates space for a woman writer to unsettle fixed categories, Saint-Domingue behaving not unlike a peripheral location from which women naturalists were allowed greater freedom to innovate. Just as knowledge produced in the contact zone superceded previously-accepted knowledge based in the metropole, so too did knowledge produced from the site of revolution override that of knowledge circulating secondhand on the continent.

Sian Silyn Roberts calls *Secret History* “disjunctive,” full of unresolved narrative dead ends that parallel the characters’ island hopping and that produce fragmented information (264). The fragmentation that results from the novel’s inability to narratively unify environment mirrors that of the problematic natural history. Both early national novel and natural history attempt to cohere what is already shattered, and in so doing, produce texts of unresolvable contradiction. The Haitian Revolution, like the tropical swamp, forces an ecology, throwing everything commingling in one habitat into relation. While Sansay’s hyperfocus on nationality and kinds of women suggest a taxonomic impulse, the novel itself resists. Ultimately, the structural integrity of the epistolary conceit through which Mary orders her observations crumbles when “private” correspondence comes to include a third voice—Clara’s. Simultaneously, Clara’s marriage spectacularly implodes, and Saint-Domingue falls in an explosion of brutal violence. Mary’s instinct to order is never quite enacted, but is rather weighed down by her own skepticism. Her eyewitnessing as an American lends her a position of objectivity, and after all she has seen, all

she has come to “know,” she does not subscribe to what she sees as the illusions of the creoles, who believe in an inevitable restoration of order:

Yet the Creoles still hope; for ‘Hope travels through, nor quits us when we die.’ They think it impossible that this island can ever be abandoned to the negroes. They build houses, rebuild those that were burned, and seem secure in their possession...Whatever may be the fate of this country, here I must wait with patience...The romantic visions of happiness I once delighted to indulge in, are fading fast away before the exterminating touch of cold reality.—The glowing hand of hope grows cold, and fancy lives not to be old. (92-93)

Mary records the “hopes” of the creoles alongside her own “romantic visions” in order to highlight the devastation the colony has already undergone. While hope is a unifier, it is also an illusion, Mary tells us: it flies in the face of “cold reality.” Just so the narrative apparatus of the novel, or of the natural history, which is erected upon a generically unstable foundation that cannot, without its counterpart, fully support either taxonomy or narrative, science or literature.

In fact, the early republican novel can be said to pick up where the natural history leaves off. By late eighteenth century, the natural history of the Americas, while still deeply invested in the description of natural phenomena, had also moved to a greater focus on peoples. As exotic locales became more frequented, and their natural histories widely circulated, some works attention turned to environmental impacts on settlers and creoles. Using non-whites as signifiers of nature was part of the imperial natural history generic tradition. The progression of descriptive practice from natives and Africans to creoles operates on this imperialist trajectory; the early American novel hyperfocused on the creole recycles imperialist rhetorics towards nationalist agendas by painting the creole object as last on this spectrum of racialized evolution. The creole

in Sansay's novel receives the brunt of the violence that traditionally, in the natural history, belonged to Amerindians and Africans.

It is the categorization of women, however, that is the route by which the novel transitions the history of nature into the history of social order. Enlightenment stadial theory posited that society progressed in stages from primitive to pastoral to agrarian to commercial, and that these stages were intimately linked to the treatment of women. In the most advanced commercial stage, women had a higher social purpose—that of keeping intact the domestic sphere as dangerous market forces threatened it (Kriz 199).¹⁸³ The Haitian Revolution provides the violent backdrop to Sansay's evolutionary history of women, intermingling, as did earlier natural histories like Stedman's, narrative scenes of grotesque horror with moments of Baconian eyewitnessing. The creole woman in particular takes on multiple resonances, as she becomes, for Mary, who attempts to avoid creolizing, both object of violence and specimen.

Clara is Mary's primary "specimen," and as a woman, and finally a creole, she is the victim of domestic and cultural violence. Clara's creolization, which I speak of earlier in this chapter, is put in stark relief when the near-destruction of her honor by General Rochambeau is juxtaposed with his irrational cruelty towards Feydon, a creole. When she and Mary are accosted on a nature walk by General Rochambeau and his compatriots, Rochambeau entreats Clara to run away with him, but not before forcibly cornering her and creating a physical barrier from her sister, Mary (102). St. Louis's sudden appearance averts the implied appalling consequence of this scene, but in the next chapter, the eleventh-hour arrival of Feydon's brother with the ransom required to save him from the death ordered by Rochambeau, is not soon enough (103-104). The

¹⁸³ Kay Dian Kriz argues that in the hypercommercial space of the West Indies, the mulatress—as both refined and sexual at once—becomes the symbol of civilization within the slave economy. She is portrayed in Brunias's paintings "command[ing] the space of the market while being actively disengaged from commercial transactions." Kriz argues that Carib women were thought too "primitive," and white women were too sparse to be representative (199-207).

disruption of a pleasant hike in the mountains parallels the disruption of natural history by the novel form: how can nature be observed or experienced when manmade “silent horror reigns throughout the place”? (103) The caprice that directs this violence does not belong to the French General alone, but to the “place” itself. Sandwiched between Clara’s frightful encounter and Feydon’s irrational execution is a paragraph describing the deaths of three blacks who have attempted to torch a plantation, and are in turn burnt at the stake (103). In Mary’s numerous comparisons between Cape Francois, St. Jago, Kingston, and Philadelphia, place imbues individuals, nationalities, and races with virtue or depravity. Cultivation—the governing ethic of the agrarian ideal—and civilization—that of the American Republic—are inherently distorted, made grotesque by plantation culture and slavery.

As does John Gabriel Stedman, Sansay intermingles the natural history vision of an Edenic Caribbean island with the destructive effects of environment on the European constitution and with the attendant horror of race war. Mary recounts secondhand the “pleasures of the Creole ladies whose time was divided between the bath, the table, the toilette and the lover” by admitting the fantasy of the “negroes...reduced to order.” Should the Haitian Revolution be stamped out, a time would return, Mary says, when “I should repose beneath the shade of orange groves; walk on carpets of rose leaves and frenchipone; be fanned to sleep by silent slaves, or have my feet tickled into extacy by the soft hand of a female attendant” (73). And yet these same orange groves are poison for whites: “A negro eats a plantain, a sour orange, the herbs and roots of the field, and requires no cloathing, whilst this mode of living is fatal to the European soldiers.” Mary then returns the reader to the present moment, jarring the fantasy with finality: “The sun and the dew are equally fatal to them, and they have perished in such numbers that, if reinforcements do not arrive, it will soon be impossible to defend the town” (74). Mary’s fantasy

of “silent slaves” fanning her to sleep collapses time. The slaves’ silence is a foreboding of what has already come to pass—European death at the hands of a quiet killer—the African-nature alliance. And also of that which continues to erupt from this “silent horror” and is implied by the whites’ “impossible” defense.

In an astonishing scene that symbolically epitomizes the ways in which the early national novel appropriates the natural history to treat the unspeakable, the slave revolt, land crabs come to represent the silent offensive of mutinous enslaved peoples and simultaneously the terror an inadequate knowledge of natural phenomena can inspire. In Clara’s first letter to Mary from Bayam, Cuba, exiled after fleeing her husband’s abuse, she recounts a night spent on her journey, during which an “army” of land crabs descend a mountain, enter her hut, trample over her and her companion, Madame V---, and proceed to the sea shore, where they lay their eggs. Clara describes the crabs as would a naturalist:

The ground was covered with them, and paths were worn by them down the sides of the mountain. They strike their claws together as they move with a strange noise, and no obstacle turns them from their course...During the night their noise prevented me effectually from sleeping. They appeared like a brown stream rolling over the surface of the earth. Towards morning they gradually disappeared, hiding themselves in holes during the day. (145-146)

This eyewitness account hinges on both marvel and surprise. Surprise is accompanied by terror, and perhaps is the source of it. The mixed use of active and passive voice in this excerpt throws into relation eyewitness and actor—the land crab invasion is inextricable from Clara’s experience of it. It is significant that where the active voice is used is in direct attack and retreat: “they strike their claws” and they “hid[e] themselves in holes during the day.” Clara then equates

the terror of the assault with that of its active concealment. That which is hidden cannot be seen; that which cannot be seen, cannot be known, the central premise of the eyewitnessed natural history.

Importantly, this scene is reminiscent of one that opens the novel, where Mary describes the almost “catastroph[ic]” error of General LeClerc, who landing on the shores of the Cape, sees “numbers of people descending the mountains,” and believes them to be “negroes coming to oppose his landing”: instead, they are white inhabitants fleeing from the revolutionary Henri Christophe (62). The confusion of white and black, friend and enemy, is repeated in the scene of the land crabs, when Clara relates an anecdote her guide has provided: a Spanish prisoner of war escapes the British when he tells them the noise of the land crab army is that of a Spanish troupe come to attack the camp. His quick thinking “probably prevented [the British] from becoming masters of the island,” and the land crabs are practically “canonized” in the island’s lore (146). The land crabs are grotesque and terrifying, silent and thunderous in their assault all at once, like the insurgent Africans. But they are also the innocuous products of nature, wondrous in the extreme, particularly in their temerity, and ultimately representative of the colonial enterprise’s numbered contradictions. Although once more Africans and nature are aligned, there is no neat dichotomy here of good and evil.

Taxonomizing Women

Secret History fails at classification, and it continues to straddle the line between natural history and the early American novel in other ways too. From the minor use of natural history conventions like analogy—in the Cuban backcountry, “they kill beef...skin it...cut the flesh into long pieces about the thickness of a finger” (144)—and the contribution to global knowledges—“the heart recoils at the barbarity of a mother who can thus abandon her child; but the custom,

here, as in China, is sanctioned by habit, and excited no horror!” (113)—to a deeper engagement with Enlightenment descriptive practices and the employment of the Romantic mode—Sansay indicates her generic influences. Mary’s description of the Cuban creoles blends the naturalist’s dual roles as observer and subject. The creole woman is the new human specimen of the novel form:

Nothing can equal the unpleasantness of this town: it is built on the declivity of a hill; the streets are not paved; and the soil, being of white clay, the reflection is intolerable, and the heat insupportable. The water is brought on mules, from a river three miles off, and is a very expensive article. The women never walk, except to church, but every evening they take the air in an open cabriolet, drawn by mules, in which they exhibit their finery, and, not unfrequently, regale themselves with a segar. (118)

Mary does not practice description by omission here. Although she does not explicitly mention smell, taste, and texture, the senses most commonly avoided in Linnean descriptive practice (Stalnaker 8), these descriptors are felt in the vivid visuals of the women’s dangling cigars, of the white clay soil under Mary’s feet, the heat so oppressive that the soil produces a reflection.

Where Sansay engages the Romantic mode, again we see how the scientific and the literary meld. Clara’s description of her night flight to Bayam momentarily transports the beleaguered reader—who has now traveled from fallen Saint-Domingue to a peaceful altitude alongside Clara:

The night was calm. The town, which lies at the foot of the mountain, was buried in profound repose. The moon-beams glittered on the waves that were rolling in the bay, and shed their silvery lustre on the moving branches of the palm trees. The silence was broken by the melodious voice of a bird, who sings only at this hour, and whose notes are

said to be sweeter than those of the European nightingale. As I ascended the mountain, the air became purer. Every tree in this delightful region is aromatic; every breeze wafts perfumes! (140)

In this poetic prose, we learn that by comparison, an unidentified Cuban bird's "notes are said to be sweeter than those of the European nightingale." Though Clara does not name this bird, she participates in the comparative tradition of the natural history, whereby readers are familiarized with the exotic through existent knowledge. As Clara acclimates to the mountain air, so too does the white reader find familiar footing in the heavily circulated tropics—the palm trees, the citrusy "perfumes" that are staples of the islands. Silence in this passage is not ominous, as it is with the land crabs. Roles are reversed, for now Clara is the town's silent observer, surveying from atop the mountain, much as Bartram surveyed a "happy" plantation (83-84) in *Travels*. The image is hers to paint. While Bartram's survey is interrupted by plunging alligators, Clara is pursued by her maniacal husband and by the afflicting traumas of the Haitian Revolution. Both Bartram and Clara must recuperate the danger in order to remain in the Romantic mode; Clara does so by "frequently stopping to enjoy the delightful calm that reigned around me" even as she reminds herself that she has yet six more miles to walk before reaching safety (140).

As the natural history commenced in degenerate portrayals of West Indian creoles, who were generally "swarthy, scheming, libertine, reckless, and above all, a sign of contagion" (Goudie, 71), so too did the "overdilated European colonialist (male) gaze fix[] on West Indian women's bodies, fashions, interracial relations, and sexuality for purposes of social and economic mastery" (69). Goudie calls this fixation "negative," with white creole women reflecting back male creole defects. These critiques—"vanity and pride," "rage," "excess consumption and overindulgence," "weakness of human nature," passion, oversexualization,

indolence, and the “monstrous” “transgressions committed by creole white women and their slaves” (69)¹⁸⁴—are picked up by the female-authored early American novel. They are then lent a new ethos as objects of the female gaze. Michael Drexler calls creole women in Mary’s letters “tragic objects of desire,” the fantasy of luxury a lure for the practical Mary (“Brigands and Nuns,” 190) even as this fantasy is laced with pity for the fate the creoles’ very nature seems unable to avoid. The Mary/Clara split, for Sansay an act of autobiography in which she “writ[es] of herself as another,” “reverses her own objectification by the male gaze,” transforming Clara, or herself, into “the object of desire” (Drexler, “Introduction” 29). Sansay’s reversal tremendously complicates the role of the naturalist, accounting for creolization as penetrating and inescapable where the natural historian typically elides a personal admission of creolization’s corruptive influences. However, this reversal also implies the disposition of “curiosity,” whereby the naturalist is both subject and object, the observer and the observed (Parrish 57). It likewise signals participation in New Scientific discourses of vision, where gazer and gazed upon are fused.¹⁸⁵

Though Clara becomes creolized, as an American she is set apart from French, French creole, Spanish creole, mulatto, and black women. The French inspire a good deal of curiosity and are, to Mary, generally the most foreign of all the races. And yet, they are also, as is the example of virtuous Eliza, caring for a sick aunt at the Cape and separated from her family, industrious, educated, and highly resourceful (119).¹⁸⁶ Generally, however, French values are opposed in the extreme to republican values. Mary describes the French at length:

¹⁸⁴ Goudie cites Edward Long’s *History of Jamaica* (1774) for some of these charges, which were otherwise widely circulated in circuits of institutional science.

¹⁸⁵ See more on eighteenth-century curiosity and on theories of vision in the New Science in my Introduction.

¹⁸⁶ An exception here is Pauline Le Clerc, whose birthright makes her completely unsuited for the boredom of island life (67).

The French appear to understand less than any other people the delights arising from an union of hearts. They seek only the gratification of their sensual appetites. They gather the flowers, but taste not the fruits of love. They call women the 'beau sexe,' and know them only under the enchanting form of ministers of pleasure. They may appear thus to those who have only eyes...female virtue is blasted in the bud by the contagious influence of example. Every girl sighs to be married to escape from the restraint in which she is held whilst single, and to enjoy the unbounded liberty she so often sees abused by her mother...all traces of her native simplicity are destroyed. She joins with unblushing front, the crowd who talk of sentiments they never feel, and who indulge in the most licentious excesses without have the glow of passion to gild their errors. (96)

That the French national and the French creole are indistinguishable in this passage, where the natural history's common charges against the creole are leveled, is a statement of creolization's indeterminate origins. Creolism may not originate in climate, but in the blending of national and colonial characters in interaction with the environment. Mary marvels at the unique bond between French mother and daughter, wherein a daughter idolizes a mother who practices these "licentious excesses." She reexamines this closeness by critiquing its unnatural consequence in the female creole: "But the most captivating trait in their character is their fondness for their children! The Creole ladies, marrying very young, appear more like the sisters than the mothers of their daughters. Unfortunately they grow up too soon, and not unfrequently become the rivals of their mothers" (110).

The Spanish character is shaded, like the French, but manifested oppositely in the sexes. Mary is convinced of Clara's virtue and vows that she will "never, to escape the domestic ills she suffers, put her happiness in the power of a Spaniard" (126). The Catalonians, who control

Cuban trade, are “false, treacherous, and revengeful, to the highest degree”; also “jealous” and not possessed of “that magnanimous spirit, which once animated the Spanish cavalier” (120). The dirty inhabitants of a hut Clara, Madame V--, and their guide visit en route are implied to be Spanish creoles or Spanish mulattoes. Clara’s language is unusually judgmental: “the filth of the house, and appearance of its inhabitants filled me with disgust...incredible as it may appear, this miserable looking being, whose abode resembled the den of poverty, is the owner of countless multitudes of cattle, and yet it was with the greatest difficulty that we could procure a little milk” (143). Spanish men are then highly passionate, immoral, and indolent. There is one mention of the enchanting women of Lima—whether native Peruvian or Spanish creole, we don’t know—related secondhand by the Irish soldier Mary becomes acquainted with (136). There is also the governor at Barracoa’s “divinely beautiful” wife, whose “charming countenance express[es] every emotion of her soul” (107). With her husband, Donna Jacinta has left the gaiety of Havana for desolate Barracoa, and it is she who teaches Clara to speak a tolerable Spanish. Sansay leaves undefined the creole status of these Spanish speaking women, again blurring boundaries between nationality, coloniality, and creoleness. It is significant that while Spanish-speaking men are depraved, women are elevated. Here, Sansay rejects the creole women-creole men reflection paradigm, suggesting that creole identities are highly malleable.

While African women are infrequently painted as either loyal slaves (70, 77) or courageous co-leaders of the insurgency (92), mulatto women are treated with greater depth and made a distinct category from the white creole. Just as Kriz finds in her discussion of Agostino Brunias’s paintings, for Mary, the mulatress’s central feature is a refined sexuality:

The mulatto women are the hated but successful rivals of the Creole ladies. Many of them are extremely beautiful; and, being destined from their birth to a life of pleasure, they are

taught to heighten the power of their charms by all the aids of art, and to express in every look and gesture all the refinements of voluptuousness. It may be said of them, that their very feet speak. In this country that unfortunate class of beings, so numerous in my own,- -victims of seduction, devoted to public contempt and universal scorn, is unknown... To the destiny of the women of colour no infamy is attached; they have inspired passions which have lasted through life, and are faithful to their lovers through every vicissitude of fortune and chance. (95)

The wonder of the mulatress then is her role in creole society, so seamlessly integrated into cultural mores and codes of conduct that elevate sensuality and constancy irrespective of institutional matrimony. The mulatress's power is palpable—her “very feet speak” and she is for this reason, the following page tells us, restricted in her dress and forced to wear the madras handkerchief around her hair. The ingenuity of this species of women in effecting a strike that subverts white authority, also extends the power of their sexuality, and quite unexpectedly, inspires white creole women to appropriate the symbol of this subversion, the madras handkerchief.

Mary's allusion to the “victims of seduction, devoted to public contempt and universal scorn” in the new Republic are the same women who form the foundation of Rowson's female classification system in *Reuben and Rachel*. They are erected as foils for her virtuous women; the “dishonoured, stained” woman begins with Alzira, Orrabella's sister, who is defiled by Garcias Du Ponty. There is also Bruna, the lovely native of St. Domingo, who is raped by Diego, a Spanish “official.” Also, Mina, Columbia's companion and attendant who falls victim to James Howard, who simultaneously attempts to entrap Columbia. Each of these women are peripheral to the Columbian lineage. Other morally profligate women like the detestable Mrs. Varnice and

Mrs. Courtney effect reverse seductions of men that prove almost-fatal, but significantly, the men are spared while the women are not. Although the tainted women are closely aligned with the women of virtue (sisters, companions), Rowson suggests that becoming a “victim of seduction” is a failure of character which women of dignity and education like Orrabella and Columbia, respectively, reject. Rowson’s obsession with the description of women “types” is a taxonomic impulse that gradually forms into a functioning system of classification as the narrative progresses. The “true” American woman is decidedly less complex when Native Americans, Africans, and even Europeans have been purged from this system. Though young Rachel Dudley is the descendent of a Native American/European bloodline, she has abandoned the Old World values her European blood represents and the dangerous creolization that her native blood threatens.

Conclusion

Reading the natural history against the early national novel, particularly in the context of early republican discourses around creoleness and creolization, implores us to not only reassess this unstable, burgeoning genre, but also the natural history. By appropriating conventions of the natural history into their work, Sansay and Rowson were both hybridizing the early American novel and actively evolving the natural history genre, with West Indian settings allowing them greater freedom to push the boundaries of both generic forms. Both *Secret History* and *Reuben and Rachel* make truth claims and what Michael McKeon calls “claims to historicity” by posturing their West Indian narratives as eyewitness accounts. With the Caribbean still exotic enough to excite interest—although by late eighteenth century in the context of a new American readership the desire shifted somewhat to geographic, political, and cultural, rather than natural,

knowledge—literally and metaphorically traveling women novelists, like their explorer and colonial women naturalist counterparts, professed to be producing knowledge “from life.”

The ever-mutating natural history evolves in its use by Leonora Sansay and Susanna Rowson towards a multivalent nationalism, rather than towards imperial, proto-ecologic, or regional agendas. The natural history helps their novels work through the two discursive strains of “paracolonialism” that Goudie outlines: American-West Indian market relations as key positioner of an American commercial empire and as incompatible with the republican values central to the agrarian ideal. While Susanna Rowson’s *Reuben and Rachel* champions the latter strain, Sansay’s *Secret History* complicates the first; Rowson ultimately disavows the West Indies, marking its difference, but Sansay comes to own it, transplanting its creolizing influences to the continent, and through that transplantation, altering the nation as place. It is important that Rowson’s erasure of place and her repudiation of the America-West Indies bond, paradoxically works to circulate the West Indies within the new nation—ultimately promulgating racial and gender anxieties that shape the new Republic, and therefore imperfectly marking West Indian difference.

In their writing of New World nature, naturalists sometimes de-emphasized the unique ecologies of place, and just as frequently exoticized tropical locales to make foreign that which was new knowledge, sometimes within the same work. Both impulses seek to universalize rather than particularize distinct habitats, but it is often the habitat itself that resists generalizability. In Chapter One, for example, I argue that John Gabriel Stedman exploits the trope of the tropics to make Surinam knowable, and yet from place-specific conflict based in Surinam’s topography emerges an ecology that uniquely defines place. In Sansay’s treatment of creolization, the West Indies becomes site of extreme mixture, with each island and its natives, creoles, blacks, and

Europeans, culturally distinct from every other; and yet, these distinctions are illusory, for the strongest distinction Mary attempts to make between the Caribbean and the new nation, easily collapses under individual ecologies of place. The mutually constitutive influences of races, nationalities, and cultural and moral codes based in their mixture and in the environment, tremendously complicate easy, clear nationalisms. Rowson enacts a foundationally shaky restoration of republicanism by novel's end, but Sansay never quite can, and perhaps does not wish to. The natural history genre in the early national novel form, then, becomes mediator and arbiter of every new resonance of creolism that impacts the new nation.

Appendix A

Full Textual Descriptions Cited in Chapter One

From my youth, I applied myself to the study of Insects, I began in Frankfurt-on-Main in my country, with silken worms, after having noticed the most beautiful butterflies, that fly during the day, and only fly at night, emerge from Caterpillars; I picked up all that I could find, in order to study their transformations. To my observations with more exactitude I abandoned all kind of company and applied myself to the purpose of painting these Insects as they are naturally. Thus I collected and painted on parchment all the Insects that I discovered in Frankfurt and Nuremburg. This collection had fallen into the hands of a few curious, they exhorted me to give to the Public the observations I had made regarding the Insects for the satisfaction of the Physicians. I allowed myself to follow their counsel and I published the first part in Quarto in 1679 and the second in 1683. After I engraved them myself. I passed time then in Frise and Holland where I continued my examination of Insects in the entire Friesland, because in Holland I had not the opportunity to search all over the bushes and vines; however I must confess that the Curious repaired this fault and brought me Caterpillars whose transformations I could examine, and I kept their observations, which served me every day as I augmented the two preceding volumes. But I have seen nothing in Holland more curious than the different insects provided by two Indians, when I had the permission to see the cabinet of the illustrious Mr. Nicolas Witsen, mayor of Amsterdam, and director of the East India Company, and the same of Mr. Jonas Witsen, Secretary of the same city. I also saw the curious Cabinet of Mr. Frederic Ruisch celebrated Doctor of Medicine and Professor of Anatomy and Botany; and finally the same of Mr. Levin Vincent and many others, where I found innumerable number of Insects, they nevertheless did not know their origin or generation, that is to say, how the Caterpillars transformed in beans, or other changes. This is what determined me to undertake the long journey to America in Suriname, a country hot and humid, where those persons I have mentioned, received the majority of their Insects. I crossed the sea in the month of June 1699. & I stayed in this country it until June 1701. In order to have the time to make my remarks with care: I then recrossed into Holland, where I arrived on the 23rd of September. I carefully painted these seventy-two plates on parchment on the scene in their natural grandeur, as well as they can be seen at home with the Insects dry. One must confess that I did not find in this country conveniences I had been promised for the examination of Insects; for the Climate being inconvenient for my temperament, I was forced to return to my country sooner than I had resolved. When I returned, a few curious, who did see my designs, suggested that I print and publish, judging that it was the most beautiful Work that had never been painted in America. Expenditures, which would induce me to do this, first made me suspend execution of this plan; but I finally overcame this difficulty.

This work therefore includes seventy-two boards that represent more than a hundred Observations on the Caterpillars, Worms, and Mites; in what manner, after changing shape, they change color and form and transform finally into Butterflies, nocturnal Butterflies, Bees in Buds and Flies. I have represented all the Insects on plants, flowers and the fruit they feed on. I added remarks on the generation of Spiders in the West Indies, Ants, Serpents, Lizards, Toads, and Frogs, that I made in America where I had designed my drawings after nature; I have also gathered something of the narratives made me by Indians.

It is not interest which made me undertake this work; I do not seek to recoup my cost; I have not spared either for the engraving of this paper, in order to please the connoisseurs, and those who study the nature of Insects and Plants and if I have met their expectations, I shall be happy.

Following the example of Cl. Bidloo Professor in Leiden, I put a plate between two descriptions as he did in his Anatomy. I could have easily extended these descriptions; but as it is today very delicate and scientists do not find points of agreement on these subjects, I am required to hold simply to what I observed, I am just giving matter to the reflections of others. Besides the fact that several authors have written extensively before me on the same subject, such as Mouffet, Godart, Swammerdam, Blankart, & c. I gave to the first transformation of Caterpillars the name of beans and to the second of Butterflies, simply for those who fly during the day; and I called with Mouffet nocturnal Butterflies those who fly only at night; I have the same name to Flies and Bees in the second transformation Mites and Worms.

I gave Plants the names given them by the inhabitants of that country and the Indians; and Mr. Gaspar Commelin Doctor of medicine, Professor of Botany at the College of Medicine, and the Leopoldine Academy, has added in names in footnotes and nicknames given to them in Latin.

I have resolved, if heaven grants me life & health, to add to the comments that I made in Germany, the ones I collected in Friesland & Holland & publish them in Latin & Dutch.

Maria Sybilla Merian's full preface to *The Metamorphosis of the Insects of Surinam*, translated by Diana Epelbaum from the 1726 French language publication.

It is believed that in the waters of Surinam is a species of Cress, whose leaves are thick, united, and full of juice: the stem is of a yellow color, and the leaf of a pale red; it takes the place of spinach, we also eat it in salad.

Before ending this address on Insects, I will make the poorly developed point that next to this Cress, lives an aquatic animal which is a species of toad, whose female carries its young on its back; because it has the Uterus along the back, and that's where she conceives & nourishes the embryos, until they have received life, then they open a passage through its skin, and they come out as an egg, one after another. Once I had taken note of this, I threw the mother in ethanol with the little ones whose heads or bodies were already cut off. The Negroes eat these toads and find them delicate; they are a blackish brown, their meat to resemble those of Frogs, and those from behind to those of the Ducks.

I also fished of Shells in the Sea, to see what fish they contained; I found several small living animals, and having pulled with force, I remarked that in the front was a species of crayfish & from behind, they resembled snails locked in a scallop. During the day, they are at rest, but at night they are strongly disturbed, they make noises in their home with their bodies.

Full text accompanying Maria Sybilla Merian, Plate 59, “The Surinam Toad,” in *The Metamorphosis of the Insects of Surinam*, translated by Diana Epelbaum from the 1726 French language edition.

Pineapple being the most excellent fruit that we eat, it is right that he should be first within this book and within the order of my observations. The first figure represents the face when in bloom, and in the following, we see a wall. We see the small leaves before a wall. The small variegated leaves that are under the fruit look a speckled red satin yellow, the little offspring that are beside continue to grow when the ripe fruit is picked. The leaves are long, outside a green sea and within a green prairie, with reddish edges and filled with enough high peaks. Besides several learned men have spoken strongly on this fruit, as beautiful to the sight as it is pleasant to the taste, Pison and Marcgrave have described it in *History of Brazil*, Reede in the XI. Part of the *Hort. Malab.*, Commelin, in the I. Part of the *Hor. Amstel & C.* and I am indebted to these learned men for my observations on insects.

The Cockroach is an Insect of America, those which we know the most, by the evils and losses they cause to the inhabitants, they gnaw through the fabrics of Wool and Canvas, and they spoil drink and food. They love everything about sweet things, which is why they have an extraordinary inclination towards the pineapple. They cast their seed in a heap and envelope a fine membrane just as certain Spiders do in Europe. When eggs reach maturity, and when the young have formed inside, they themselves eat the hull, and exit precipitously; and not being bigger than an ant, these young Cockroaches fit easily by or through the keyhole slots in the coffer and in wardrobes, where they gnaw and destroy everything. Finally they become the size that you see represented first in the figure, a grayish brown color. When they grow to size, their skin splits in two, and there emerges a Cockroach wing, soft and white, his slough looks like a Cockroach's, but it is empty inside.

On the other side of the fruit you see another species of Cockroach, which carries its eggs in the abdomen in a small brown bag; but if we touch the animal, it leaves the sac, to save itself and does so with levity, the fate of the young to whom this happens go through the same transformations as the big ones we just spoke about, without any difference.

Text accompanying Maria Sybilla Merian, Plate 1, "Pineapple and Cockroaches," translated in *The Metamorphosis of the Insects of Surinam*, translated by Diana Epelbaum from the 1726 French language edition.

Here were some beautiful pine-apples and melons, which, though they are so generally known, I will nevertheless give some account of. The imperial fruit called *Anana* or pine-apple grows in the centre of an elegant sea-green plant, on a stalk of the same hue, about eight inches in length, its leaves diverging near the surface of the earthy, which are smooth, long, strong, pointed, and dentulated with hard prickles. The shape of this fruit is nearly oval, the size of a sugar-loaf, all over chequered, and of a most beautiful orange or golden colour, being crowned with a sea-green tuft, of the same leaves as the mother plant, and which when put in the ground produces another pine-apple in the space of about eighteen months. The delicious taste and flavor of this fruit has in the space of half a century become so well known, that I have introduced it merely to notice its *plenty* in the country I write of; for so spontaneously indeed do the former grow in this climate, and of such different kinds, without any cultivation, that on many estates they serve as a common food for hogs.

The *musk* and *water melons* grow also plentifully in this country; the first is of a globular form, large, like the crown of a small hat, ribbed, buff colour, orange and green. The pulp is yellow, firm, sweet, and succulent; still it is eaten with sugar, but more frequently with black pepper and salt—the smell of this fruit is excellent.

The water-melon is of an oval or cylindrical shape, its colour is a bright polished green, and partly a very pale buff: the pulp of this fruit is a pink colour, and of a mellow watery substance; its taste is sweet, exceedingly cooling, and of a most agreeable flavour.

Both of the above melons are of the cucumber kind, growing on rough stalks, with large leaves, that creep along the ground. It is remarkable that the water-melon, which may be freely eaten in all distempers without the least pernicious consequence, thrives best in very dry and sandy places.—In the annexed plate may be seen the *Anana* or pine-apple, with the musk and water-melon, besides the seed from which this last is produced (336-337).

Embedded full textual description accompanying John Gabriel Stedman, Plate 64, “The Musk Melon, Water-Melon & Pine-Apple,” in *Narrative of a Five Years’ Expedition Against the Revolted Negroes of Surinam* (1796).

This fruit of a pale yellow color is called Banana. It is a kind of Banana as represented in Plate XII and whose leaves are similar; their fruits are different like in Europe our Apples are different from our Pears. The flesh of these Bananas is softer than that of our Bananas. Both serve the same purpose; in addition if you put this fruit in water and sugar it will make vinegar, and will become rather sour.

The brown caterpillar that I found on the leaves of this tree is armed with four tips; its head adorned with a crown, she has a split tail and a red pulp. It being held at rest, on the 3rd of December she transformed into the bean color of wood, and on each side were two silvery spots. On the 20th of the same month, there emerged a beautiful Butterfly with two superior wings that under the light are a clear ocher color, and the two sides a beautiful blue; and the top of the whole Butterfly is a yellow, brown, white, and black stripe, and its name in Holland is Little Atlas.

For this Plate, I've added the blue Lizard with its eggs. It had made its nest in the ground at my house, and there he laid four eggs, white and round, such as we see here three. I carried it with me when I returned to Holland, and on the ocean, emerged three very delicate small Lizards, as you can see on the tail of the Bananas, but since neither the Sea was their habitat, nor was there proper nourishment, they died.

Text accompanying Maria Sybilla Merian, Plate 23, "Blue Lizard and Banana," translated in *The Metamorphosis of the Insects of Surinam*, translated by Diana Epelbaum from the 1726 French language edition.

One day, straying with me through a watery savanna, I shot a bird, which I found to be the spur-winged water-hen of Edwards. This beautiful creature is supposed to be of the plover kind, with the body about the size of a pigeon, being of a deep cinnamon colour, between red and very rich orange; the neck and belly are perfectly black, the larger feathers of the wings of a bright yellow, and armed on each pinion with a short and sharp horny spur, which it uses for its defence, as game-cocks use theirs in England. It has no tail; its bill is near two inches in length; its legs are long, and, as well as the bill, are of a yellowish green colour; its toes, especially the hinder ones, are of a remarkable length, and seem calculated to support its weight in the mud, where it is most frequently seen, if not wading in the water to seek its food. These birds, like plovers, never swim; they have a scarlet crest and small pearls (like those of the Muscovy duck) separating the bill from the eyes; they are always seen in pairs, and when they fly produce an agreeable whistling from their throats. The spur-winged water-hen, on account of its great beauty, reminded me of another fine bird I lately saw upon one of the neighbouring estates, but which I had forgotten to mention: this was the Guiana curlew, here called *flamingo*, from its great resemblance to the famous bird of that name, seen in Canada and many parts of North and South America, and which is supposed to be of the crane kind, with its body as large as that of an European swan. This bird, however, is only the size of a small heron; it has not tail, but a very long neck and long limbs, with four toes: the head is small, and the bill also long, round, and arched. The flamingo lays always two eggs, which, when hatched, the chickens appear black, next grey, then white, as they come nearer maturity; and, finally, the whole bird becomes a bright scarlet or crimson, some not lighter than the colour of blood. They live in society like the storks, and mostly on the banks of rivers, or near the sea, where they are seen in such amazing flocks, that the sands seem dyed with vermilion; these birds, when young, are accounted very good eating, and are so tame, that on the plantations they are frequently seen walking and feeding among the poultry, though fish and animal food they generally prefer (185).

Embedded full textual description accompanying John Gabriel Stedman, Plate 36, “The Spur winged Water hen of Guiana and The Red Curlew of Surinam,” in *Narrative of a Five Years’ Expedition Against the Revolted Negroes of Surinam* (1796).

I have represented in this Plate XVIII on a branch of the Gauva tree, the Spiders, ants and small birds which are called Hummingbirds. I also found this tree of the Spiders to be a huge size. In Plate XIX, I represented the same tree with insects, so I will not speak here of it but rather only of the Spiders.

I have found on the Guava tree many huge black Spiders of this species which make their home in the large round nest that is represented by the Cocoon of the Caterpillar in the next Plate, because they do not spin long Cocoons, as some travelers have wanted to have us believe; they are covered with hairs of all dimensions, and they are armed with acute teeth, and their bite is very dangerous because the humidity grates their teeth. Ants serve as their food; and the Spiders capture the ants in the trees where it is difficult to avoid them; because, like all Spiders, they have eight eyes, where two look down, two look high, two to the side, and two in another direction. When they find the ants, they snatch small birds from their nests; and they suck out all the blood. They change skin like Caterpillars, however I have never found that they fly. The other species of Spider drawn on the canvas is smaller, they carry their eggs under their bellies in a kind of crust when they are young. They also have eight eyes, which are placed here and with more confusion than in the larger species.

You find in extremely large ants that they can in one night so despoil the trees of their leaves, and then rather take for the brushes than for the trees. They are armed with curved teeth, that intersect one another like scissors, they are so strong as to cut the leaves of the trees, which do fall to earth so that the trees appear bare as they do in Europe during the Winter. Thousands of ants pounce on these falling leaves on the ground, or & as they await their prey they carry the leaves to their nest, not for food, but for that of their young that are as small as worms, because the winged ants throw their seed like the gnats, and it leaves worms or moths of two kinds, some of which are enveloped in a Cocoon, and others in greater number that change into small beans; the ignorant call these small beans eggs of ants, but they are wrong because the ant eggs are much smaller. Suriname hens are nourished much better by these bean ants than by barley or oats. Ants emerge out of these beans, they shed their skin, and it is their wings, and it is these ants that lay these eggs from which emerge worms with great care, because they do not have to make provisions for the winter in this hot country. They are found in the land of the caves which are sometimes more than eight feet tall, and they do as well as men can do. When they want to go somewhere or they find a point of passage, they make a bridge, and in this experience will widely differ one from the other, in the first place, it attaches its teeth to a piece of timber, in the second place after the first on which it attaches, the third attachment is the same as the second, and the fourth as the third and so on and in this manner they get carried away by the wind until at the last they attach to the other side, and also thousands of other ants pass there and use their bridge. These ants are always at war with all the Spiders and Insects of this country. They come out from their caves once a year in countless swarms, they enter homes, travel to rooms, and kill by sucking all Insects big and small. In one moment they devour one of those giant Spiders, as they pounce on it in such large numbers that it cannot defend itself, the same men are obliged to flee as they enter room by room by troupes and when the entire house is cleaned, they pass into the neighbor's house and so on to another until they go back to their caves.

The Spiders trap the Hummingbirds in their nest. Formerly this bird served as food for Priests in this country, as they told me, and they dared not eat anything else. These birds lay four eggs like the other birds and they hatch: they fly with rapidity, they suck the honey from the flowers on which they spread their wings, they remain in the air without the slightest movement, and they are adorned by several colors that are more beautiful than the Peacock's.

Text accompanying Maria Sybilla Merian, Plate 18, "Spiders and Ants," translated in *The Metamorphosis of the Insects of Surinam*, translated by Diana Epelbaum from the 1726 French language edition.

I have already stated that, from some unaccountable delay, it was very late this morning before we left the camp; we, nevertheless, all started at last; I having the van-guard with the rangers, and the poor marines loaded each man with *nine days* provisions on his back. In this condition we had not proceeded long, when one of the rangers sounding this horn, they spread, and I among them, all instantly falling flat upon the ground, with our firelocks cocked, and ready to engage: but this, however, proving to be a false alarm, by a stag rushing out through the foliage, we soon rose, and after marching the whole day through water and mire, at three in the afternoon encamped on a high ridge, where not a drop of water was to be found till we had dug a hole for that purpose, and this was so very thick and muddy, that we were obliged to strain it through our neckcloths or shirt-sleeves before we could drink it...On the succeeding day we marched again, keeping course W. and N.W. with very heavy rain, while I had the rear-guard; and once more entered on a quagmire, which cost me three hours time to bring up the rear to the beach, this march being particularly distressing, as the negro slaves with their burdens broke through the surface every moment, while the loaded marines had enough to do to mind themselves, and I too weak by my late loss of blood to afford them any assistance whatever. At last, approaching the beach, I perceived the dead bodies of several rebel negroes scattered on the ground, with their heads and right-hands chopped off. These bodies being fresh, induced me to conclude, that they must have been very lately killed in some engagement with the troops and rangers stationed on the Pirica river...Let not these remarks, however, fix a stigma of cruelty on me in the eyes of the world, since no man could more strongly feel at the sight of such manly youths stretched dead among the surrounding foliage; and finer bodies than two of them were in particular I never beheld in my life (300-301).

Embedded full textual description accompanying John Gabriel Stedman, Plate 55, “March thro’ a swamp or Marsh in Terra-firma,” in *Narrative of a Five Years’ Expedition Against the Revolted Negroes of Surinam* (1796).

Bibliography

- Adams, Percy. "Introduction to the Dover Edition," "Introduction to the First Edition" in William Byrd, *William Byrd's Histories of the Dividing Line betwixt Virginia and North Carolina*, Ed. Percy Adams. New York: Dover Publications, 1967. v-xxxix.
- Albin, Eleazer. *The Natural History of British Insects: Illustrated with a hundred copper plates, Curiously Engraven from the Life: and (for those who desire it) exactly coloured by the author*. London: Printed for the Author, 1720.
- Allewaert, M. "Swamp Sublime: Ecologies of Resistance in the American Plantation Zone." *PMLA* 123.2 (March 2008): 340-357.
- Anderson, Douglas. "Plotting William Byrd." *The William and Mary Quarterly*. 56.4 (Oct 1999): 701-722.
- Anonymous. *Curious Adventures of Captain Stedman, During an Expedition to Surinam in 1773; Including The Struggles of the Negroes, and the Barbarities of the Planters, Dreadful Executions, The Manner of Selling Slaves, Mutiny of Sailors, Soldiers, & c. and various other Interesting Articles*. London: Printed for Thomas Tegg, Cheapside, 1809.
- Anzilotti, Cara. *The Journal of Southern History*. 63.2 (May 1997): 239-268.
- Attenborough, David. *Amazing Rare Things: The Art of Natural History in the Age of Discovery*. London: Royal Collection Enterprises, Ltd., 2007.
- Audubon, John James. *The Birds of America*. London: Published by the author, 1827-1838.
- Bacon, Francis. *The New Organon, or, True Directions Concerning the Interpretation of Nature, 1620*. Dodo Press.
- Barbour, Julian B. *Absolute or Relative Motion?: The Discovery of Dynamics*. Cambridge: Cambridge U.P., 1989.
- Barnhart, John Hendley. "Significance of John Bartram's Work to Botanical and Horticultural Knowledge." *Bartonia Special Issue*. 1931. 24-34.
- Bartram, John. *A Journal from St. Augustine up the River St. John's* in William Stork's *An Account of East-Florida*. London: W. Nicoll, 1766.
- ". "To Jane Colden, January 24, 1757." *The Letters and Papers of Cadwallader Colden, 1755-1760. Vol. 5*. New York: New-York Historical Society, 1923. 25-26. [Colden Papers]

- , "To Peter Collinson, June 30, 1766." "To John Fothergill, May 9, 1771."
Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *The Correspondence of John Bartram: 1734-1777*. Gainesville: The University Press of Florida, 1992. 668, 740.
- Bartram, William. "The Fothergill Album of William Bartram's Drawings." Natural History Museum of London. M.S. No. 78 and M.S. No. 79. 1766-1776.
- , *Travels Through North and South Carolina, Georgia, East and West Florida And Other Writings*. Ed. Thomas P. Slaughter. New York: The Library of America, 1996.
- Bauer, Ralph. *The Cultural Geography of Colonial American Literatures: Empire, Travel, Modernity*. Cambridge: Cambridge U.P., 2003.
- Bawarshi, Anis S. and Mary Jo Reiff. *Genre—An Introduction to History, Research, Theory, and Pedagogy*. West Lafayette, Indiana: Parlor Press, 2010.
- Behn, Aphra. Ed. Catherine Gallagher and Simon Stern. *Oroonoko; or, the Royal Slave*. Boston and New York: Bedford/St. Martin's Press, 2000.
- Bellows, Barbara L. "Eliza Lucas Pinckney: The Evolution of an Icon." *The South Carolina Historical Magazine*. 10.2/3 (April-July 2005): 147-165.
- Benedict, Barbara M. *Curiosity: A Cultural History of Early Modern Inquiry*. Chicago: The University of Chicago Press, 2001.
- Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *Dr. Alexander Garden of Charles Town*. Chapel Hill: The University of North Carolina Press, 1969.
- Berkeley, George. *Essay Towards a New Theory of Vision*. Dublin: Printed by Aaron Rhames, at the Back of Dick's Coffee-House, for Jeremy Pepyat, Bookseller in Skinner-Row, 1709.
- Berland, Kevin Joel. "Preface," "Introduction," "Textual History," "Editorial Matters" in William Byrd, *The Dividing Line Histories of William Byrd II of Westover*, Ed. Kevin Joel Berland. Chapel Hill: University of North Carolina Press, 2013. vii-62.
- Bigelow, Jacob. *American Medical Botany, Being a Collection of the Native Medicinal Plants of the United States*. Boston: Hilliard, 1817-1820.
- Boyle, Robert. *New Experiments Physico-Mechanical: Touching the Spring of the Air and their Effects*. Oxford: H. Hall for T. Robinson, 1660.
- Britten, James. "Jane Colden and the Flora of New York." *Journal of Botany, British & Foreign*. 33 (1895): 12-15.
- Brown, Laura. *Ends of Empire: Women and Ideology in Early Eighteenth-Century English Literature*. Ithaca: Cornell U.P., 1993.

- Buell, Lawrence. *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. Cambridge: Harvard U.P., 1995.
- Byrd, William. "Account of a Negro Boy dappled in Several Places of his body with white spots." *Royal Society Journal Books*. RBO/7/167. July 20, 1697. 146-147. The Royal Society of London, London, England.
- Byrd, William. Ed. Marion Tinling. *The Correspondence of the Three William Byrds of Westover, Virginia, 1684-1776*. Charlottesville: University Press of Virginia, 1977.
- Byrd, William. *The History of the Dividing Line betwixt Virginia and North Carolina Run in the Year of Our Lord 1728 in The Dividing Line Histories of William Byrd II of Westover*, Ed. Kevin Joel Berland. Chapel Hill: University of North Carolina Press, 2013. 65-341.
- . *The London Diary, 1717-1721, and Other Writings*. Eds. Marion Tinling and Louis B. Wright. New York: Oxford U.P., 1958.
- Cain, Robert J. "Separation of Carolinas." *Encyclopedia of North Carolina*. 2006. <http://ncpedia.org/carolinas-separation>. 10 April 2016.
- Castiglia, Christopher. *Bound and Determined: Captivity, Culture-Crossing, and White Womanhood from Mary Rowlandson to Patty Hearst*. Chicago: University of Chicago Press, 1996.
- Catesby, Mark. *The natural history of Carolina, Florida and the Bahama Islands: containing the figures of birds, beasts, fishes, serpents, insects and plants: particularly the forest-trees, shrubs, and other plants, not hitherto described, or very incorrectly figured by authors. Together with their descriptions in English and French. To which are added, observations on the air, soil, and waters: with remarks upon agriculture, grain, pulse, roots, &c. To the whole is prefixed a new and correct map of the countries treated of*. 2 vols. London: Printed at the expense of the author, 1731, 1743.
- Chaplin, Joyce E. *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676*. Boston: Harvard U.P., 2001.
- . "Tidal Rice Cultivation and the Problem of Slaver in South Carolina and Georgia, 1760-1815." *The William and Mary Quarterly* 49.1 (Jan 1992): 29-61.
- Clements, Frederic. *Research Methods in Ecology*. Lincoln: University of Nebraska Press, 1905.
- Colden, Alexander. "To Cadwallader Colden, May 8, 1756." *The Letters and Papers Cadwallader Colden, 1755-1760. Vol. 5*. New York: New-York Historical Society, 1923. 71-74. [Colden Papers]

Colden, Cadwallader. *Catalogue Planatarum. The Scientific Papers and Notes of Cadwallader Colden from the Correspondence and Papers Cadwallader Colden and Family, 1692-1825. Box 1, Microfilm.* New York: New-York Historical Society. 1918-1937. 366.

----- "Description of 2 Flowering Plants." *The Scientific Papers and Notes of Cadwallader Colden from the Correspondence and Papers Cadwallader Colden and Family, 1692-1825. Box 1, Microfilm.* New York: New-York Historical Society. 1918-1937. 366.

----- *History of the Five Indian Nations of Canada.* London: T. Osborne, 1727.

----- "Introduction to the Study of Natural Philosophy, Compiled for Peter De Lancey the Younger." "The successful use of oil in curing snake bites." *The Scientific Papers and Notes of Cadwallader Colden from the Correspondence and Papers of Cadwallader Colden and Family, 1692-1825. Box 1, Microfilm.* New York: New-York Historical Society. 1918-1937. 364-365.

----- *Principles of Action in Matter, the Gravitation of Bodies, and the Motion of the Planets, explained from the Principles.* London: R. Dodsley, 1751.

----- "To John Bartram, January 27, 1746-7." Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *The Correspondence of John Bartram: 1734-1777.* Gainesville: The University Press of Florida, 1992. 284-285.

----- "To Gronovius, October 1, 1755." "To Collinson, October, 1755." *The Letters and Papers of Cadwallader Colden, 1755-1760. Vol. 5.* New York: New-York Historical Society, 1923. 29-32, 38-39. [Colden Papers]

----- *Plantae Coldenhamiae in provincia noveboracensi americes sponte crescentes. Acta Societatis Regiae Scientiarum Upsaliensis, 1743: 81-136 (1749 ed.); 1744-50: 47-82 (1751 ed.).*

----- "To Robert Whytt" (1758), "To Dr. Gronovius" (October 29, 1745). *The Scientific Letters of Cadwallader Colden. Microfilm.* New York: New-York Historical Society. 1918-1937. 360.

Colden, Jane. *Botanic Manuscript of Jane Colden, 1724-1766.* Ed. E.C. Hall and H.W. Rickett, Garden Club of Orange and Dutchess Counties. New York: Chanticleer Press, 1963.
Colden, Jane. *Botanic Manuscript, or Flora Nov-Eboracensis.* F. von Vangenheim to Sir Joseph Banks. Natural History Museum of London. 1801.

----- "Memorandum of Cheese Made 1756." *The Letters and Papers of Cadwallader Colden, 1755-1760. Vol.5.* New York: New-York Historical Society, 1923. 55-63. [Colden Papers]

- Colden, Jane and Alexander Garden. "Description of the [Gardenia Plant]." *Essays and Observations, Physical and Literary*. Edinburgh: G. Hamilton and J. Balfour, 1756.
- Colden, Jane. "To Alice Colden, May 5, 1747." "To Alice Colden, May 18, 1747." "To Alice Colden, May 27, 1747." "To Alice Colden, June 10, 1747." "To Alice Colden, June 19, 1747." "To Cadwallader Colden, June 20, 1747." "To Cadwallader and Alice Colden, July 5, 1747." "To Alice Colden, November 5, 1749 (Newburgh)." *The Letters and Papers of Cadwallader Colden, 1677-1832 (bulk 1711-1775)*. New York: New-York Historical Society. MSS, Box 12. [Colden Papers]
- Colden, John. "To Jane Colden, Fall 1749." *The Letters and Papers of Cadwallader Colden, 1677-1832 (bulk 1711-1775)*. New York: New-York Historical Society. MSS, Box 12. [Colden Papers]
- Collinson, Peter. "To John Bartram, January 20, 1756." "To John Bartram, December 25, 1767." Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *The Correspondence of John Bartram: 1734-1777*. Gainesville: The University Press of Florida, 1992. 693-695.
- "To Cadwallader Colden." November 10, 1757. *The Letters and Papers of Cadwallader Colden, 1677-1832 (bulk 1711-1775)*. New York: New-York Historical Society. MSS, Box 12. [Colden Papers]
- "To Cadwallader Colden, October 5, 1757." *The Letters and Papers of Cadwallader Colden, 1755-1760. Vol.5*. New York: New-York Historical Society, 1923. 190-191. [Colden Papers]
- Collis, Louise. *Soldier in Paradise: The Life of Captain John Stedman: 1744-1797*. New York: Harcourt, Brace & World, Inc., 1965.
- Coon, David L. "Eliza Lucas Pinckney and the Reintroduction of Indigo Culture in South Carolina." *The Journal of Southern History*. 42.1 (Feb 1976): 61-76.
- Cooper, Susan Fenimore. *Rural Hours*. New York: George P. Putnam, 1850.
- Colden, Jane. *Botanic Manuscript, or Flora Nov-Eboracensis*. F. von Vangenheim to Sir Joseph Banks. Natural History Museum of London. 1801.
- Coppola, Al. The Graduate Center, City University of New York, New York. 18 Feb. 2011. Class Lecture.
- The Graduate Center, City University of New York, New York. 11 March 2011. Class Lecture.
- Crabtree, William and John. *Coldenham*. Date unknown. Photograph. Coldenham Preservation and Historical Society, <http://www.coldenpreservation.org/>. 1 July 2015.

- Cullina, William. *Native Trees, Shrubs, and Vines: A Guide to Using, Growing, and Propagating North American Woody Plants*. New York: Houghton Mifflin Co., 2002.
- Curran, Andrew S. *The Anatomy of Blackness: Science and Slavery in and Age of Enlightenment*. Baltimore: The Johns Hopkins U.P., 2011.
- Darwin, Charles. *On the Origin of Species*. Ed. Julian Huxley. New York: Signet, 2003.
- Davidson, Cathy N. *Revolution and the Word: The Rise of the Novel in America, 2nd Edition*. New York: Oxford U.P., 2004.
- Derrida, Jacques. "The Law of Genre." *Glyph* 7 (1980), 202-232.
- Descartes, Rene. *Principles of Philosophy*. London: D. Reidel Publishing Co., 1983.
- Diderot, Denis. *Encyclopedie, ou Dictionnaire Raisonne Des Sciences Des Arts et Des Metiers*. Paris: André le Breton, Michel-Antoine David, Laurent Durand, Claude Briasson, 1751-1772.
- Dillon, Elizabeth Maddock. "The Secret History of the Early American Novel: Leonora Sansay and Revolution in Saint-Domingue." *NOVEL: A Forum on Fiction (The Early American Novel)* 40.1/2 (Fall 2006-Spring 2007): 77-103.
- Dillon, Elizabeth Maddock and Michael J. Drexler, Eds. "Introduction: Haiti and the Early United States, Entwined." *The Haitian Revolution and the Early United States: Histories, Textualities, Geographies*. Philadelphia: University of Pennsylvania Press, 2016. 1-16.
- Doolen, Andy. *Fugitive Empire: Locating Early American Imperialism*. Minneapolis: University of Minnesota Press, 2005.
- Douglass, Frederick. *Narrative of the Life of Frederick Douglas (1845)*. New York: Millenium Publications, 2014.
- Drexler, Michael J. "Brigands and Nuns: The Vernacular Sociology of Collectivity After the Haitian Revolution." *Messy Beginnings: Postcoloniality and Early American Studies*. New Brunswick: Rutgers U.P., 2003. 175-199.
- , "Introduction." *Secret History: Or, The Horrors of St. Domingo and Laura*. Toronto: Broadview Editions, 2007. 10-37.
- Duff, David. *Modern Genre Theory*. Harlow: Longman Publishers, 1999.
- , *Romanticism and the Uses of Genre*. Oxford: Oxford U.P., 2012.
- Duncan, James. *Lives of Eminent Naturalists with Engraved Portraits Accompanying Each*. Vol. 2. Edinburgh, London, Dublin: W. H. Lizars, S. Highley, and W. Curry, 1840. 17-46.

- Edwards, George. "Account of the Frog-Fish of Surinam." *Philosophical Transactions of the Royal Society of London, 1759-1760*. 51 (1 January 1759): 653-657. Presented to the Society on March 27, 1760.
- Etheridge, Kay. "Maria Sybilla Merian: The First Ecologist?" *Women and Science: Figures and Representations—Seventeenth Century to Present*. Eds. Veronique Molinari and Donna Spalding Andreolle. Newcastle upon Tyne: Cambridge Scholars Publishing, 2011. 35-54.
- Ewan, John. *William Bartram: Botanical and Zoological Drawings, 1756-1788 [Reproduced from the Fothergill Album in the British Museum of Natural History]*. Philadelphia: The American Philosophical Society, 1968.
- Faherty, Duncan. "On the Hudson River Line: Postrevolutionary Regionalism, Neo-Tory Sympathy, and 'A Lady of the State of New-York.'" *Mapping Region in Early American Writing*. Eds. Edward Watts, Keri Holt, and John Funchion. Athens: University of Georgia Press, 2015. 138-159.
- Fothergill, John. "To John Bartram, September/October 1772." Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *The Correspondence of John Bartram: 1734-1777*. Gainesville: The University Press of Florida, 1992. 750-751.
- Freedman, Aviva and Peter Medway, *Genre and the New Rhetoric*. London: Taylor and Francis, Ltd., 1994.
- Frow, John. *Genre (The New Critical Idiom)*. New York: Routledge, 2015.
- Fryer, Darcy M. "The Mind of Eliza Pinckney: An Eighteenth-Century Woman's Construction of Herself." *The South Carolina Historical Magazine*. 99.3 (July 1998): 215-237.
- Gallagher, Catherine. "Introduction: Cultural and Historical Background," "West Africa in the Triangular Trade," "The Caribbean in the Triangular Trade," "Colonial Life in Suriname." *Oroonoko; or, the Royal Slave*. Boston and New York: Bedford/St. Martin's Press, 2000. 3-25, 208-217, 326-337, 337-341.
- Garden, Alexander. "To Colden, May 23, 1755." "To Colden, August 14, 1756." "To Colden, March 14, 1758." *The Letters and Papers of Cadwallader Colden, 1755-1760. Vol. 5*. New York: New-York Historical Society, 1923. 11, 89-92, 227-231. [Colden Papers]
- Gardner, Jared. *The Rise and Fall of Early Magazine Culture: The History of Communication*. Chicago: The University of Illinois Press, 2012.
- Genette, Gerard. "Narrative Discourse: An Essay in Method." New York: Cornell U.P., 1980.

- Goedaert, Johannes. *Metamorphosis naturalis, ofte historische beschrijvinge van den oirspron, aerd, eyenschappen ende vreemde verandeinghen des wormen, rupsen, maeden, vliegen, witjens, byen, motten ende dierghelijcke dierkens meer*. Middelburgh: Fierens, 1662.
- Goudie, Sean X. *Creole America: The West Indies and the Formation of Literature and Culture in the New Republic*. Philadelphia: University of Pennsylvania Press, 2006.
- Graffen, Maria Sybilla. *Der Raupen Wunderbare Verwandlung Und Sonderbare Bl Nahrung (The Wondrous Transformation of Caterpillars and their Curious Floral Alimentation)*. Nuremberg, Frankfurt and Leipzig, Utrecht: Johannes Andreas Graffen, David Funsen, Andreas Knorsen, 1679.
- . *Neues Blumenbuch*. Nuremberg: Johannes Andreas Graffen, 1680.
- Grainger, James. *The Sugar-Cane: A Poem. In Four Books. With Notes*. London: R. and J. Dodsley, 1764.
- Greenblatt, Stephen. *Marvelous Possessions: The Wonder of the New World*. Chicago: The University of Chicago Press, 1991.
- Gronim, Stidstone Sara. "What Jane Knew: A Woman Botanist in the Eighteenth Century." *Journal of Women's History*. 19.3 (Fall 2007): 33-59.
- Grove, Richard. *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860*. Cambridge: Cambridge U.P., 1995.
- Gsell, Georg. *Maria Sybilla Merian*. c. 1700. Copperplate Reversal by Jacobus Houbraken. Rijksmuseum, Amsterdam.
- Hallock, Thomas. *From the Fallen Tree: Frontier Narratives, Environmental Politics, and the Roots of a National Pastoral, 1749-1826*. Chapel Hill: The University of North Carolina Press, 2003.
- . "Locating Early America." *American Literary History*. 26.4 (2014): 765-774.
- . "Male Pleasure and the Genders of Eighteenth-Century Botanic Exchange: A Garden Tour." *The William and Mary Quarterly*, Third Series, 62.4 (Oct 2005): 697-718.
- Harris, Moses. *The Aurelian: Or, Natural History of English Insects, Namely Moths and Butterflies, Together with the Plants on Which They Feed*. London: Printed for the Author, 1766.
- Harris, Sharon M. "Introduction." *Women's Early American Historical Narratives*. New York: Penguin Books, 2003. vii-xxvi.
- Heil, Jenny. "Imperial Pedagogy: Susanna Rowson's Columbus for Young Ladies." *Early American Literature* 47.3 (2012): 623-648.

- Hesse, Mary B. *Models and Analogies in Science*. Notre Dame: University of Notre Dame Press, 1966.
- Homestead, Melissa J. and Camryn Hansen. *Early American Literature* 45.3 (2010): 619-654.
- Hoogbergen, Wim. *The Boni Maroon Wars in Suriname*. Leiden, The Netherlands: E.J. Brill, 1990.
- Hooke, Robert. *Micrographia, Or Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses With Observations and Inquiries Thereupon*. London: Printed by Joseph Martyn and James Allestry, 1665.
- Hitchcock, Peter. "The Genre of Postcoloniality." *New Literary History: Theorizing Genres*. 34.2 (Spring 2003): 299-330.
- Humboldt, Alexander von. *Personal Narrative of a Journey to the Equinoctial Regions of the New Continent by Alexander von Humboldt and Aimé Bonpland*. Vol. 1-3. London: H. Bohn, 1852.
- Hurston, Zora Neale. *Their Eyes Were Watching God (1937)*. New York: Perennial Classics, 1990.
- Iannini, Christopher. *Fatal Revolutions: Natural History, West Indian Slavery, and the Routes of American Literature*. Chapel Hill: University of North Carolina Press, 2012.
- Rutgers University, New Brunswick, NJ. 1 Nov. 2010. Class Lecture.
- James, Mrs. Thomas Potts. "Account of the Bartram Garden." C. Sherman, Son, & Co., May 18, 1864. 1-11.
- Jehlen, Myra. *American Incarnation: The Individual, The Nation, The Continent*. Cambridge: Harvard U.P., 1986.
- Johnson, Rochelle and Daniel Patterson. *Introduction to Susan Fenimore Cooper's Rural Hours (1850)*. Athens: University of Georgia Press, 1998.
- Johnston, David W. "Birds and Natural History Observations in the Life of William Byrd II of Westover." *Banisteria* 5 (1995): 3-11.
- Kolodny, Annette. *The Land Before Her: Fantasy and Experience of the American Frontiers, 1630-1860*. Chapel Hill: The University of North Carolina Press, 1984.
- Kriz, Kay Dian. "Curiosities, Commodities, and Transplanted Bodies in Hans Sloane's *Natural History of Jamaica*." *William and Mary Quarterly* 57.1 (Jan. 2000): 35-78.

- . “Marketing Mulatresses in the Paintings and Prints of Agostino Brunias.” *The Global Eighteenth Century*. Ed. Felicity Nussbaum. Baltimore: Johns Hopkins University Press, 2003. 195-210.
- Laurens, Henry. “To John Bartram, August 9, 1766.” Berkeley, Edmund and Dorothy Smith Berkeley, Ed. *The Correspondence of John Bartram: 1734-1777*. Gainesville: The University Press of Florida, 1992. 670-673.
- Leclerc, Georges-Louis, Comte de Buffon and Louis-Jean-Marie Daubenton. *Histoire Naturelle: Generale et Particuliere, Avec La Description du Cabinet du Roi*. Paris: Imprimerie Royale, 1749-1804.
- Ligon, Richard. *A true & exact history of the island of Barbados : illustrated with a mapp of the island, as also the principall trees and plants there, set forth in their due proportions and shapes, drawne out by their severall and respective scales : together with the ingenio that makes the sugar, with the plots of severall houses, roomes, and other places, that are used in the whole processe of sugar-making, viz. the grinding-room, the boyling-room, the filling-room, the curing-house, still-house, and furnaces, all cut in copper*. London: Printed for Humphrey Moseley, 1657.
- Linnaeus, Carolus. *A General and Universal System of Natural History, Comprising the Three Kingdoms of Animals, Vegetables, and Minerals, Arrange Under Their Respective Classes, Orders, Genera, and Species*. Vol. 12. London: W. Lewis, 1794-1810.
- . *The Economy of Nature* [Transl. of *Oeconomia naturae*]. London: Benjamin Stillingfleet, 1775.
- . *Species Planatarum*. Stockholm: 1753.
- . *Systema Naturae* [Transl. from 1735 Latin]. Edinburgh: Mundell and Son, 1758.
- Long, Edward. *History of Jamaica, Or General Survey of the Antient and Modern State of that Island with Reflections on its Situation, Settlements, Inhabitants, Climate, Products, Commerce, Laws, and Government*. London: T. Lowndes, 1774.
- Lucas, George to Charles Pinckney, (1699-1758), 22 December 1744, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0223> (accessed 2016-03-10).
- , 23 December 1745, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0215> (accessed 2016-03-10).

- , 30 January 1746, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0209> (accessed 2016-03-10).
- Marshall, Humphry. "Specimens Pressed by Rufus King (?), from Marshall, Humphry *Arbustrum Americanum* 1785." New-York Historical Society.
- Marx, Leo. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York: Oxford U.P., 1964.
- McKeon, Michael. *The Origins of the English Novel: 1600-1740*. Baltimore: The Johns Hopkins U.P., 1987.
- McIntosh, Robert P. *The Background of Ecology: Concept and Theory*. Cambridge: Cambridge U.P., 1985.
- "Mechanical Philosophy." Mechanical Philosophy - Background, Major Advocates Of The Mechanical Philosophy, Later Developments, Bibliography. 8 July 2016.
- Merchant, Carolyn. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: Harper and Row Publishers, 1980.
- Merian, Maria Sybilla. *Dissertation Sur La Generation et Les Transformations Des Insectes de Surinam (The Metamorphosis of the Insects of Surinam)*. Paris: A La Haye, Chex Pierre Gosse, 1726.
- , *James Petiver, FRS, Apothecary to the Charter-House: Miscellaneous Correspondence*. March 14, 1703. Sloane MS 4067, ff. 51. The British Library, London.
- , *Metamorphosis Insectorum Surinamensium (The Metamorphosis of the Insects of Surinam)*. Amsterdam : Maria Sybilla Merian, 1705.
- , *New Book of Flowers*. Munich: Prestel, 1999.
- Meyers, Amy R.W. "The Perfecting of Natural History." *Mark Catesby's Natural History of America: The Watercolours from the Royal Library, Windsor Castle*. Ed. Henrietta McBurney. Houston: Museum of Fine Arts Houston, 1997. 11-25.
- Miller, Carolyn. "Genre as Social Action." *Quarterly Journal of Speech* 70 (1984), 151-167.
- Morgan, Philip D. "The Caribbean Islands in Atlantic Context, circa 1500-1800. *The Global Eighteenth Century*. Ed. Felicity Nussbaum. Baltimore: Johns Hopkins University Press, 2003. 195-210. 52-64.

- Mulcahy, Matthew. *Hurricanes and Society in the British Greater Caribbean, 1624-1783*. Baltimore: The Johns Hopkins U.P., 2008.
- Mulry, Kate. "The Scent of 'Flora's Wide Domains': Cultivating Gardens and Political Subjects in the Early Modern English Atlantic." New York University. King Juan Carlos I of Spain Center, New York, NY. 8 May 2014. Lecture.
- Murray, William to Eliza Lucas Pinckney, January 1745, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0345> (accessed 2016-03-11).
- Nash, R.C. "South Carolina Indigo, European Textiles, and the British Atlantic Economy in the Eighteenth Century." *The Economic History Review* 63.2 (May 2010): 362-392.
- Newton, Isaac. "Minutes." *Royal Society Journal Books, 1702-1714*. JBO/11. 27 October 1703. 32-33. The Royal Society of London, London.
- . *Opticks, Or, a Treatise of the Reflexions, Refractions, Inflexions and Colours of Light*. London: Printed for Samuel Smith and Benjamin Walford, 1704.
- . *Philosophia Naturalis Principia Mathematica* (1687). New York: Daniel Adee, 1846.
- Nussbaum, Felicity. *The Autobiographical Subject: Gender and Ideology in Eighteenth-Century England*. Baltimore and London: The Johns Hopkins University Press, 1989.
- . *The Global Eighteenth Century*. Baltimore: Johns Hopkins University Press, 2003.
- Ogilvie, Brian W. *The Science of Describing: Natural History in Renaissance Europe*. Chicago: University of Chicago Press, 2006.
- Opacki, Ireneusz. "The Hybridization of Genre Forms as a Determinant of the Evolution of Poetry." *Pamiętnik Literacki*, 54.4 (1963).
- Parrish, Susan Scott. *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World*. Chapel Hill: University of North Carolina Press, 2006. 103-173.
- Phillips, Dana. *The Truth of Ecology: Nature, Culture, and Literature in America*. Cary, New York: Oxford U.P., 2003.
- Pinckney, Charles Cotesworth (1746-1825) to Eliza Lucas Pinckney, 29 December 1780, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0286> (accessed 2016-03-10).

Pinckney, Elise. "Introduction," Biographical Sketch," "Preface." *The Letterbook of Eliza Lucas Pinckney, 1739-1762*. Ed. Elise Pinckney. Columbia: The University of South Carolina Press, 1997. ix-xxxiii.

Pinckney, Elise, Ed. "Letters of Eliza Lucas Pinckney, 1768-1782." *The South Carolina Historical Magazine*. 76.3 (July 1975): 143-170.

Pinckney, Eliza Lucas to Miss Bartlett, May 20, 1745, in Harriott Horry Rutledge Ravenel, *Eliza Pinckney*. New York: C. Scribner's Sons, Women of Colonial and Revolutionary Times, 1896. 114-115.

Pinckney, Eliza Lucas to Rebecca Raven Evance, (Mrs. Branfill), 25 September 1780, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP1013> (accessed 2016-03-11).

Pinckney, Eliza Lucas. "For Croup," in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP1354> (accessed 2016-03-10).

----- "For a Pain in Ye Face," in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP1246> (accessed 2016-03-10).

Pinckney, Eliza Lucas to Alexander Garden, (1699-1758), 14 May 1782, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0378> (accessed 2016-03-11).

Pinckney, Eliza Lucas to Daniel Horry, Jr, April 16th, 1782, in "Letters of Eliza Lucas Pinckney, 1768-1782," Ed. Elise Pinckney. *The South Carolina Historical Magazine*. 76.3 (July 1975): 166-168.

Pinckney, Eliza Lucas to Daniel (Charles Lucas Pinckney) Horry, 18 February 1787, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0409> (accessed 2016-03-11).

Pinckney, Eliza Lucas. *Journal and Letters of Eliza Lucas*. Ed. Harriott Pinckney Holbrook. Wormsloe, GA: Unknown, 1850.

----- *The Letterbook of Eliza Lucas Pinckney, 1739-1762*. Ed. Elise Pinckney. Columbia: The University of South Carolina Press, 1997.

- Pinckney, Eliza Lucas Marriage Settlement, May 1744, in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0211> (accessed 2016-03-11).
- Pinckney, Eliza Lucas to Charles Cotesworth Pinckney, (1746-1825), [1768], in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP0175> (accessed 2016-03-11).
- Pinckney, Eliza Lucas. "The Receipt Book of Eliza Lucas Pinckney," in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
- Pinckney, Eliza Lucas to Unidentified person, [1753], in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
<http://rotunda.upress.virginia.edu/PinckneyHorry/ELP1015> (accessed 2016-03-11).
- Pluche, Noel Antoine. *Spectacle de la nature: ou, Entretiens sur les particularités de l'histoire naturelle qui ont paru les plus propres à rendre les jeunes gens curieux, & à leur former l'esprit. Première partie. Contenant ce qui regarde les animaux & les plantes*. Paris: Chez la Veuve Estienne & Jean Desaint, 1732-1748.
- Popkin, Jeremy D. "Historians on the Autobiographical Frontier." *American Historical Review* 104.3 (June 1999): 725-48.
- Powell, Douglas Reichert. *Critical Regionalism: Connecting Politics and Culture in the American Landscape*. Chapel Hill: The University of North Carolina Press, 2007.
- Pratt, Mary Louise. *Imperial Eyes: Travel Writing and Transculturation, 2nd Edition*. New York: Routledge, 2008.
- Price, Richard and Sally Price. "Introduction." *Stedman's Surinam: Life in an Eighteenth Century Slave Society: An Abridged, Modernized Edition of Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam by John Gabriel Stedman*. Baltimore: The Johns Hopkins U.P., 1992.
- Raleigh, Sir Walter. *The discoverie of the large, rich, and beautiful empyre of Guiana : with a relation of the great and golden citie of Manoa (which the Spanyards call El Dorado), and of the prouinces of Emeria, Arromaia, Amapaia, and other countries, with their riuers adioyning : performed in the year 1595*. London: Robert Robinson, 1596.
- Ramagosa, Carol Walter. "Eliza Lucas Pinckney's Family in Antigua, 1688-1747." *The South Carolina Historical Magazine* 99.3 (July 1998): 238-258.

- Ravenel, Harriott Horry Rutledge. *Eliza Pinckney*. New York: C. Scribner's Sons, Women of Colonial and Revolutionary Times, 1896.
- Ray, John. *Methodus Insectorum*. Londini: Apud Sam. smith & Benj. Walford, Societatis regiae typographos, 1705.
- Redi, Francesco. *Esperienze Intorno alla Generazione degl'Insetti (Experiments on the Generation of Insects)*. Florence: 1668.
- "[Rice Culture and Trade](#)." *Dictionary of American History*. 2003. *Encyclopedia.com*. 4 Apr. 2016 <<http://www.encyclopedia.com>>.
- Robbins, Paula Ivaska. *Jane Colden: America's First Woman Botanist*. New York: Purple Mountain Press, 2009.
- Roberts, Sian Silyn. "Dispossession and Cosmopolitan Community in Leonora Sansay's *Secret History*." *The Haitian Revolution and the Early United States: Histories, Textualities, Geographies*. Eds. Elizabeth Maddock Dillon and Michael J. Drexler. Philadelphia: University of Pennsylvania Press, 2016. 250-265.
- Rowson, Susanna. *Reuben and Rachel: Or, Tales of Old Times*. Ed. Joseph F. Bartolomeo. Toronto: Broadview Editions, 2009.
- "R.R." "The Surinam Toad." *Classified Papers on Zoology, 1660-1724*. Cl.P/15i/36. N.D. The Royal Society of London, London.
- Sansay, Leonora. *Secret History: Or, The Horrors of St. Domingo and Laura*. Ed. Michael J. Drexler. Toronto: Broadview Editions, 2007.
- Schiebinger, Londa. *The Mind Has No Sex?* Boston: Harvard U.P., 1989.
- Schmidt-Loske, Katharina. "Introduction: Maria Sybilla Merian's 'extremely costly' journey to nature's treasure-house." *Insects of Surinam, 1705*. Cologne: Taschen, 2009. 7-20.
- Schoepf, Johann David. *Materia Medica Americana potissimum regni Vegetabilis*. Erlangen: Sumtibus Palmii, 1787.
- Schueller, Malini Johar and Edward Watts. "Introduction: Theorizing Early American Studies and Postcoloniality." *Messy Beginnings: Postcoloniality and Early American Studies*. New Brunswick: Rutgers U.P., 2003. 1-28.
- Schulz, Constance. *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.

- . “The Letterbooks of Eliza Lucas Pinckney and Harriot Pinckney Horry,” in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
- . “Lucas Family Plantation Management,” in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
- . “Pinckney Family Residence in England, 1753-1758,” in *The Papers of Eliza Lucas Pinckney and Harriott Pinckney Horry Digital Edition*, ed. Constance Schulz. Charlottesville: University of Virginia Press, Rotunda, 2012.
- Seba, Albertus. *Locupletissimi rerum naturalium thesauri accurata descriptio – Naaukeurige beschryving van het schatryke kabinet der voornaamste seldzaamheden der natuur (Accurate description of the very rich thesaurus of the principal and rarest natural objects)*. Amsterdam: Apud Janssonio-Waesbergios, & J. Wetstenium, & Gul. Smith. 1735-1765.
- Shapin, Steven. *The Scientific Revolution*. Chicago: The University of Chicago Press, 1996.
- Shteir, Ann. *Cultivating Women, Cultivating Science: Flora’s Daughters and Botany in England 1760 to 1860*. Baltimore: Johns Hopkins University Press, 1996.
- Silver, Sean R. “Locke’s Pineapple and the History of Taste.” *The Eighteenth Century*. 49.1 (2008). 43-65.
- “Sir Hans Sloane,” Natural History Museum. Web. 16 March 2011.
<<http://www.nhm.ac.uk/nature-online/science-of-natural-history/biographies/hans-sloane/index.html>>.
- Sloane, Hans. *A Voyage to the Islands Madera, Barbados, Nieves, S. Christophers and Jamaica, with the Natural History of the Herbs and Trees, Four-Footed Beasts, Fishes, Birds, Insects, Reptiles, & C. Of the last of those Islands*. 2 vols. London: Printed by B.M. for the author, 1707-1725.
- Smith, Charlotte. *Desmond*. Ed. Antje Blank and Janet Todd. Toronto: Broadview Press, 2001.
- . *The Wandering of Warwick*. Gale ECCO Print Editions, 2012.
- Smith, Henry Nash. *Virgin Land: The American West as Symbol and Myth*. Cambridge: Harvard U.P., 1950.
- Smith, Sidonie and Julia Watson. *Reading Autobiography: A Guide for Interpreting Life Narratives, 2nd Edition*. Minneapolis: University of Minnesota Press, 2010.

- Smith, Sidonie and Julia Watson, Eds. *Women, Autobiography, Theory: A Reader*. Madison: University of Wisconsin Press, 1998.
- Southerne, Thomas. *Oroonoko: A Tragedy As it is Acted at the Theatre Royal, By His Majesty's Servants*. London: Printed for H. Playford, B. Tooke, and S. Buckley. 1696.
- Stalnaker, Joanna. *The Unfinished Enlightenment: Description in the Age of the Encyclopedia*. New York: Cornell U.P., 2010.
- Stearn, William T. "The Origin of the Male and Female Symbols of Biology." *Taxon* 11.4 (May 1962), 109-113.
- Stedman, John Gabriel. *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam (1796)*. Wageningen, Netherlands: R.A.J. Van Lier, 1971.
- *Narrative of a Five Years' Expedition Against the Revolted Negroes of Surinam, Transcribed for the First Time from the Original 1790 Manuscript*. Ed. Richard Price and Sally Price. Baltimore: The Johns Hopkins U.P., 1988.
- Sudworth, George B. "United States Department of Agriculture, Division of Forestry, Checklist of Forest Trees of the United States." Washington: Government Printing Office, 1898. 102-103.
- Swammerdam, Jan. *Historia Insectorum generalis, ofte algemeene verhandeling van de bloedeloose dierkens (The Natural History of Insects)*. Utrecht: 1669.
- Sweet, Timothy. *American Georgics: Economy and Environment in American Literature, 1580-1864*. Philadelphia: University of Pennsylvania Press, 2002.
- Todorov, Tzvetan. "The Origins of Genres." *New Literary History*. 8.1 (Autumn 1976). 159-170.
- Unknown Artist. *John Gabriel Stedman*. 1783. Portrait.
- Unknown Artist. *Maria Sybilla Merian*. 1679. Portrait.
- Vail, Anna Murray. "Jane Colden, An Early New York Botanist." *Torreyia* 7 (1907): 21-34.
- *The Old Private Burying Ground in the 'Spring Hill' Farm*. February 17, 1907. Photograph. Frontispiece to Jane Colden, *Botanic Manuscript (1750s)*.
- Walls, Laura Dassow. *The Passage to Cosmos: Alexander von Humboldt and the Shaping of America*. Chicago: The University of Chicago Press, 2009.
- Watts, Edward and Keri Holt. "Bordering Establishments: Mapping and Charting Region before 1860 (Introduction)." *Mapping Region in Early American Writing*. Eds. Edward Watts, Keri Holt, and John Funchion. Athens: University of Georgia Press, 2015. 1-21.

- Wells, Helena. *Constantia Neville; Or, the West Indian*. Gale ECCO Print Editions, 2012.
- . *The Stepmother; A Domestic Tale from Real Life*. Gale ECCO Print Editions, 2010.
- Wertheimer, Eric. *Imagined Empires: Incas, Aztecs, and the New World of American Literature, 1771-1876*. Cambridge: Cambridge U.P., 1999.
- Wiegand, Dometa. "Alexander von Humboldt and Samuel Taylor Coleridge: The Intersection of Science and Poetry." *Coleridge Bulletin: The Journal of the Friends of Coleridge* 20 (Winter 2002): 105-13.
- Williams, Harriet Simons. "Eliza Lucas and Her Family: Before the Letterbook." *The South Carolina Historical Magazine* 99.3 (July 1998): 259-279.
- Williams, Raymond. *Writing in Society*. London and New York: Verso Press, 1983.
- Winberry, John J. "Reputation of Carolina Indigo." *The South Carolina Historical Magazine* 80.3 (July 1979): 242-250.
- Winkfield, Unca Eliza. *The Female American*. Ed. Michelle Burnham. Toronto: Broadview Editions, 2001.
- Woertendyke, Gretchen. "Romance to Novel: A Secret History." *Narrative* 17.3 (Oct 2009): 255-273.
- Woodfin, Maude H. "William Byrd and the Royal Society." *The Virginia Magazine of History and Biography* 40.1 (Jan 1932): 23-34, and 40.2 (April 1932): 111-123.
- Wright, Joseph. *An Experiment on a Bird in the Air Pump*. 1768. Oil on Canvas. National Gallery, London.
- Zagarri, Rosemarie. *Revolutionary Backlash: Women and Politics in the Early American Republic*. Philadelphia: University of Pennsylvania Press, 2007.
- Zemon Davis, Natalie. *Women on the Margins: Three Seventeenth Century Lives*. Boston: Harvard U.P., 1995.