Ecocriticism and Early Modern English Literature

Green Pastures

Todd A. Borlik

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Introduction

> I will yet, to satisfy and please myself, make a Utopia . . . a poetical commonwealth of mine own, in which I may freely domineer, build cities, make laws. . . . I will have no bogs, fens, marshes, vast woods, deserts, heaths, commons, but all enclosed (yet not depopulated, and therefore take heed you mistake me not). . . . I will not have a barren acre in all my territories, not so much as the tops of mountains: where nature fails, it shall be supplied by art.
>
> —Robert Burton[1]

Stumbling upon the miniature utopia tucked inside Robert Burton's sprawling tome, *The Anatomy of Melancholy*, few readers today will likely applaud its dismissive, cavalier outlook on non-human nature. It is certainly worlds away from Ernest Callenbach's *Ecotopia* (1975), a visionary if somewhat wooden pulp novel about an ecologically enlightened society in the Pacific Northwest, whose inhabitants revere wilderness as sacred precisely because it is desolate. Thoreau saw in wilderness the preservation of the world; most early moderns tended to regard the word as synonymous with wasteland. Open and sparsely inhabited spaces, Lear's heath for instance, were not sources of wonder and solace, but of fear and trembling, or even impatience with nature's profligacy. Like Pascal's God, the Puritan ethic abhors a void. Nature does not exist for its own opaque, independent purposes; its raison d'être was to nourish and enrich human life. In those inhospitable, infertile places where it failed to perform its function adequately, human intervention was necessary to improve its manifest defects. If nothing else, this excerpt from Burton reminds us that Francis Bacon was not the only person to advocate "the enlarging of the bounds of human empire" in the early seventeenth century. Infamously, these attitudes in Tudor and Stuart England received a theological justification from Judeo-Christian cosmogony, and its account of mankind's privileged niche in the universe.

> Let us make now Man in our image, Man
> In our similitude, and let them rule
> Over the Fish and Fowl of Sea and Air,
> Beast of the field, and over all the Earth,
> And every creeping thing that creeps the ground.[2]

The repetition of "creep" in the final line is just as revealing as the repetition of "Man" in the opening line. With stunning dispatch, Milton's redaction

of Genesis 1:26-8 exposes the invidious axis between Christianity, patriarchy, and anthropocentrism. It underscores the connection between man (note the gendered noun) and God, as well as the stature and lowly status of beasts, whose posture constitutes proof of their ontological inferiority. In contrast, the poet touts mankind's bipedal physiognomy, now regarded as a gradual evolutionary development, as a divine mandate for human supremacy. In the Renaissance, the Judeo-Christian worldview found further validation in classical texts like Cicero's *On the Nature of the Gods*, in which the Stoic Balbus outlines a hierarchical and anthropocentric vision of the universe in which plants exist for the sake of animals, animals for the sake of man, and man for the sake of worshipping God. Accepting the premise that "man's nature transcends that of all other living creatures" points to the inexorable conclusion that "all things in this universe of ours have been created and prepared for us humans to enjoy."[3] To state the obvious, it would be criminally naive to come to early modern literature expecting to find fully formulated theories of biotic egalitarianism. Most people in pre-industrial society did not have the luxury to be sentimental about wilderness. As Aldo Leopold gruffly puts it, "wild things . . . had little human value until mechanization assured us of a good breakfast."[4]

Given the prevailing cultural assumptions outlined earlier, it is perhaps not surprising that the emergent green criticism, with its pronounced contemporary slant, has been slow to flower in early modern literary studies. By and large, the early landmark studies have assumed that all literature from, say, Constantine's conversion to the publication of *The Origin of Species* must adopt an utterly anthropocentric view of nature, or subscribe to Christian theology's *contemptu mundi*. In *The Environmental Imagination,* for instance, Lawrence Buell takes Thoreau's *Walden* as the terminus a quo for ecologically conscious literature. *The Ecocriticism Reader*, meanwhile, which has become something of a touchstone for subsequent work in the field, is heavily tilted toward twentieth-century texts and contains only a single passing reference to Shakespeare. From a twenty-first century perspective, this thumbnail sketch of pre-modern attitudes may seem accurate; however, a closer inspection of "The Medieval/Elizabethan World-Picture" soon uncovers a thousand fissures in it. Keith Thomas's sweeping survey, *Man and the Natural World,* marshals a staggering array of evidence indicating that inhabitants of early modern England were very much preoccupied with their natural surroundings and far from achieving a consensus about humanity's place within them.[5]

As a crisper picture of the ecological history of the early modern world has developed in recent scholarship, it has become evident that people in the sixteenth century thought about a number of issues that continue to vex and galvanize the environmental movement four hundred years later. To name a few that will figure most prominently in the ensuing study: a population boom and widespread deforestation provoked anxieties about a looming energy crisis. In response, the Tudor monarchs passed several laws regulating heavy industry such as iron works in order to restrict

environmental degradation. As the price of timber soared, people began to extract and burn sea-coal in unprecedented quantities, emitting noxious sulfur-laden fumes in towns throughout the land. In London, the merchant classes produced and consumed ever-increasing quantities of luxury goods, which engendered unease about materialism as both a spiritual hazard and a contributing factor to the scarcity of the land's biomass resources.[6] Scarcity was an ever-present wolf at many doors in Tudor England, one that became particularly threatening in the 1590s when, as contemporary chronicles record and paleo-climatologists have verified, the country experienced a streak of volatile weather that led to near famine conditions in many rural areas. To cope with consecutive years of meager crop yields, many people were forced to adopt habits and beliefs that would encourage what we now call sustainability. In the midst of this ecological turmoil, theological texts and philosophical treatises on ethics, skepticism, and republican government raised serious questions about mankind's right to exploit animals, and even the inanimate landscape, for human purposes. Historians sometimes speak of the effort in the 1870s to stop the damming of the Tuolumne River in the Hetch Hetchy Valley in Yosemite as the birth of the environmental movement; yet over two hundred and fifty years earlier, attempts to drain the fens in East Anglia provoked a similar outcry and fierce opposition from locals.[7] Elizabethan attitudes toward the natural world were, in other words, far more multi-faceted, and even at times conservation-oriented, than has generally been recognized.

While it would be anachronistic to cast early modern poets as modern ecologists, it would be equally erroneous to assume that they were oblivious or indifferent to the environmental developments unfolding around them. Philip Sidney, for instance, had a keen interest in botany and a profound regard for animal and plant life that made him suspicious of both hunting and agrarian capitalism. Michael Drayton openly opposed the draining and enclosure of the fens in Lincolnshire. His chorographical epic, *Poly-Olbion*, portrays these wetlands not as desolate wastelands, but as a flourishing, picturesque habitat for a variety of fish and waterfowl, co-existing alongside the local human population: "O who is he can tell / The species that in me for multitudes excel!" boasts a personification of the fen, adding

> That whosoever would a Landskip rightly hit,
> Beholding but my Fennes, shall with more shapes be stor'd
> Than Germany, or France, or Thuscan can afford.[8]

Drayton also praises the "umbrageous wyld" (22.1619) and bemoans the destruction of forests throughout England, particularly in his native Warwickshire. Whether or not Shakespeare made an annual pilgrimage back to Stratford (as Aubrey reports), he must have been aware of these developments in his home county. No doubt the deforestation contributed to *As You Like It*'s conflicted representation of Arden as both pocked with

"purlieus" and as an idyllic sylvan oasis. Pastoral nostalgia reflects more than a puerile longing for a mythical Golden Age, the poet's lost childhood, or a state of epistemological innocence; it is often stirred by real environmental trauma. So, too, is hard pastoral. Orlando and Adam's desperate quest for food recalls the actual conditions in the Midlands in the wake of the dearth. Scarcity of foodstuffs is an explosive issue in *Coriolanus* as well, which displays an intuitive understanding of Malthusian economics and rails against the acquisitive citizens' mania for "cushions, leaden spoons, / Irons of a doit, doublets."[9] While post-colonial critics have understandably compared Caliban with the indigenous inhabitants of the Caribbean or the subaltern Irish, his plight also bears a similarity to that of the residents of the Lincolnshire fens, dispossessed by the land improvement schemes of Jacobean aristocrats.

> All the infections that the sun sucks up
> From bogs, fens, flats, on Prosper fall, and make him,
> By inchmeal, a disease!
> [*A noise of thunder is heard*]
> (2.2.1–3)

As industrial civilization now finds itself besieged by an increasingly unstable climate and the threat of toxins in our air and water supply, Caliban's curse reads like a prophecy of ecological retribution. Rather than control the weather like Prospero, the prosperous Baconian technocracy that emerged in the early modern period is slowly discovering that the thunder is now on Caliban's side.

Even Renaissance texts that seem to endorse human dominion appear more difficult to appraise the more closely one examines them. While Burton is hostile to fens and wilderness, his utopia can also be seen as espousing environmental management for the purposes of preserving resources for future generations. If Milton subordinates nature and woman to man, he also, as Diane McColley and Ken Hiltner have cogently argued, praises Eve's stewardship of the garden and interprets the fall, in part, as an allegory about human alienation from the natural world, the loss of place.[10] If some early modern thinkers could question patriarchy, could they not question anthropocentrism as well? The Bible, obviously, is not a monolithic document, and neither can three sentences from Genesis be taken as the definitive statement of environmental beliefs in the early modern era. If the Judeo-Christian scripture appears to sanction human lordship over the planet, it also suggests that the natural world was an effusion of divine creativity. The verses in which God surveys his creation and deems it to be good invites readers to share this sense of nature's fundamental benevolence and look upon it as something to be treated with sanctity and respect. As Augustine recognized, Paul and Plato were in agreement that divinity glimmered within the phenomenal world; in the words of Romans 1:20, "the invisible things of him from the

creation of the world are clearly seen, being understood by the things that are made." Although Cicero's Stoic, Balbus, posits human happiness as the sole *telos* toward which the universe strives, the other orators in Cicero's text deflate this claim as a hubristic delusion.

The spirit of ambiguity and skepticism that haunts *On the Nature of the Gods* is, I believe, vital to the Renaissance understanding of mankind's niche in the cosmos; it leaves an indelible stamp on authors such as Petrarch, Montaigne, Sidney, Donne, Ralegh, and Shakespeare. Take for instance Hamlet's speech to Rosencrantz and Guildenstern, long considered a *locus classicus* of Renaissance humanism. After hailing human beings as "the paragon of animals," the oration culminates with the sobering declaration that the species is merely the "quintessence of dust." The sense of the phrase, usually taken to mean something like dust at its most dusty, would carry an alternate charge for a Renaissance audience. In medieval and classical philosophy (in which Hamlet is, of course, steeped), quintessence referred to a mysterious fifth element of which the stars were supposedly composed, and which was thought to be latent in all things. Though it displaces Hamlet's mirth, the message here should give ecocritics reason to smile. "Man," it turns out, does not stand above and apart from the natural world. Nor does he truly possess an angelic apprehension of the universe, as the play's uncertainty about the new cosmology confirms. Despite the critical fixation with his cerebral interiority, Hamlet's "man" is fundamentally an embodied being. Insofar as the soul remains a viable concept for Hamlet, it is a collection of infinitesimal specks of perpetually decomposing and recomposing matter, a truth he confronts firsthand in his *tête-à-tête* with Yorick.

The bathos that undercuts Hamlet's monologue also shapes Donne's elegy, *Anatomy of the World*:

> This man, this world's vice-emperor, in whom
> All faculties, all graces, are at home;
> And if in other creatures they appear,
> They're but man's ministers and legates there,
> To work on their rebellions and reduce
> Them to civility and to man's use:
> ....
> This man, so great, that all that is, is his,
> Oh! What a trifle and a poor thing he is![11]

In Shakespeare and Donne, the conflicting perspectives among Cicero's interlocutors are now synthesized within the consciousness of a single individual; however, it is radical doubt about human exceptionalism that reverberates the loudest. Scholars have often characterized these dour musings on man as reflecting either a residual medieval or contemporary Calvinist pessimism about the human condition.[12] But this outlook can just as easily

be framed as a reaction to the scientific upheaval sparked by Copernican astronomy, compounded by a renewed interest in classical skepticism. The possibility that the universe contains other inhabited worlds, home to potentially higher orders of beings, begs the question which Burton poses in his *Anatomy*: "how are all things made for man?" (2:55). Likewise, for Donne the "new philosophy" literally and figuratively de-centered human beings from their presumed niche as the cynosure of the universe. Read alongside works like Wordsworth's "Lines Written in Early Spring," the ecological undertone of Donne's elegy becomes immediately audible. The natural world has a subjective right to exist without being reduced "to civility and to man's use." Insofar as early modern texts—from Montaigne's *Apology for Raymond Sebond* to Shakespeare's *King Lear*—reject anthropocentric bias in favor of a chastened view of mankind's place in the cosmos, they present a cultural precedent for ecocriticism's current efforts to promote a humbler understanding of human subjectivity and well-being as inextricably linked with that of the non-human.

Rather than dismiss the early modern period as ecologically benighted, critics should pay the era special scrutiny as one of the most pivotal moments in the environmental history of the planet. Thanks to the information revolution triggered by the printing press, the advent of modern science, Reformation theology, overseas exploration, the rise of global capitalism, and the technological take-off of the West, European societies gained an unprecedented capacity to explain, admire, and exploit the environment. This study will analyze some classic, as well as a few marginal, works of early modern literature to expose how they document, sanction, or resist these developments. Did the humanist exultation of "Man" and mankind's creative prowess entail a denigration of the natural world? Or could art serve to embellish Nature in order, as Sidney put it, "to make the too much loved earth *more lovely*?"[13] If certain authors' opinions and actions seem wildly inconsistent from the perspective of modern ecology, it is worth recalling that in this respect they are not very different from people today, even self-professed literary ecologists (myself included) who consume large amounts of compressed wood-pulp and zip about the country on CO_2-spewing jets to attend conferences on, say, the Green Poetics of Whitman's *Leaves of Grass*.[14]

Admittedly, if one were to subject the canonical works of Renaissance literature to the criteria for an environmental text outlined by Lawrence Buell, few would pass muster.[15] One early modern text that does meet Buell's litmus test on all four counts is Drayton's *Poly-Olbion*: (1) *Human history is implicated in natural history.* As opposed to modern nature writing (which privileges untouched wilderness), the "landskips" in *Poly-Olbion* are repositories of cultural memory. Through prospopoeia, the poem transforms the rivers, forests, fens, and meadows into a confederacy of historians, relaying the sagas of all the various battles, coronations, and martyrdoms they have witnessed. Historical events are shaped by the specific environment in which they occur; conversely, playing host to history further

endears the land to humans. To name just one example, Robin Hood's fame is entangled with Sherwood, and the association with the legendary outlaw fuels Drayton's plea for the forest's preservation. For Drayton, love of antiquity and love of nature are two blossoms on the same bough. (2) *The human interest is not the only legitimate interest*. One of the epic's most astonishing features is that human beings intrude on the narrative only from nature's point of view. Primarily peopled by trees, rivers, nymphs, dryads, and naiads, who often denounce the exploitation inflicted upon them by mankind's pursuit of "vile gain" (12.528), nature in *Poly-Olbion* is anthropomorphic without being anthropocentric. Human flourishing is predicated on ecological stability, while the natural world is revealed to possess purposes aloof from human interests. The poem invites readers to see the various topographical features interacting as a self-sustained whole. Nothing in nature exists superfluously. The hills of Malvern rebuke those who dismiss mountains as barren warts on the land, as Drayton observes how the snowmelt swells the rivers by which the neighboring valleys "maintaine their somers pride" (7.102). In irrigating the earth, the personified rivers seem to offer a precedent for human care. This segues into Buell's third criterion: (3) *Accountability to the environment is part of the text's ethical orientation*. Drayton repeatedly advocates environmental stewardship and issues grim warnings about the consequences of over-farming, over-fishing, deforestation, and incipient industrialization. (4) *A sense of the land as process*. This idea is engrained in many early modern texts through the topos of mutability, which spurred Drayton's muse as much as it did Spenser's. Steeped in chronicle history, Drayton is aware that environmental degradation is nothing new under the English sun. In Song 16, the River Lee complains that King Alfred dammed its source to entrap a marauding Danish fleet, and is consoled by the naiad Sturt:

> Your case is not alone, nor is (at all) so strange
> Sith everything on earth subjects itself to change
> Where rivers sometime ran is firme and certaine ground
> And where before were Hills, now standing lakes are found.
> (16.301–304)

If he portrays this degradation as a melancholy inevitability, Drayton also channels these feelings to oppose or soften the human impact on the land. Finally, the epic advocates what we would now recognize as bio-regionalism. Divided into 30 songs that venture through the 39 historic counties plus Wales, its chorographical scope heralds the particular natural features, legends, customs, and delicacies of each shire. The counties thus emerge as ecological spaces more than political entities. The town of Bristol itself is likened to a country-estate, which "hath itself what may suffice" (3.260). It boasts a self-sustained economy, where the local produce of the land dictates the range and pace of consumption, without relying

on foreign imports. In Book 2, Drayton pledges he will "to the varying earth so sute, my varying vaine/ That Nature in my work thou maist thy power avow" (2.8–9). Indeed, the prefix "poly" in the title registers Britain's variegated topography, and connotes the poem's "celebration of the manyness and muchnes of the land itself."[16] Despite the book's nationalist project and its proto-ecological vision of Nature as a unity circumscribing a teeming multiplicity (which I will explore in Chapter 1), regionalism remains the dominant narrative perspective. Sadly, few readers today have the patience to trudge through Drayton's epic. From an ecocritical viewpoint, however, its imposing length is actually integral to the book's meaning. The "herculean toil" it requires of the reader reflects the inhuman dimensions of the landscape it seeks to encompass, a mental exertion almost equivalent to the physical one required to perambulate the country on foot. Drayton's epic may be exceptional in meeting all of Buell's strictures, yet the chapters that follow will examine dozens of early modern texts by the likes of Shakespeare, Sidney, Donne, Milton, and Spenser, which fulfill a good number of the four.

But applying Buell's guidelines too rigidly, as he himself confesses, would essentially whittle the environmental canon down to late twentieth-century nature writing. Non-fiction works such as *A Sand County Almanac, Desert Solitaire*, and *Pilgrim at Tinker Creek* do deserve a place on college syllabi. Yet the complex ethical and aesthetic responses great fiction elicits—its ability to sharpen our perceptions through vivid diction and metaphors, re-freshen our sense of this planet's organic splendor, evoke subtle affinities among biological life, and dramatize the shared struggle for surviv-al—make it a powerful forum for imagining ecological community. This sense of ecological community may be instilled even more strongly by texts that manage to transcend the idiosyncrasies of time and space. Few modern readers may share my enthusiasm for *Poly-Olbion*, but how can we account for the enduring appeal of a play like *King Lear*? How can Shakespeare be so confident that a moldy tale of a king and his three daughters set in prehistoric Britain will deeply affect audiences in London in 1605? How has this same play continued to evoke such a visceral reaction over the past four centuries, inspiring spin-offs from the likes of Nahum Tate to Akira Kurosawa, while the original still packs theatres in modern Manhattan? To view the popularity of texts like *King Lear* across centuries and countries as due solely to the machinations of the Shakespearean culture industry, or as a side effect of British imperialism, seems sadly reductive.[17] Perhaps we have become too squeamish when dealing with the universality of literary narratives. Obviously, the impact of historical and cultural contingencies must not be ignored. Nor can we discount human difference entirely: a dog, a cat, a rat will not sit through a three-hour play and howl for Cordelia's death. Yet studying the classics may force us to attend more closely to certain fundamental biological conditions of life and cognitive features of the human mind, which have not radically altered over the past

40,000 years. This is a task for which Renaissance ecocriticism is particularly well-fitted.

For early modern ecocritics of a more historical bent, there also remains an urgent need to trace what Lynn White famously called "The Historical Roots of Our Ecologic Crisis." White's article is a provocative exposé on the consequences of Christianity's assault on pagan animism (and yet it is safe to say that its twelve pages have by no means exhausted the topic). White, of course, is not the only one to pursue this investigation, which has produced a growing line-up of suspects. Carolyn Merchant's impassioned and often chilling book, *The Death of Nature*, fixates not on Christianity but on the triumph of the mechanistic science that ushered in the Industrial Age. Previously, Martin Heidegger had blamed Socratic philosophy for constructing a rational subject that approaches the natural world as an object that serves a purely utilitarian purpose, a process that culminates (or reaches a disturbing nadir) in the Cartesian split. Finally, in one of the foundational works of critical theory, Horkheimer and Adorno pointed the finger at the Enlightenment for the technological atrocities of the Second World War. If different critics finger different culprits, there seems to be a general consensus that the legacy of the Enlightenment has in some way compounded the problem. Efforts to palliate or "un-think" this legacy with a discourse based on Enlightenment values of uninhibited reason, utility, and human self-interest are hamstrung because they allow the opposition to set the terms of the debate. One of the major undertakings of this book, then, will be to sift through the texts of pre-Enlightenment authors to recover alternative modes of conceptualizing and engaging with the environment.

Nature is hardly terra incognita in the voluminous scholarship on the literature of the English Renaissance. Thanks to iconic works by E.M.W. Tillyard, Theodore Spencer, C.S. Lewis, and S.K. Heninger, among others, critics have long recognized that the medieval/early modern vision of a holistic, orderly universe exerted an incalculably powerful impact on contemporary literature.[18] Even after the "New" Historicism began to explode the World Picture as the propaganda effort of a hierarchical society under siege, unpacking the significance of nature for early moderns continued to exercise critics. Richard Marienstras' *New Perspectives on the Shakespearean World*, Jeanne Addison Roberts' *The Shakespearean Wild*, Linda Woodbridge's *The Scythe of Saturn*, and John Gillies' *Shakespeare and the Geography of Difference* have all in various ways sought to reconstruct early modern attitudes toward our terrestrial surroundings as a prerequisite for a proper appraisal of literary texts. Yet, as Simon Estok has duly observed, most of these studies written before the turn of the millennium would be more properly classified as "green thematicism," rather than ecocriticism as the term is now usually received.[19] William Rueckert, who coined the name of this theoretical enterprise back in 1978, defined it as an "application of ecological concepts to the study of literature." Pitching a somewhat

wider tent, Cheryl Glotfelty summarizes its mission as the "study of the relationship between literature and the physical environment." While there remains some disagreement about the field's methodology, the majority of ecocritics today (myself included) share an activist bent and see their work as promoting ways of reading literary texts that can, however indirectly, motivate and guide us to strive for a more ethical co-existence with the rest of the biotic community.

Early modern scholars, usually at the vanguard of new developments in literary theory, have lagged far behind Romanticists and Modernists in embracing ecocriticism, to the point that Estok has diagnosed the field as suffering from "eco-phobia," an insecurity about discussing environmental issues. Yet now that the new critical discipline has gained greater respectability and traction in English departments, early modernists are finally showing signs of overcoming this reluctance. Indeed, the past few years have seen a remarkable efflorescence of studies seeking to bring ecological concerns to bear on canonical authors such as Shakespeare and Milton. In 2007 Karen Raber compiled an annotated bibliography of "Recent Ecocritical Studies of Renaissance Literature" that spans twenty pages.[20] Perusing this bibliography should be enough to persuade even the staunchest skeptic that early modern texts are astonishingly responsive to the concerns of literary ecology. The list of publications continues to swell, as Raber herself has recently co-edited an essay collection titled *Early Modern Ecostudies* (in which a version of my second chapter appears). Panels on topics such as "Shakespeare and the Environment" and "Imagining the Forest in Renaissance Literature" are becoming commonplace at professional conferences. Interest in the subject, in other words, is gathering momentum.

Two of the first works out of the gate were Gabriel Egan's *Green Shakespeare* and Robert Watson's *Back to Nature*, both published in 2006. Each reveals the new facets that glimmer from sixteenth-century texts when viewed through an ecocritical prism. Each abounds with insights to which many of the interpretations in this study are indebted. Yet despite their manifold assets, both books are not without their shortcomings, some of which are spelled out in the dueling reviews the two wrote of each other's work.[21] *Ecocriticism and Early Modern English Literature* borrows from both these texts, while at the same time seeking to expand upon and/or cavil with several of their premises. In particular it seeks to recover some of the ethical and even spiritual dimensions of early modern reading. For literary ecology to have an intellectual as well as a material impact, it will need to combine both theory and practice or, as Sharon O'Dair memorably puts it, pastoral and georgic modes of criticism, laboring in tandem.[22]

Although I follow a somewhat different itinerary, embarking on this trek with these path-breaking studies before me has been a decided advantage. This book synthesizes and refines much of the scholarship that has appeared

in the past decade. It also assumes a slightly wider scope, surveying the period rather than dwelling on a single author, to allow for a greater multiplicity of perspectives to emerge. One of my overarching aims has been to illustrate how humanism, despite being a favorite punching bag of environmentalists, stimulated the recovery and dissemination of pagan poetry and philosophy, creating the conditions for an environmental ethos in the early modern era. Undoubtedly, some critics will find this undertaking hopelessly anachronistic, like a Marxist analysis of *Beowulf.* But few will, I think, dispute that redefining the past to suit the purposes of the present is a cultural activity with a long historical precedent. In the late Middle Ages and Renaissance, philosophers such as Thomas Aquinas launched an ambitious program to reconcile classical ethics with Judeo-Christian dogma, collating Aristotle's twelve virtues with the Mosaic Decalogue. A similar effort is now under way (in which Chapter 4 participates) to siphon the old wine of Aristotle's moral philosophy into new environmentally friendly bottles. If modern philosophers have been able to enlist Aristotle as a spokesperson for environmental ethics, literary critics should be able to perform a similar task for writers with minds as perspicacious and agile as those of Shakespeare, Sidney, and Spenser. Bringing cultural, intellectual, and environmental history to bear on early modern literary texts, I hope to showcase some of the ways that they can cultivate both an aesthetic receptivity to and ethical responsibility for non-human nature.

The opening chapter scrapes the rust off the Great Chain of Being, one of the most enduring and ingenious of human schemes to impose intelligibility on the environment. While cultural materialists have justifiably sought to debunk the Renaissance "World Picture" as the ideology of an elite, its holism also fostered an "analogical habit of mind" that can be seen as a forerunner of an ecological sensibility. Chapter 1 answers Egan's call to resuscitate this schema, upping the amperage with new evidence, while further prescribing how a green chain must differ from its shopworn prototype. Specifically, it traces this analogical habit back to the Greek philosopher Pythagoras, arguing that, despite his ambiguous reputation in the Renaissance, many thinkers—including Shakespeare, Marlowe, Jonson, Spenser, and Donne—drew on his ideas to construct a vision of human subjectivity as rooted in non-human nature. After documenting how the Pythagorean-Platonic doctrine of the *anima mundi* informed the apotheosis of Nature in medieval and Renaissance literature, I inspect poems and portraits depicting Queen Elizabeth as Dame Nature, reading them as statements of the Crown's jurisdiction over the nation's natural resources. In contrast to New Historicist claims that Spenser's encomia to Elizabeth invariably mystify monarchal power, I argue that his vision of Dame Nature underscores the limitations of royal dominion over the natural world. Finally, the chapter considers how Spenser's mobilization of Dame Nature might enable ecocritics to reflect on the benefits and pitfalls of James Lovelock's Gaia hypothesis.

Chapter 2 uncovers an intriguing link between the *Old Arcadia* and the rise of fiscal forestry, revealing how Sidney evokes the pastoral fantasy of the Golden Age in response to anxieties about environmental instability in the wake of the "timber famine" that shook late sixteenth-century England. Drawing on his aesthetic theories outlined in the *Defence*, as well as the phenomenology of Merleau-Ponty, the chapter contrasts the Orphic tropes that saturate Sidney's poetry with the psychic hierarchy of Aristotelian natural philosophy, arguing that the *Arcadia* often scrambles the ontological divide between articulate human subject and a mute, passive landscape. The chapter concludes with a survey of *Poly-Olbion*'s besieged and indignant forests.

Chapter 3 demonstrates how texts by Spenser, Shakespeare, Nashe, and Milton sublimate vestiges of nature worship in Catholicism, outlawed by the Reformation. While opening an airway for green theory to resuscitate the old anthropological school of criticism, I argue that Shakespeare conceived of *A Midsummer Night's Dream* in part as a theatrical ritual allaying the fear of climate change generated by the "Little Ice Age" of the 1590s. The chapter thus complicates and refines Lynn White's notorious accusation by insisting that Puritanism in particular hastened the disenchantment of nature and that poetry provided a discursive outlet for pantheistic sentiments.

Chapter 4 spotlights the potential synergy between pastoral and environmental ethics, positing that Renaissance authors employed the genre to satirize consumptive dispositions and inculcate temperance and stewardship—virtues that can be seen as akin to modern notions of sustainability. The first wave of ecocritics such as Joseph Meeker, Carolyn Merchant, Terry Gifford have, following Raymond Williams, almost unanimously damned pastoral as promoting a static, cloyingly idyllic view of the rural landscape that whitewashes the unsavory aspects of agrarian capitalism. Likewise, the work of New Historicists such as Louis Montrose has taught a whole generation of early modern scholars to see the pastoral primarily as a vehicle of Tudor absolutism. Chapter 4 counters these readings by illustrating the way the mode encourages what Buell calls "the aesthetics of relinquishment"—a more organic, low-impact lifestyle that is respectful and appreciative of nature, without being puritanical or impossibly austere. Supported by close readings of the Legend of Temperance and *The Mask Presented at Ludlow Castle*, the chapter culminates in an exposé of Spenser's and Milton's attacks on air pollution created by the early modern coal industry.

Chapter 5, titled "Rethinking Dominion," looks at the role of republican political theory in promoting alternatives to the problematic authority granted to humans by the Judeo-Christian creation myth. Culling evidence from anti-hunting diatribes and dietaries, the chapter illuminates the tendency of Renaissance humanists to view the natural world as a fallen Republic. Republican sympathies in More, Sidney, and Shakespeare

go paw-in-hand with respect and empathy for non-human nature. It also surveys discourses about Lenten fasts and the odd preponderance of meat imagery in plays like *As You Like It*, *Hamlet*, and *Timon of Athens*, to underscore Shakespearean drama's concern with the ethics of eating. To sum up, Renaissance texts offer a stunning vista onto a pre-Enlightenment sensibility from which to critique Enlightenment principles often seen as contributing to our current ecological predicament. At the same time, this book makes a tacit demand for a more historically informed appreciation of ecocriticism as a contemporary "version of the pastoral."

It would have been a relatively mindless procedure to inventory all the passages in Elizabethan literature that clash with deep ecology. Opting for the more arduous route, I have sought to explore the features of early modern texts that dovetail with green virtues like stewardship, temperance, and compassion for non-human nature. My intent was not merely to construct a genealogy of the environmental sensibility, however. Rather I have made an equal effort to document how early modern texts enshrine ways of thinking and feeling about nature that might complicate or enable us to think critically about certain assumptions of modern environmentalism. An ecocritical study of Renaissance pastoral, like the texts it examines, risks coming across as atavistic or sentimental. Obviously, some aspects of the pre-modern worldview—reincarnation, astrology, pantheism—are no longer as tenable as they were in the past. Nevertheless, investigating how Renaissance authors found literary inspiration in some of the alien, unorthodox, and/or disturbing beliefs of classical antiquity and even medieval Catholicism will, I believe, prove an instructive exercise. One of the main arguments for preserving the literary inheritance of the past is that it can cultivate openness to unfamiliar modes of feeling, scientific-theological beliefs, or cultural practices, which allow us to reflect upon the situated-ness our own. According to pre-Newtonian physics, smoke rises because it is light and an apple falls because it is heavy. Objects, in other words, are not bandied about by external forces. Instead, they possess an innate tendency for motion that amounts to a quasi-agency. Post-Enlightenment readers tend to be insufficiently aware of the extent to which "the Elizabethan world was animistic and vitalistic, indeed, panpsychistic."[23] A proper understanding of Shakespearean imagery and metaphor demands (if I may be so bold as to tamper with Coleridge's classic formula) the suspension of Enlightenment disbelief in the magical elements of the early modern worldview. This alone makes it worthy of ecocritical recuperation.

Of particular interest to early modern ecocritics, however, are the ways in which this natural philosophy gets refracted in the rhetorical and syntactical aspects of literary texts. Synecdoche, for instance, forces us to see parts as constitutive of wholes and vice versa, and anthimeria—the verbing of nouns and nouning of verbs—can unsettle the grammatical structures that filter our perception of nature as passive and inanimate. If there be

any truth in the claims of cognitive linguists that studying Shakespeare can rewire the brain's neural pathways, grappling with the densely figurative language of early modern texts may help us to re-think the relation between object and subject, nature and the human, as far more fluid than contemporary usage permits.[24]

At the same time, insofar as studying pre-modern texts can foster a sense of continuity with pre-industrial civilization, it can pose a challenge to Hegelian narratives of human history as one of interminable progress that grates against the self-repeating cycles of nature and its seasons. As Robert Pogue Harrison has warned (in a phrase that might serve as this study's mantra), "detachment from the past . . . culminates, in one way or another, with detachment from the earth."[25] Striking the same note, but in a more upbeat key, the Duke in *As You Like It* tries to boost the morale of his fellow exiles in Arden: "Hath not old custom made this life more sweet / Than that of painted pomp?" (2.1.2–3). The Duke appeals to "old custom," by which he likely means pastoral literature,[26] to fortify and uplift them in a time of hardship, to be content with less. Since a great deal of early modern literature, including even Shakespeare's pastoral comedy, now qualifies as "old custom," it can, I think, in an age of ecological anxiety, perform something like the same function for us.

THE KNOTTED GARDEN: TOWARD AN EARLY MODERN ECOPOETICS

Early practitioners of literary ecology, recoiling from the cerebral and byzantine logic of post-structuralism, waged a coup to re-capture what David Abrams has called "the spell of the sensuous." In *The Environmental Imagination*, Buell gripes about various critical approaches that reduce the literary nature-scape to a conglomeration of "formal or symbolic or ideological properties rather than a place of literal reference."[27] In a complete inversion of Derridean deconstruction, some environmentally minded critics have gone so far to posit, "anything cultural must be understood as part of a natural ecosystem."[28] Yet even if bracketing nature as a cultural construct is disempowering to those who would resist its transformation into a "gigantic toolshed" for human beings, it would be naive to imagine we can totally skirt the ubiquitous cultural apparatus that conditions our experience of the world. Increasingly, ecocritics have begun to recognize the need to mediate between the two warring factions, noting that an alliance might enable each to supplement the weaknesses of the other. Kate Soper, one of the architects of the truce, writes,

> Just as a simplistic endorsement of nature can seem insensitive to the emancipatory concerns motivating its rejection, so an exclusive

emphasis on discourse and signification can very readily appear evasive of ecological realities and irrelevant to the task of addressing them.[29]

Buell adopts a similar line in his second ecocritical study, toning down his prior zeal to propose a "myth of mutual constructionism," an endless game of give-and-take between nature and culture as twin forces that mutually re-fashion one another.[30]

Ecocritical readings of Renaissance literature can, I will argue, guide us toward a more sophisticated understanding of how mutual construction works than generally emerges from literary analysis of modern nature writing. Despite its obvious allure, nature writing is in some ways a problematic genre in that it tends to sequester nature in remote corners of the globe, or in pristine sanctuaries like Yosemite, totally apart from where we live our lives and make our everyday decisions that impact the well-being of the planet. To combat this mentality, William Cronon argues that we need to jettison our "bipolar moral scales" and learn to "see a natural landscape that is also cultural, in which city, suburb, the pastoral, and the wild each has its proper place."[31] Renaissance literature can aid us in this endeavor. The works of Shakespeare, Spenser, and Sidney display an exceptionally nuanced understanding of the interplay between art and nature that offers a blueprint for reconciling ecological assumptions of a pure and essentialized Nature with post-structuralism's attempt to reduce the non-human world to a cultural construct. In this respect, the study of Renaissance literature offers a useful corrective for the tendency to fetishize wilderness among the first wave of ecocritics.

In the *Defence of Poetry*, Sidney states, "There is no art delivered to mankind that hath not the works of nature for his principal object, without which they could not consist, and on which they so depend, as they become actors and players, as it were, of what nature will have set forth" (78). Anticipating the metaphor that Shakespeare would famously emboss, Sidney, too, sees the world as a stage, but is even more explicit about placing the promptbook in Nature's hands. Sidney creates a troubling mish-mash of Christian theology and Platonic notions of poetry as divine possession when he claims that literature is proof God originally set human beings "beyond and over all the works of that second nature" (79). Yet his understanding of humanity as fallen and imperfect fetters the rational subject so that the poet ultimately "goeth hand in hand with nature" (78) rather than transcends it. For Sidney, the end of knowledge is to promote virtuous action in the world rather than cognitive narcissism about mankind's intellectual superiority. This portion of the *Defence* is usually overlooked by critics who fixate on the exemption Sidney grants to poets to range "within the zodiac of [their] own wit" (78). Yet very few of the fantastical figures he alludes to in the text—Demigods, Cyclops, Chimeras, Furies—actually appear in his writing. A more revealing glimpse of Sidney's aesthetic

theories can be found in the description of Kalander's garden in *The New Arcadia*, written a few years after the *Defence*:

> The backside of the house was neither field, garden, nor orchard—or rather it was both field, garden, and orchard—for as soon as the descending of the stairs had delivered them down, they came into a place cunningly set with trees of the most taste-pleasing fruits; but scarcely they had taken that into their consideration but that they were suddenly stepped into a delicate green, of each side of the green a thicket bend, behind the thickets again new beds of flowers, which being under the trees were to them a pavilion, and they to the trees a mosaical floor, so that it seemed that art therein would needs be delightful by counterfeiting his enemy, error, and making *order in confusion*. In the middest of all the place was a fair pond whose shaking crystal was a perfect mirror to all the other beauties, so that it bare show of two gardens, one indeed, the other in shadows; and in one of the thickets was a fine fountain made thus: a naked Venus of white marble wherein the graver had used such cunning that the natural blue veins of the marble were framed in fit places to set forth the beautiful veins of her body.[32]

This passage encourages ways of seeing similar to those promoted by Cronon. Field, garden, and orchard alone do not define the landscape, which is simultaneously natural and cultural. Trees become pavilions, flowerbeds mosaics, and, in an instance of wordplay so characteristic of Elizabethan literature, veins veins. The landscape design is not only glorifying human ingenuity in creating order from confusion, but also magnifying an artistic order latent in nature. So, too, is Sidney's prose. One cannot read the *Arcadia* without a delight in patterned language. Sidney seems to be consciously fashioning an analogy of the relationship between nature and art in his vision of the two gardens, "one indeed, the other in shadows," that is, reflected in the pond. The poet does not traffic in visions of chimeras, but in mimetic reflections of an external reality, albeit one that is, like Kalander's garden, already acculturated. Heninger frames the dynamic nicely: "The golden world of the poets cannot be wholly fantastical, but must relate to the brazen world of nature. Art must be cogent to the reality it presumes to interpret."[33] Shortly after leaving the garden, Kalander's guest enters a picture gallery where he is entranced by one of the portraits. Although to the beholder it "seemed the skill of painter bestowed on the [woman] new beauty," the narrator vouches that the converse is also true: "the beauty of her bestowed new skill of the painter" (15). Through the rhetorical scheme antimetabole, Sidney formulates—far more elegantly than Buell—a theory of mutual construction that celebrates nature's agency within human art.

Whereas formalist critics conceived of the literary text as a self-contained artifact, ecocritics need to explain how the text is both artificial and organic, a by-product of human culture, yet shaped by an encounter

with what is "out there." Instead of dusting off the well-wrought urn, early modern ecocritics could, I would like to propose, contribute to the advent of a new Formalism by imagining a poem or a play as a knotted garden. These hedges and flower-beds popular in Tudor horticulture are intricately arranged and trimmed in conformity with the age's fondness for pattern and symmetry, but are, nonetheless, composed of "what nature has set forth." Rife with semantic knots, double plots, and parallel phrasing and syntax, Elizabethan literature, too, often strives to find a patterned elegance in reality, an underlying structure in the bewildering panorama of organic nature.

Appropriately, Shakespeare refers to a "curious knotted garden" (1.1.236) in *Love's Labour's Lost*, a pastoral comedy that delights in rhetorical contrivances and figurative language. A similar setting provides the backdrop for Donne's "Twickenham Garden." When the lovelorn speaker proves unable to find solace in the garden, he pleads to be merged with it:

> Love let me
> Some senseless piece of this place be
> Make me a mandrake, so I may grow here
> Or a stone fountain weeping out my year. (29)

In the garden, Donne encounters the earth not simply as an "object of" but as an "occasion for" experience. This experience, in turn, generates the poem. John Dixon Hunt has described how the formal poetics of landscape gardening can encourage "a creative coupling of perceiving subject and object perceived."[34] "Twickenham Garden" offers a memorable example of this as the poet projects himself into a mandrake and a statue.

The metamorphosis into a weeping statue, a product of human artifice, suggests that, for Donne, the beauty of art can supplement the inhuman beauty of the garden. A proper understanding of this facet of the poem is inaccessible without due attention to its intricate structure and prosody. Divided into three nine-line stanzas featuring the rhyme scheme *ababbccdd* and a complex modulation of five-pentameter and four-tetrameter lines, the verse mimics the elegant design of the garden that serves as the poem's mis-en-scène. As Donne would elsewhere observe, "Grief brought to numbers cannot be so fierce / For, he tames it, that fetters it in verse" (16). Through its stylized prosody, the poem attains an equipoise that belies the poet's complaint. In *The Art of English Poesy*, Puttenham makes several elaborate comparisons between the poet and the gardener, calling them "coadjutors" of Nature, and notes that inter-lacing rhyme in verse was sometimes referred to as "knots."[35] The synthesis between art and nature in early modern literary culture is also evident in its tendency to speak of rhetorical figures as "flowers," to the point that Henry Peacham could title his 1577 manual on classical rhetoric *The Garden of Eloquence*. If moderns find rhetoric overwrought, early moderns such as Sidney, Peacham, and

Spenser's mysterious friend E.K. thought of it as intensifying and enriching perception. Paradoxically, the highly "artificial" style of Elizabethan verse was, for its contemporaries, eminently natural; poetry was valued for its ability to generate an impression of verbal order comparable to an organic order within the biophysical world. Nowhere is this sensibility more on display than in Puttenham's defense of analogy, the frame, as it were, of the World Picture:

> This lovely conformity, or proportion, or convenience between the sense and the sensible hath nature herself first most carefully observed in all her own works, then also *by kind grafted it in the appetites of every creature* working by intelligence to covet and desire and *in their actions to imitate and perform,* and of man chiefly before any other creature, *as well as in his speeches as in every other part of his behavior.*
>
> (348, italics added)

Such comments may strike some critics today as suspiciously ideological. Yet Puttenham's conviction that poetry should convey a latent proportion in nature, and that this, in turn, could condition human behavior, lends an ecological credibility to the arts of prosody and rhetoric. Although he pre-dates Darwin by almost three centuries, Puttenham's declaration that Kind (that is, Nature) "grafts" an appetite for order in its creatures corresponds with the work of "evocritics" like Brian Boyd, who claim that all living things, but especially the higher primates, have an evolutionary proclivity for pattern. "Art," according to Boyd, "concentrates and plays with the world's profusion of interrelated or intersecting patterns."[36] Early modern literature, thanks in part to what Joel Altman called "The Tudor Play of Mind," tends to be even more intricately patterned than modern texts. These patterns can be linguistic, as in Shakespeare's use of rhetorical schemes like parison ("more than kin and less than kind"), rhyming couplets that close out a scene ("the play's the thing"), and recurring motifs or iterative imagery (theatre, madness, the classics, disease, astronomy, food). In Hamlet's first soliloquy he wishes his flesh would melt; in the second brief soliloquy he commands his sinews to stiffen. They can also occur at the level of plot and character: the narratives of Laertes and Fortinbras parallel that of Hamlet; the scene in which Polonius dispatches Reynaldo to spy on his son is followed by Claudius ordering Rosencrantz and Guildenstern to spy on his nephew.[37] To its Renaissance apologists, such masterfully crafted literature was capable of promoting civic virtues like decorum (or decency), foresight, discretion, justice, and cooperation. In a similar spirit, contemporary ecocritics may want to think more deeply about how these virtues can be pressed into service on behalf of the greater biotic commonwealth. From the perspective of evolutionary psychology, art plays a vital and practical role in human development. By improving our pattern recognition, art improves brain function, boosting our capacity to adapt

and survive. Attending to the formal properties of literary texts may not reverse global warming or cleanse a polluted bay, but there may be something more at stake than mere personal delight.

Accrediting art with an evolutionary purpose calls for a reconsideration of form and beauty as categories of literary analysis. As a result of valorizing aesthetic distance, a Kantian ideal of disinterestedness, "the greater part of the history of aesthetic theory since the eighteenth century has been a collective exercise in the promulgation of alienation."[38] The advantage of the garden model over the well-wrought urn is that the former can promote an aesthetic of engagement rather than detachment. In the standard work on Renaissance horticulture, Roy Strong perceives the geometrical rigor of Henry VIII's gardens as emblematic of royal dominion over nature. Pointedly, Milton's Eden features no "curious knots" (4.242). But neither does the dream garden of Francis Bacon. Even when setting aside a portion of it for "natural wildness," Bacon speaks of gardening as a "royal ordering" of nature.[39] If Royalist gardens and their commanding "prospects" encouraged proprietary attitudes, Elizabethans knew of Republican gardens as well that required the "sophisticated involvement of a moving spectator." The gardens of Adonis, Kalander's House, and Twickenham all adhere more closely to the Republican-style gardens of Venice, which celebrated harmony, proportion, and a collaboration between art and nature, that is, between the whims of the gardener and the plant-life the soil will support.[40] Just as Kalander's paradox-studded garden exhibits "order in confusion," Sidney's *Arcadia* carves out a textual space for pondering and reconciling opposites: dead and animate, civilization and wilderness, natural and artificial, subject and object.

Gardens are also, like art, sites for reflecting upon and forging community. Not coincidentally, Cicero's *De oratore* is set in a garden, a background that encourages conversation, debate and deliberation, which the author believes are vital to a flourishing republic. Likewise, Thomas More has Raphael recount his travelogue on a bench in the narrator's garden. The Utopians take great pride in cultivating their gardens and King Utopus has his urban planners sprinkle green spaces throughout the nation's cities. As Julian Yates has remarked, More's gardens represent a humanist ideal of the good life, a site of "purposeful leisure" in which to admire the "visible mechanicism" of the universe.[41] But they are also places for getting one's hand's dirty. The Utopians all serve two years on farms to learn the rudiments of agriculture. While they delegate hunting to criminals, they work their own gardens, and have "a zest in keeping them" (4:121). Even Shakespeare's royalist gardens seem less concerned with dominion than with expressing how the garden's natural beauty or fertility has been nurtured through human care and cultivation. It is true that many early moderns regarded a world without people as the ecological equivalent of anarchy. Thus in *Richard II* the "knots disordered" (3.4.47) in York's garden symbolize the political upheaval in the realm. A similar mindset informs Burgundy's plea for peace at the end of *Henry V*:

> And all her [France's] husbandry doth lie on heaps
> Corrupting in its own fertility
> Her vine, the merry cheerer of the heart,
> Unpruned dies; her hedges even-plashed
> Like prisoners wildly overgrown with hair
> Put forth disordered twigs.
>
> (5.2.39–44)

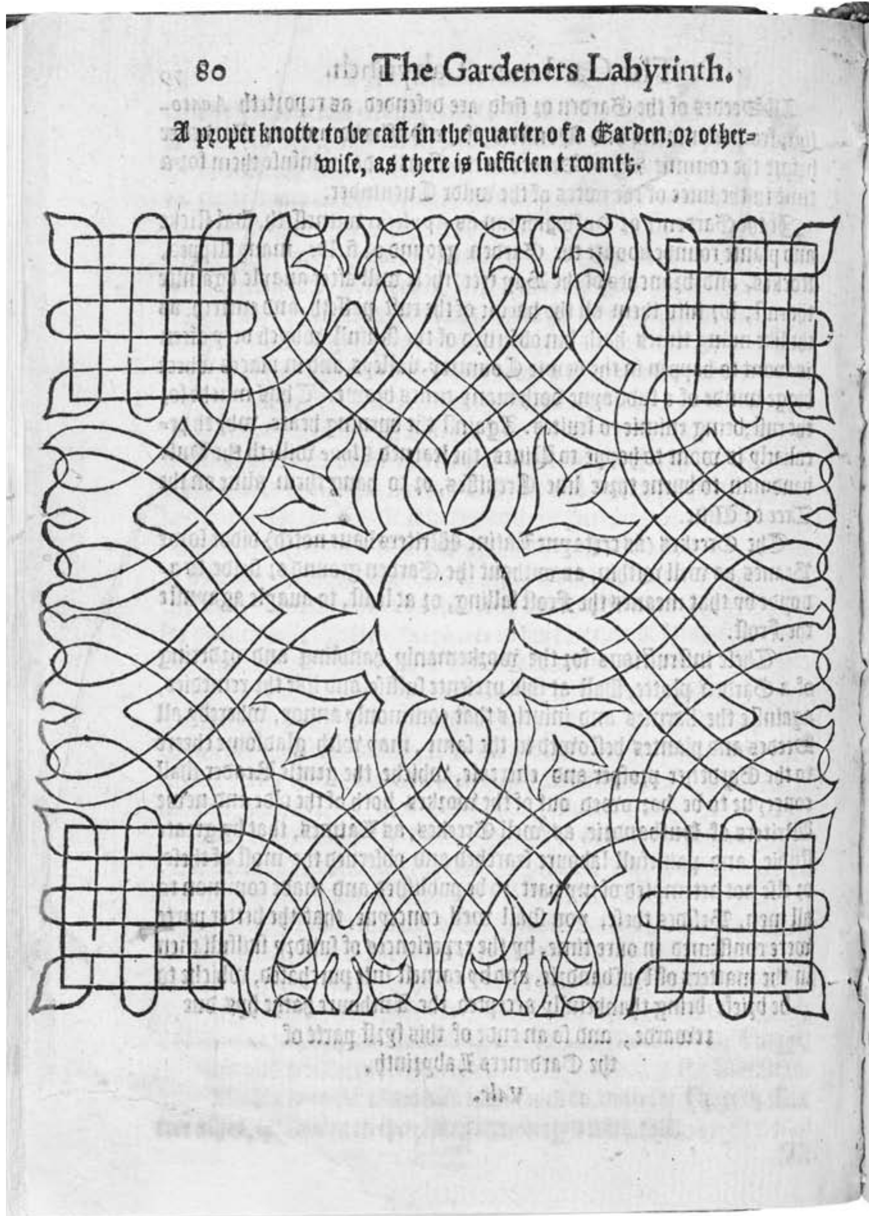
Yet both plays depict the state's proper stance toward nature as one of benign management rather than exploitation. In *Richard II*, the gardener binds up the "dangling apricots" when their over-laden boughs threaten the health of the tree. Likewise, Burgundy observes that the vine will die without anyone to tend it. In Shakespeare's gardens, Milton's Eden, and early modern horticultural manuals, "gardening is directed toward a restraint that encourages nature to fulfill herself more truly."[42] Since the invention of agriculture, humans and plants have co-existed for so many millennia that in certain contexts their relationship verges on mutual dependence. To the chagrin of some contemporary ecocritics, Elizabethan literature features few odes to the unspoiled wild. But its admiration for a well-maintained, "even-plashed" garden does provide something else of equal value: an ethos of care-taking and stewardship, which it sees as the responsibility of private individuals and public institutions both.[43]

The early moderns' passion for order and symmetry in political ideology, poetry, and garden design do not simply reflect their stratified social matrix but also their experience of a natural world that is both menacing and benevolent, volatile yet complexly inter-connected. While modern poetry has tended to reject prosody as constrictive, the modern preference for vers libre is an aesthetic that can only emerge in a civilization where nature's unruliness no longer commands the dread and respect it possessed in pre-industrial society. Hence Kant's discourse on the sublime coincides with the advent of modernity, when it becomes easier to sentimentalize the wild. Unfortunately, this infatuation with the Kantian sublime in post-Romantic literature has led to a corresponding neglect of the beautiful. If the sublime bespeaks a commendable regard for the wild, the responsiveness to natural beauty relayed in literature is not without certain benefits of its own. The perception of nature as delightful, consoling, or fragile can instill a desire to conserve it. Working from the widely credited definition of fairness (one shared by Francis Bacon) as "a symmetry of everyone's relation to each other," Elaine Scarry has persuasively argued that the perception of beauty can awaken, not anesthetize, our desire for social and environmental justice.[44] When an object, be it a poem or garden, is deemed beautiful, "even if it is inanimate, it comes to be accorded a fragility and consequent level of protection normally reserved for the animate. . . . Beauty seems to place requirements on us for attending to the aliveness (or in the case of objects) the quasi-aliveness of our world, and for entering into its protection."[45]

Since literary aesthetics, for better or worse, inevitably inform our notions of environmental aesthetics, an appreciation for pattern, order, and symmetry in art can promote a corresponding appreciation for such attributes within nature. More importantly, it can enkindle a desire for a similar equilibrium in our relationship with the rest of the biosphere. In the *Defence*, Sidney asserts that prosody cultivates a taste for harmony and proportion, which may have pragmatic, political applications (100–101). When these aesthetic benchmarks predispose us to cherish stability and balance in the natural world, the study of literature assumes a certain ecological onus. This approach is not entirely new. In one of the foundational essays of ecocriticism, William Rueckert cites Barry Commoner's First Law of Ecology, "everything is connected to everything else," as a guiding principle of close reading.[46] Yet Rueckert's comparison between poetry and green plants fails to recognize the degree to which poetic craft is rooted in culture. Literary scholars still must approach nature through the mediation of words. Simply because it is mediated, however, it does not follow that the human relationship with the biophysical world is inauthentic. On this point I agree with Watson: accepting that our connection to the environment is epistemologically slippery does not absolve us from an ethical responsibility toward it. Where we differ is in my reading of language and metaphor as bridges over the very gulf they seemingly instantiate.[47] No doubt scholars will continue to debate the transparency of the windows in the prison-house of language; some will continue striving to pick its locks. Yet all ecocritics will, I think, want to believe that the texts we study and teach can have a modest but tangible impact on how we inhabit and interact with the world. Formalist beauty results from a care and economy with the resources of language. Part of literature's contribution to environmental aesthetics, then, could be to nourish, however obliquely, these virtues for the task of planetary stewardship. It is this ethos of care and economy, rather than the chastening vastnesses of the Romantic sublime, that an early modern ecoformalism might seek to recapture.

In imagining a poem as a knotted garden, my aim is not to dictate some universal law of literary criticism. Rather my purpose is to encourage ways of approaching literary texts that can counter-balance environmentalism with deconstruction, formalism with historicism's attention to social context, and ecocriticism's presentist impetus with an awareness of valuable precedents from the past. It is only right that a movement that champions biological diversity should promote corresponding diversity in its methodology. Early modernists can make certain contributions to literary ecology as important as any insights derived from contemporary nature poetry. To further establish the credibility of their undertaking, early modern ecocritics could turn to the work of Martin Heidegger, whose love of Greek philosophy was shared by many Renaissance humanists. For Heidegger, art affords a unique medium for reconciling *physis* and *techne*, thus reconstituting a subject whose knowledge does not elevate it over and against its

environment.[48] Such a philosophy would hardly startle writers like Puttenham, Sidney, and Shakespeare. All of them in some degree equate the poet's output with what Shakespeare calls "the curious workmanship of nature"



80 The Gardeners Labyrinth.

A proper knotte to be cast in the quarter of a Garden, or other-wise, as there is sufficient roomth.

Figure I.1 An Elizabethan Knot Garden, from Thomas Hill, *The Gardener's Labyrinth* (London: 1577). Reproduced with permission of the Folger Library.

(*Ven.* 734). The line reflects the belief that organic life exhibits artistic impulses, which scholastic philosophers dubbed *Natura naturans*, that is, Nature naturing. The intellectual historian Pierre Hadot has recently summarized the ecological upshot of this outlook:

> If people consider themselves part of nature because art is already present in it, there will no longer be opposition between nature and art; instead human art, especially in its aesthetic aspect, will be in a sense a prolongation of nature and then there will no longer be a relation of dominance between nature and mankind.[49]

The first part of this excerpt repeats, in essence, the same logical acrobatics Polixenes performs in his debate with Perdita in *The Winter's Tale*. On the downside, treating art as nature once removed runs the risk of granting humans carte blanche to rearrange the world as we deem convenient, justifying all sorts of technological interventions, not all of them as benign as grafting. But to the extent that this mentality fosters a profound aesthetic regard for, and empathetic engagement with, the non-human, early modern literature can be, figuratively speaking, a knot that binds readers more closely to the earth.

1 Reincarnating Pythagoras

Anima Mundi and Renaissance Gaia Theory

> Much has been learned since the end of the eighteenth century in the study of nature based on evolutionary theory, genetics, ecological theory; but it is no accident that ecological theory—which is the basis of so much research in the study of plant and animal populations, conservation, preservation of nature, wildlife and land use management, and which has become the basic concept for a holistic view of nature—has behind it the long preoccupation in Western civilization with interpreting the nature of earthly environments, trying to see them as wholes, as manifestations of order.
>
> —Clarence Glacken[1]

In the midst of a relatively peaceful fin de siècle decade, anxiety about the aging childless Queen, who had reigned so well for so long, coincided with periods of turbulent weather and dearth. Roughly two years after her death, Shakespeare wrote *King Lear*, an apocalyptic tragedy that can be seen in retrospect to signal the demise of the so-called Elizabethan World Picture. In 2001, after a long fin de millennium decade of geo-political stability and prosperity in the West, a disputed election, Islamic jihad, and recession coincided with scientific reports on an up-tick in global temperature, triggering widespread concern that the environmental overreach of industrialized nations has gravely affected our planet's long-term inhabitability. I call attention to this overlap not to discredit the truth of ecology or the recent groundswell of green criticism in academia. The search for "manifestations of order" in nature occurs with far too much regularity to be dismissed as a mere backlash or anodyne against political upheaval. Yet this search does become particularly intense during eras of accelerated change and uncertainty. These transitional moments in the past, of which the late sixteenth and early seventeenth century remains one of the best documented in English literature, harbor lessons that can illuminate and orient our own search in the present. The Renaissance itself rummaged for insights in the thought of antiquity, and that, in turn, is where this search for the origins of the belief in the inherent orderliness of the universe must begin.

One of the first individuals to expound a conviction in the organic integrity of the cosmos is the pre-Socratic sage Pythagoras. Best known today for the mathematical theorem that bears his name, Pythagoras is a remarkably complex and prescient thinker whose legacy deserves more thorough consideration than it has been afforded by either ecocritics or scholars of

early modern English literature. If one may judge a philosopher by his enemies, it is a decisive mark in his favor that Pythagoras incurred the scorn of Francis Bacon. While Bacon's hostility to Aristotle is notorious, he waged an equally bitter smear campaign against Pythagorean cosmology. In an overlooked yet characteristically slashing passage, the Lord Chancellor complains that the Pythagorean sect "did first plant a monstrous imagination; which afterwards was, by the school of Plato and others, watered and nourished. It was that the world was one entire perfect living creature" (2:640). Seeking to uproot the heresy, Bacon debunks their superstitious teachings that the tides were the respiration of the ocean, and the earth itself was vivified by a *spiritus mundi*:

> This foundation being laid, they might build upon it what they would; for in a living creature, though never so great (as for example, in a great whale) the sense and the affects of any one part of the body instantly make a transcursion throughout the whole body; so that by this they did insinuate, that no distance of place, nor want or indisposition of matter, could hinder magical operations; but that (for example) we might here in Europe have sense and feeling of that which was done in China; and likewise we might work any effect against matter; and this not holpen by the co-operation of angels or spirits, but only by the unity and harmony of nature. (2:640-641)

Thanks to his role in writing the obituary of the animistic universe, Bacon has become a favorite whipping boy of environmental historians. With each new increasingly dire prognosis of the planet's health, there comes a mounting recognition (not to mention a twinge of trepidation) that Europeans may very well "have sense and feeling of that which was done in China." The irony lurking in the previously cited passage is that Bacon, while discrediting Pythagorean cosmology with his right hand, frequently personifies nature for his own purposes with his left. Inspecting his gendered representations of nature as female, critics such as Carolyn Merchant and William Leiss have notoriously accused Bacon of crafting a sadistic epistemology, where scientific inquiry resembles the sexually abusive inquisition of a witch. Recently, scholars have sought to complicate this cardboard version of Bacon as the sinister mastermind of the modern environmental crisis—some of the sexist tropes were embellished by Bacon's Victorian translators, his metaphors are not invariably violent, his only extended personification of nature depicts it as the male satyr, Pan, and so forth. To some extent Bacon is simply a convenient scapegoat; it would be facile to assert that he single-handedly sparked the so-called scientific revolution of the seventeenth century.[2] Yet his hostility toward the Pythagorean-Platonic doctrine of an *anima mundi,* or world soul, his effort to discount it as absurdly "magical," represents something of a tipping point. It is, I will argue, a marked departure from the opinions expressed by many of the

leading minds of the Elizabethan age. After Bacon, the scientific mentality begins its slouch toward the uninhibited interrogation and subjugation of the natural world "to enlarge the bounds of human empire." Lorraine Daston remarks that by the late seventeenth century, Baconian philosophers like Robert Boyle saw nature as "an artifact rather than a potentially usurping artisan," and reviled the anthropomorphic representation of it as verging on idolatry.[3] Since the *anima mundi* recognizes both a sanctity and subjectivity in nature, which encourages human beings to reflect on the ecological impact of their actions, it is tempting to speculate how the course of Western civilization might have differed if this notion had retained the viability it enjoyed in the sixteenth century.

Many feminist critics are justifiably concerned that the tendency to speak of "Mother Nature" inevitably stakes out culture as a male domain, reinforcing patriarchal notions of women as somehow unsophisticated, irrational beings whose energies would be best devoted to childbearing and childrearing. Yet in medieval and Renaissance England, particularly during that era when a powerful female monarch occupied the throne, the representation of Nature as a quasi-divine empress could also emphasize the status of all mortal human beings (both men and women, peasants and earls) as *biological subjects*, embodied beings dependent on the environment for their nourishment, propelled by carnal drives, swayed (so it was believed) by innate temperaments, humoral imbalances, and astral influences, and susceptible to the flesh's thousand natural shocks.[4] Equally important, the anthropomorphic fantasy of Nature as a living creature was both informed by and perpetuated an animistic mindset that made it difficult, in Lynn White's phrase, "to exploit nature in a mood of indifference to the feelings of natural objects." Roman agricultural texts, for instance, instruct farmers to offer expiatory prayers and sacrifices to wood spirits before thinning a grove.[5] These rites had a practical ecological purpose, since having to kill some of one's livestock every time one wanted to fell a tree would discourage over-harvesting.

While I have designated the period as "early modern" in the title of this book to underscore its continuity with contemporary society, the Renaissance, unfashionable as the term is today, remains a useful label insofar as it stresses the recovery and renewed prestige of pagan learning in Europe in the centuries following Petrarch's coronation as a living embodiment of Greek and Roman culture. Renaissance humanists advocated a greater receptivity to non-Christian natural philosophy, ethics, spirituality, ways of relating to and being in the world. Similarly, one of the key objectives of an early modern ecocriticism must be to recover alternative, pre-Enlightenment modes of conceptualizing and engaging with nature. Post-modern historians of science have taught us to exercise caution when framing the advent of Copernican astronomy and Newtonian physics as a triumphant narrative of progress from naïveté to Truth. A cosmological model is not a fiction exactly, nor a mere projection; rather it is like Shelley's multi-colored

dome of glass which we construct from the materials around us and through which we perceive, refracted, the kaleidoscopic flux of reality. Every model can generate sufficient evidence to make it appear compelling, but the evidence is always selective, reaching us through our current epistemological filters, filters that are in turn bent and colored by certain socio-political beliefs and psychological needs. At the conclusion of his majestic *Discarded Image*, C.S. Lewis reflects on the mortality of the current scientific worldview.

> It is not impossible that our own Model will die a violent death, ruthlessly smashed by an unprovoked assault of new facts—unprovoked as the nova of 1572. But I think it is more likely to change when, and because, far-reaching changes in the mental temper of our descendants demand that it should. The new Model will not be set up without evidence, but evidence will turn up when the inner need for it becomes sufficiently great.[6]

Less than a half-century later, the paradigm shift that Lewis imagines unfolding in some far distant epoch may already be under way. An onslaught of new evidence, from ferocious hurricanes to the thinning ozone, from silent bee hives to the grim reports issued by the Intergovernmental Panel on Climate Change, are chipping away at certain assumptions about human entitlement to heaping portions of the global pie. Needless to say, the model that emerges to replace the old one will not be geocentric. Yet it very likely could, in other vital respects, resemble the classical-medieval World Picture.

As ecocriticism has slowly begun to gain traction in literary studies, new attempts are again being made in early modern studies to grab hold of the Great Chain of Being, one of the most enduring and ingenious of human schemes to impose intelligibility on the environment. Forged in part by Plato and Aristotle, who were working from (as I shall illustrate) certain assumptions made by Pythagoras, this model encouraged early modern Europeans to see a glimmer of purposiveness in all creation. The intellectual historian Arthur Lovejoy promoted the schema in the mid-twentieth century and it was widely embraced in English departments, its popularity not unrelated to the fact that it meshed nicely with New Criticism's faith in the organic unity of the literary artifact. By the time New Historicism and Cultural Materialism emerged as the dominant critical paradigms back in the early eighties, however, the "Chain" was looking rather rusty. Over the past two decades early modernists have understandably sought to debunk this theory as the ideology of an elite, which served to naturalize the inequalities of the social hierarchy.[7] But the time might be ripe for a re-appraisal. While its spiritual taxonomy works to underwrite a belief in human exceptionalism, its holism also fostered an "analogical habit of mind" that can be seen in some way as intimating an ecological sensibility in its insistence on the inter-dependence of human beings and the other organisms with which they share the

planet. But in order for the Great Chain of Being to serve as more than the pre-modern equivalent of shallow ecology, early modern ecocriticism will have to re-forge it, as Jeanne Addison Roberts suggests, from a vertical hierarchy to a horizontal bond.[8] An emphasis on the Pythagorean heritage of the Chain can allow for this more flexible reconfiguration of the model to occur. The Pythagorean scheme, as S.K. Heninger has remarked, includes "express provision for variety on a horizontal scale. At each level of creation, within each link of the chain, there also is diversity."[9] Fortunately, many early modern authors such as Shakespeare and Sidney seem to have grasped this more firmly than twentieth-century critics, who have tended to focus on its appropriation as political ideology. As Gabriel Egan shrewdly notes, "if the Elizabethan World Picture . . . was thinkable as a model of the world even as it was dismissed as official propaganda, then the Gaia hypothesis would have appeared unremarkable" to early moderns.[10] *Green Shakespeare* has sounded the first bars of the reveille to restore the faded World Picture; the pages that follow will expand upon his efforts, applying new tools and methods to better reveal just how green it really was.

Since the Gaia hypothesis cannot be empirically verified, some redoubtable skeptics such as Richard Dawkins and Stephen Jay Gould have sought to discredit it as a mawkish fantasy of sentimental nature-lovers.[11] To be sure, the earth is not always a benevolent nurturer. Its multifarious terrains and life forms do not invariably conspire to promote human flourishing. The planet's response to anthropogenic climate change may not be the product of conscious deliberation; there may even be a blizzard on the day your university has scheduled a global warming teach-in. Nonetheless, this does not disqualify Gaia from serving as a conceptual tool for tracing the subtle webs of mutual dependence that sustain life on our planet. In the paradoxical phrase of Robert Hooker, a noted draftsman of the World Picture, the atmospheric elements may be "involuntary agents" so that "what they do they know not, yet is it in show and appearance as though they did know what they do."[12] Although he credits God as "the guide of nature," Hooker's language corresponds with Lovelock's in that he, too, discerns an appearance of premeditated order in the operations of natural phenomena: "Forasmuch as the works of nature are no less exact, than if she did both behold and study how to express some absolute shape or mirror always present before her; yea, such her dexterity and skill appeareth, that no intellectual creature in the world were able to by capacity to do that which nature doth without capacity and knowledge" (67). Hooker, like Lovelock, remains aware that anthropomorphized nature is to some degree a projection of human consciousness. Yet through his use of the feminine pronoun to personify and effectively deify the complex ecological interactions of the earth, Hooker's philosophy is a recognizable antecedent of Gaia theory.

Opponents of such holism, like Dana Phillips, have touted the individualistic ecology of H.A. Gleason, who declared "every plant is a law unto itself."[13] There is, of course, evidence of a similar skepticism in the pages of Elizabethan literature. The traditional cosmos venerated by Hooker as

prescribing community, order, and benevolent hierarchy "was being challenged by a conception of nature as dictating violence, egoism, and the destruction or domination of the weak by the strong."[14] Espoused most vociferously by Marlowe's anti-heroes and Shakespeare's villains, this worldview underwrites and coincides with the emergence of a strident bourgeois individualism. It is this brand of natural philosophy (marching in lockstep with the historical advance of the middle class) that runs through the work of Machiavelli, Bacon, Descartes, Hobbes, all the way to Darwin's natural selection, which would come to shape Western society for the next four centuries. If our planet can sustain six billion humans and nearly 200 nations adhering to the belief that each is a law unto itself, so be it. If not, then some fragments of the former cosmology might be worth stooping for. Often treated as a historical inevitability, the triumph of the fractured, contrarious worldview was by no means a fait accompli in 1600. While the defacing of the World Picture generates a good deal of the dramatic tension in Shakespeare, its fragmentation by the forces of modernity is almost always registered as tragic. Acknowledging the ironies in Ulysses' homily on degree should not blind us to the fact that the majority of Shakespeare's contemporaries (not just the ruling elite) would recoil from a worldview where "each thing meets / In mere oppugnancy" (1.3.110-111). No single explanation, as Shakespeare seems to recognize, can ultimately account for all the complex workings of the biosphere. Even today, many scientists consider individualistic ecology reductive or distorted.[15] For the purposes of this study, whether or not the planet is truly a single, self-aware organism is moot. The real question worth asking is whether imagining the earth as an organic, holistic entity fosters more ecologically responsible behavior. If the vitalist elements in the poetry of Shakespeare, Spenser, and Milton accomplish such a feat, it merits the attention of students and scholars.

The World Picture has been etched so many times that there is scarce a need to retrace its contours again here. Nevertheless, as a kind of prolegomena to my study of an environmental ethos in early modern English culture, I would like to re-scale this well-trod summit in the belief that the vistas it opens up will look decidedly different now than it did to previous generations of critics. Specifically, by scrutinizing early modern literary texts through the prism of Pythagorean cosmology, whose legacy is scanted or simplified by Tillyard, Lewis, Spencer, and Egan,[16] I hope to arrive at answers to the following questions: How prevalent or respectable was this philosophy in the Elizabethan period? On what literary texts do its fingerprints appear, and what was its impact, if any, on Renaissance literary theory? How did it challenge the conventional understanding of human subjectivity, and how did it contribute to the iconography of Nature's personhood? Finally, to what extent does it constitute a viable environmental philosophy, a forerunner of James Lovelock's Gaia hypothesis, and an alternative to the Enlightenment view of Nature as a dispassionate, unfeeling mechanism? The results of this inquiry will, I believe, reveal a complex, nuanced image of Pythagoras that acknowledges his legacy's extraordinary

compatibility with ecocriticism, while recognizing the aspects of his philosophy that chafe against the attempt to reincarnate him as a prophet of modern environmentalism.

PYTHAGORAS AND THE RIVAL SCHOOLS

The achievements of Pythagoras are positively staggering: no wonder his disciples accepted his claims about reincarnation, given that it would seem to require several lifetimes to amass the breadth of knowledge he acquired in one. It is quite possible that Pythagoras is merely a figurehead for an entire school of philosophy (as Homer is suspected to be of a poetic tradition), or that later thinkers sought to piggyback on his authority by ascribing their own theories to him, as some classical scholars have speculated.[17] But in the absence of conclusive evidence I will assume with the Renaissance that a single historical individual performed the feats and espoused the beliefs that posterity attributed to him. With the exception of the "symbola" and "Golden Verses" (compilations of obscure catechisms and ethical dictums probably recorded by later disciples), none of Pythagoras's own writings survive, forcing us to piece together his teachings from four biographical accounts written centuries after his death, and scattered remarks cited at second-hand by other philosophers and historians, such as Plato, Aristotle, and Herodotus.

Sifting the testimony from these various classical sources, the Oxford don, Thomas Cooper, drafted the following composite sketch of the Greek philosopher for his augmentation to Elyot's dictionary (1548), a popular work in Tudor England:

> Pythagoras, a man of excellent wytte, borne in an yle called Samos, whiche beinge subdued by Polycrates the tyraunte, Pythagoras forsoke his countrey and wente into Egypt and Babylonia, to lerne misticall sciences. . . . He was in sharpnesse of wytte passying all other, and founde the subtill conclusions and misteries of Arthemetike Musike and geometrye. Plato wondereth at his wisdome: his doctrine was dyvine, and commodyouse, the whiche he teachynge to other[s], injoyned them to kepe silence fyve yeres, and here hym dilygentely, er they demaunded of hym any question. He never wolde do sacrifice with any bloude, he wolde eate nothynge that had life, and lyved in a mervalouse abstinence, and continence. . . . He was noted to be an expert in magike, and therefore it is written of hym, that nyghe to the citie of Tarentum, he behelde an oxe bytynge the toppes of beanes there growynge and treadinge it down with his feete, wherfore he bade the herdsman to advyse his oxe, that he shulde absteyn from grayne: the herde laughynge at hym, sayde, that he never lerned to speake as an oxe, but thou (sayde he) that semeste to have that experience therin, take myne office upon the[e]. Forthwith Pythagoras went to the oxe, and laying his mouthe

> to his eare, whispred some thynge of his art. A mervaylous thing, the oxe as yf he had ben taught, left eatynge of the corne, nor ever after touched any, but many yeres after mildely walked in the cite, & toke his meate only of them that would give it hym. Many like wonderfull thynges is written of hym, finally his disciples, for their wysedome and temperaunce were always had in great estimation.[18]

Cooper's brief vita superbly captures the ambiguous authority of this enigmatic Greek sage in the Renaissance. On the one hand, Pythagoras is a revered polymath of unrivaled acumen; but he is also something of mystic seer, a conjuror/charlatan, and a magnet for colorful but dubious folk legends. Note that half of Cooper's entry consists of an amusing anecdote about the philosopher scolding an ox not to eat beans—an infamous dietary restriction that provoked much mirth as well some ingenious symbolic interpretations from later commentators. In this case, the Renaissance author's dual obligations to instruct and delight seem almost at odds.

As far as Pythagoras's reputation as a natural philosopher and theologian was concerned, then, it is safe to say that many early modern intellectuals seem to have held him in mixed esteem. Petrarch, for instance, dubs Pythagoras a "man of exalted genius," but dismisses metempsychosis as absurd and critiques his disciples' unquestioning acceptance of their teacher's proclamations as inimical to the spirit of free inquiry.[19] On the Renaissance stage, Pythagoras and his teachings primarily appear as fodder for jokes.[20] In *As You Like It*, Rosalind jests about her not remembering her prior incarnation as an Irish rat during "Pythagoras's time" (3.2.162). Famously, Feste quizzes the imprisoned Malvolio on "Pythagoras's opinion concerning wildfowl," and, in the true topsy-turvy spirit of festive comedy, declares him insane until he resolves never to kill a bird "lest he dispossess the soul of [his] grandam" (4.2.44,50). Pythagoras himself actually has a cameo in Lyly's *Endymion*, where he confesses his philosophy to be trumped by the wisdom of Cynthia, a thinly veiled representation of Queen Elizabeth. The most acerbic lampoon on the philosopher occurs in Jonson's *Volpone*, where the dwarf Nano stages a masque recounting the various transmigrations of Pythagoras's soul, from Euphorobus the Trojan into a lowly fisherman, followed by a courtesan, a Cynic, a barnyard's worth of animals (note the declension), a lawyer, and a Puritan, up until his current incarnation as Volpone's inter-sexed companion, Androgyno. Jonson furnishes further proof of Pythagoras's ambiguous standing when Nano brands him a "juggler divine."[21]

Judging from the evidence examined thus far, many early moderns seemed to have regarded Pythagoras as a laughing stock, a byword for a risible mysticism, or at best an eccentric footnote in Western thought. None of these attitudes bode well for the possibility that his teachings on the earth's sentience and the animal soul found many converts. Indeed,

insofar as Pythagoras was taken seriously, his philosophy may have facilitated the rise of an exploitative, techno-scientific culture rather than hindered it. A true Johannes factotum, Pythagoras made another contribution to Western thought that indirectly galvanized early modern science. To the embarrassment of his later apostles, Bacon had underestimated the role of mathematics in the scientific enterprise, an oversight that could be charged to his categorical dismissal of Pythagoras. Pythagoras's innovations in mathematics, his insistence that numbers were the stuff that we and the world are made on, sparked some of the radical new research undertaken in the late sixteenth century by the likes of John Dee, Thomas Harriot, and other less-known figures in the intellectual orbit of Walter Ralegh and the "Wizard" Earl of Northumberland. In a somewhat fulsome poem, George Peele praises Ralegh and his followers for

> Leaving our scholars vulgar trodden paths
> And following the ancient reverend steps
> Of Trismegistus and Pythagoras.[22]

Four decades ago Frances Yates argued that Trismegistus, the supposed author of the Hermetic texts mentioned here alongside Pythagoras, supplied an invigorating jolt to scientific research in the Renaissance. While the Hermetic texts are, I believe, a factor, they are also heavily steeped in Egyptian theurgy. Although some critics now accuse Yates of overplaying her hand, the case that the quantitative approach to the universe championed by the Pythagoreans had an even more profound impact on the development of early science also deserves a hearing.[23] In his celebrated *Mathematicall Preface* to an English translation of Euclid, Dee alleges the authority of Pythagoras and Pico della Mirandola (another devotee of Pythagorean mathematics) to posit that the royal road to the palace of wisdom is, in a word, numbers: "By numbers, a way is had, to the searching out, and understanding of every thing, hable [sic] to be knowen."[24] In making this text available for the first time in English, Dee and the translator Henry Billingsley disseminated a revolutionary new understanding of nature in which mathematical explanations take precedent over verbal accounts of natural phenomena. The fountainhead of this philosophy is Pythagoras. Over three centuries after Mirandola and Dee, A.N. Whitehead would echo this observation, crediting Pythagoras as the first person who "divined the importance of numbers as an aid to the construction of any representation of the conditions involved in the order of nature."[25] While Pythagorean teachings sanctioned a great deal of occult numerology, they also gradually led to the substitution of numbers for necromancy which, according to William Eamon, constitutes the major catalyst in the transition from magic to science in the early modern period.[26] The quantitative approach endorsed by this pre-Socratic philosopher, absent from Aristotle, found many adherents in the sixteenth and seventeenth century;

if Bacon dismisses him with contempt, he was hailed as a precursor by the likes of Copernicus, Kepler, and Newton.[27] In short, Pythagoras (or at least the school that adopted his name) made a contribution to scientific method that could be considered tantamount to that of Bacon himself. Critics, therefore, should be chary about laying the mantle of environmental sainthood upon Pythagoras's shoulders.

A cursory study of this ancient philosophical tradition, however, will soon reveal that this account is manifestly inadequate, distorting or neglecting several of its central creeds. If Pythagorean geometry in some ways enabled the rise of mathematically and technologically oriented science in the early modern era, the uses to which this science was subsequently directed often jar with the sect's spiritual and ethical beliefs.

Although Pythagoras was a target of humor, abundant evidence suggests that many Elizabethan thinkers and authors took his opinions more seriously than is often suspected. In 1599 Iamblichus's *De vita pythagorica* was published in Latin; it was followed four years later by a parallel Greek and Latin edition of the *Pythagorean Fragments*. Although the first serious theoretical defense of transmigration would not arrive until the 1690s, these prestigious scholarly editions would have disposed readers to weigh his opinions more carefully.[28] The philosopher's reputation may also have received a lift from a lost play, entitled *Pythagoras*, performed by the Admiral's Men in 1596.[29] Though the legends surrounding the philosopher would offer some irresistible comic material (perhaps involving beans and talking oxen), if it was not a straight-forward satire like Aristophanes' *Clouds*, it may have presented Pythagoras as a learned, yet dangerous sage in the tradition of other Elizabethan conjuror plays (*Doctor Faustus*, *Friar Bacon*) in the company's repertoire. Whatever its content, the play's failure (like its eponymous hero's own writings) to survive has caused critics to underestimate the prevalence and authority of Pythagoras in early modern English culture. The Greek philosopher also figured into the philosophical curriculum at the Elizabethan universities. Thomas Cooper, the Oxford don who wrote the biography of Pythagoras in 1548, was the tutor of Philip Sidney during his years at Christ Church. Sidney also would have received a favorable opinion of Pythagoras from Dee, whose library he visited on several occasions. But rather than celebrate his mathematical achievement, Sidney's *Defence* praises Pythagoras for couching his "moral counsels" (75) in verse, as evidence of the compatibility between literature and ethics. The portrait of Pythagoras in Ovid's *Metamorphosis* lecturing to King Numa (of which more later) disseminated a view of him as a pedagogue of unmatched sagacity. Finally, the Pythagorean guru known as Timaeus in Plato's treatise of that name established the philosopher as a respected authority on cosmology, the progenitor of the most important rival to the Genesis myth in early modern Europe.

Unfortunately, due to the prominence of the *Timeaus*, Pythagorean thought has long been overshadowed by or seen merely as a subspecies of

Platonism. Yet Aristotle, Cicero, Diogenes Laertius, and Aquinas, as well as numerous Renaissance thinkers such as Bacon, all credited Pythagoras with "certain discretely identifiable contributions to the history of philosophy."[30] These unique contributions would fire the imagination of sixteenth-century writers and intellectuals. Indeed, in terms of the study of nature and humankind's place within it, "the Renaissance became especially a return to thought that is more like the pre-Socratic thinkers."[31] With the cautionary note I have sounded on the contribution of Pythagorean numerology to quantitative science echoing in the back of our minds, I would, nevertheless, like to insist that other features of Pythagorean philosophy did provide an alternative worldview that allowed early modern authors to question, re-think, or resist the prevailing Judeo-Christian, Aristotelian, and even neo-Platonic assumptions about the relationship between humanity and nature.

While the concept of an earth goddess, or Gaia, predates him by at least a century (the first recorded reference occurs in Hesiod around 700 BCE), Pythagoras remains the first person to lend intellectual respectability to the idea that the earth is a living creature. Not only was he the first to outline a coherent cosmological model, Pythagoras also coined the Greek word "kosmos," envisioning the universe as a collective entity governed by a set of physical and metaphysical laws that maintained and ensured its continual flourishing. The perception of the biosphere as a contiguous, self-regulating system that strives after a measure of stability, or homeostasis, among its various organic components is, of course, a central premise of modern ecology. In contrast to the Darwinian view of nature as a realm of bloody competition, Pythagoras taught that an elemental amity exists among all living things, and that rational beings have a responsibility for the irrational, a notion akin to our understanding of stewardship. Pythagorean theology allows for both multiple gods and a single divine creator. However, its creator is, to a much greater degree than in Judeo-Christian tradition, *immanent*. Cicero vouches that Pythagoras "supposed the Deity to be one soul, mixing with and pervading all Nature." Lactantius, an early Christian author popular among Renaissance humanists, likewise reports that the Pythagoreans revered God as "a mind diffused through all parts of the world and visiting every nature from which all the living things which are born take life."[32] This brings us to a point of divergence with Platonic doctrine that makes this philosophy so appealing to Renaissance ecocriticism. Despite the misconceptions sprung from its later grafting with Platonism, the Pythagorean sect "did not distinguish between corporeal and incorporeal existence. . . . It was Plato, not Pythagoras, who came up with a strongly defined sense of immaterial reality, the notion, that is, that Being must be predicated of the immaterial."[33] In *De anima*, Aristotle reports that Pythagoreans believed the soul was made of dust, or motes in the air, which seems not all that different from Hamlet's verdict on the subject. Meanwhile, we learn from the *Physics* that Pythagorean cosmogonists claimed that the world created and sustained life by "breathing in

void."[34] They thought that the universe respired and that its *pneuma*—a Greek word usually translated as air but also carrying the connotations of breath, wind, spirit, or mind—was infused with a divine essence from an infinite beyond. In other words, no unbridgeable cosmic chasm segregates divinity and the material world. From such statements one can infer the sect would frown upon human activities impacting the atmosphere, which they would regard as a desecration (which is, in fact, what the word "pollution" originally signifies). Engraved among *The Golden Verses*, moral axioms ascribed to Pythagoras, is the command to honor "terrestrial daemons, rendering to them the worship that is lawfully due them."[35] This suggests that Pythagoreans observed some religious rituals, perhaps modeled on the Orphic fertility cults in southern Italy or Egypt, which viewed the landscape as inhabited by guardian spirits of place. Cooper reports that members of the brotherhood were renowned for their "temperance"—a virtue that possesses some ecological ramifications (to which I will return in Chapter 4). Stirred by his belief in reincarnation (which he may have picked up during a sojourn in India), Pythagoras became the first Western thinker to advocate a vegetarian regimen on ethical grounds. Before the word "vegetarian" was coined in the mid-nineteenth century, people who abstained from meat were known as Pythagoreans. Herodotus tells us that Pythagoras once commanded a man to stop beating a dog because he recognized in its squeals the voice of a dead friend. Although this story is likely spurious and concocted to mock the philosopher, it recognizes that his teaching opposed animal cruelty. Porphyry, a follower and biographer of Pythagoras, and the author of a foundational text in the history of vegetarianism, *On Abstinence from Killing Animals*, summarizes one of the cornerstones of Pythagorean philosophy as the conviction that "all things that come to be alive must be thought akin,"[36] which in itself provides moral grounds for a non-meat diet and the ethical treatment of animals regardless of whether one accepts transmigration. Though appropriately skeptical, Robert Watson's dismissal of Pythagorean metempsychosis as "at best an equivocal force in promoting common respect for all forms of life" does not quite give the philosopher his due.[37]

Given that Pythagoras so often obsesses over harmony, how do we reconcile these seemingly dissonant versions of his philosophy? Iamblichus, writing in the third century CE, provides a clue in his reference to a schism among Pythagoras's later disciples, who split into two main camps that he labels the *Acusmatici* and the *Mathematici*.[38] Roughly translated, these words mean, respectively, "the hearers" and "the learners." The *Acusmatici* embraced the spiritual and ethical dimensions of the Pythagorean inheritance, diligently observing the rituals and taboos instituted by their leader and passed down via word of mouth to the initiates. They considered themselves the true keepers of the Pythagorean torch and denounced their rivals as a heretical splinter sect. The *Mathematici*, meanwhile, saw themselves as continuing and extending the central project of their founder, the

investigation and explanation of the workings of the natural world through mathematics.

To better illuminate this chasm between the *Mathematici* and *Acusmatici* (or at least rephrase it in more memorable language), it might help to borrow the terminology of Pierre Hadot. Hadot divides pre-modern works of natural philosophy into two basic categories: the Promethean and the Orphic. Obviously, any attempt to pigeonhole all natural philosophers into two types is going to be somewhat reductive. These dueling mindsets are not always mutually exclusive, and some figures examined in this chapter (Marlowe, Ralegh) do appear to have a foot in both camps. Nevertheless Hadot's vocabulary, like Nietzsche's Apollonian and Dionysian temperaments, provides a handy conceptual blade for cutting a broad distinction between conflicting views of mankind's ontological niche. The Promethean sensibility, epitomized by Francis Bacon in Hadot's account, seeks to unveil the secrets of nature through deception and violence. While Hadot considers Carolyn Merchant's rhetoric in arraigning Bacon for the "death" of nature a tad melodramatic, he, too, rebukes the Lord Chancellor for visualizing human beings as the end-all and be-all of the universe: "Man," Bacon pontificates, "if we look to final causes, may be regarded as the centre of the world; insomuch that if man were taken away from the world, the rest would seem to be all astray, without aim or purpose"(6:747). This passage appears, appropriately, in Bacon's interpretation of the Prometheus myth as a parable expressing divine favoritism toward mankind. If the Promethean attitude promotes species-ism and "a physics of utilization," the Orphic, writes Hadot, espouses a biological kinship with non-human nature and a "physics of contemplation."[39] Instead of wresting secrets from Nature by force and utilizing the knowledge for purely human benefit, the Orphic perspective encourages an awestruck and pious regard for order in nature, a wise passiveness, which translates into a desire to recreate that order within oneself and in the body politic. Environmentally minded critics often tend to cast the figure of Orpheus in a harsh light, viewing his enchanted lyre as a symbol of man's desire to control and subdue wild nature. But Hadot reminds us that Orpheus could also be hailed as a champion of an animistic worldview, and his ability to charm beasts and trees with song deciphered as a metaphor for poetry's power to alleviate man's sense of alienation from the natural world.

Prior to the late seventeenth century, even the *Mathematici* properly belong more in the Orphic category. In the preface to Euclid, Dee promises the book will appeal to both the mechanician and the "Pythagoricall or Platonicall perfect scholer," who may gather from its leaves "both wax and hony," that is, both practical knowledge and contemplative wisdom. Dee here explicitly contrasts Pythagorean thought with the experimental arts. Even the sect's enshrining of the quantitative mindset needs a qualifying footnote, since Pythagorean numbers possess qualitative properties, of which Elizabethans like Spenser were keenly aware.[40] The earlier sketch

thus overstates the philosopher's contribution to mechanistic science. Rather than reducing the natural world to a series of numerical entities susceptible to technological exploitation, Elizabethan Pythagoreanism may be better understood as a harmonic science that sought mathematical evidence of order within turmoil, of an ecological *discordia concors*. Moreover, since modern ecology "traffics in differential equations, complex statistics [and] mathematical modeling,"[41] the Pythagorean obsession with numerical patterns in nature could be said to represent one of its most significant predecessors in the intellectual history of the West.

Like ecocriticism, Pythagoreanism had an interdisciplinary outlook that regarded the arts and sciences as symbiotic. The aim of their systematic investigation of nature was not the "enlarging of the bounds of human empire," but a deepened regard for the physical and conceptual elegance of an orderly universe. When the Christian West assimilated classical learning, a similar logic justified the inclusion of the Pythagorean-inspired *quadrivium* in the medieval universities. But this arrangement, strained even in the time of Iamblichus, became deeply frayed in the seventeenth century, as the usual historical suspects—population pressure, an increasingly vigorous market economy, advances in mechanical technology—conspired to harness this knowledge for more practical, earthy objectives. If the Promethean tradition stimulated the scientist-mages, technicians, and alchemists of the late sixteenth and seventeenth centuries, the Orphic portion of the Pythagorean inheritance held the strongest appeal for Renaissance poets. While it is undeniably true that many scoffed at the sect's more outlandish doctrines, there is abundant evidence that several authors found many of these teachings inspirational to their verse and congenial to their aesthetic theories.

THE ECOLOGICAL CARNIVALESQUE: METEMPSYCHOSIS AND THE PYTHAGOREAN BODY

While later disciples preserved hagiographical accounts of Pythagoras's life and teachings, it is Ovid who deserves the greatest credit for reviving this ancient Greek sage as an intellectual and poetic force in Elizabethan literature. In Book 15 of the *Metamorphosis*, Pythagoras delivers a 450-line speech outlining the basic tenets of his philosophy in elegant Latin hexameters. This moment marks something of a climax in the narrative, as the Pythagorean doctrines of mutability and transmigration lend a philosophical plausibility to the text's organizing conceit, the metamorphosis. The Elizabethan translator, Arthur Golding, at least puts this spin on it in his epistle, acknowledging that "the oration of Pithagoras implyes / A sum of all the former woorke."[42] More recently, Charles Kahn has observed in his authoritative study on the pre-Socratic philosopher that it is Ovid's portrait of Pythagoras "as omniscient sage that predominates . . . in the

Renaissance."[43] Many of the teachings expounded in the speech would resonate throughout Elizabethan poetry.

One of the most momentous theories advanced by Ovid's Pythagoras, which would spawn a thousand metaphors in early modern literature, is that a close correspondence exists between human life and the cycle of the seasons. Shakespeare's *Sonnets*, to name the most celebrated example, riff on this theme repeatedly. Consider the opening lines of Sonnet 73: "That time of year thou may'st in me behold / When yellow leaves, or none, or few, do hang." Though melancholy infuses the poet's attitude toward mortality, the awareness

> that men as plants increase
> Cheer'd and check'd even by the selfsame sky
> Vaunt in their youthful sap, at height decrease
> And wear their brave states out of memory
> (15.5–8)

offers a source of consolation in a biotic solidarity among living things. In contrast, those poems in which the speaker's subjective mindset transfigures the season, as in 98 and 99, experience this psychic dissonance as anguish. Spenser's *Shepheardes Calender* also shares the Pythagorean vision of "the yeere as representing playne / The age of man," (*Metamorphosis* 15.220-221), depicting human beings—including their inner lives and artistic creativity—as subject to biological processes of growth, fecundity, decay, and death. This conceit occurs in all twelve of the poems, but "December" plucks this chord most insistently:

> Then as the springe gives place to elder time
> And bringeth forth the fruite of sommers pryde:
> Also my age now passed youngthly pryme
> To thinges of ryper reason self applied.
> (December, 73–76)

Of course early modern poets did not need a Greek philosopher to inform them that youth bears a certain resemblance to spring, but Pythagorean cosmology gave it an aura of credibility that it does not quite possess today. In other words, this figurative connection was not regarded as a mere analogy but as a proposition verging on a scientific fact.[44]

The Metamorphosis also includes Pythagoras's crucial revision of Ionian philosophy, which divided matter into four elements existing in a state of incessant flux. While recognizing volatility as endemic to nature, Pythagoras qualified this principle by arguing that the elements aspire to a state of equilibrium ("harmony" is his preferred term), combining, dissolving, and recombining endlessly, so that our perception of change is in fact illusory, a myopia caused by human finitude. As students of Renaissance literature

will recognize, this Pythagorean thesis forms the basis for Nature's verdict limiting the jurisdiction of Mutability in Spenser's *Faerie Queene*. It was Pythagoras who provided the basic framework for this concept in the Elizabethan era. By acknowledging the existence of constant change within a stable system and expanding our perspective beyond individual experience, mutability betrays a kind of ecological thinking *avant la lettre*.[45] This, in turn, lends a green sheen to accounts of death and regeneration in Renaissance texts such as Spenser's Garden of Adonis:

> The substaunce is eterne, and bideth so,
> Ne when the life decayes, and forme does fade,
> Doth it consume, and into nothing goe,
> But changed is, and often altered to and froe.
>
> (3.6.37)

As Harry Berger has incisively noted, Spenser corrodes the Aristotelian and Platonic notions of form in the Garden's hothouse atmosphere: "Form is no longer the source of life's energy. . . . As spirit gives way to matter and form to force, so art and myth give way to mere nature. Life as *bios* has triumphed over the forms of life and culture."[46] The ecological implications of this myth are considerable. As Spenser's nouns grow vague while his verbs become active, concrete, and repetitive, the reader's focus shifts from isolated subjects to biological processes. Even the personification of these cyclical patterns in nature, Adonis, is effectively de-personified by the poem. "Eterne in mutability" (3.6.47), Adonis embodies a more-than-human subjectivity diffused throughout the earth.

Infamously, Pythagoras also extended the principle of the body's mutability after death to the human soul. In lieu of a spectral distillation floating about in the cosmic ether, Pythagoras claimed that our spirits return to earth to inhabit the bodies of other people, animals, and even plants. The concept of reincarnation receives a striking literary treatment in the Garden of Adonis, a celestial nursery where souls gestate in preparation for entering their next avatar.

> Infinite shapes of creatures there are bred,
> And uncouth formes, which none yet ever knew,
> And every sort is in a sundry bed
> Set by itself, and ranckt in comely rew:
> Some fitt for reasonable sowls t'indew,
> Some made for beasts, some made for birds to weare.
>
> (3.6.35)

Like a meticulous botanist, Spenser assigns the souls of different species separate plots in his well-ordered garden. But it is not clear whether the soul's nature can alter, either arbitrarily or on the basis of their conduct in

a past life, in between incarnations. What for instance would happen to the hoggish Gryll's soul when it arrives in the Garden? There is no explicit mention of transmigration here, but the reference to the soul inhabiting "sundry forms" allows for the possibility. In any case, the Garden of Adonis asks us to entertain the notion of an animal soul popularized by Pythagoras, complicating orthodox religious views of human beings as possessing a monopoly on spirit. If Christian resurrection expresses a human yearning to transcend the life cycle (as in *November*'s pastoral elegy), Pythagorean mutability refuses to exempt the soul from the order of nature. Instead the garden metaphor materializes the soul as a plant-like entity, which blooms from and disintegrates into its environment.[47] Spenser thus mitigates his sorrow at the extinguishing of the individual with an optimistic outlook on the perpetuity of the species. In this aspect the work again resembles Shakespeare's *Sonnets*; unlike the first seventeen poems in Shakespeare's sequence, however, *The Faerie Queene* does not envision perpetuity in terms of one's children. Instead it flirts with Pythagorean theories of reincarnation, recalibrating notions of subjectivity so that it endures following the body's re-integration back into the biotic stew.

Although Shakespeare's coy Adonis is not a fertility figure, the Late Romances eventually come round to embracing this outlook on mutability. In comparison to Alexander's macabre transformation into loam, Alonso's metamorphosis in *The Tempest* seems far less disconcerting: "Nothing of him that doth fade / But doth suffer a sea change / Into something rich and strange" (1.2.403–405). The ambiguity of the word "suffer" is no doubt deliberate. These existential transformations are not painless, but the philosophical and spiritual magnitude of art like Shakespeare's can equip us with the fortitude to accept them.

In the *Mutabilitie Cantos*, Nature, like a devout Pythagorean, declares that altering form does not alter essence. Living things do not, when ground down into elements, undergo an annihilation, "but by their change their being doe dilate" (7.7.58). The key word in Nature's verdict is *dilate*. For Renaissance readers, it would smack of Pythagorean-Platonic doctrine, signifying an emanation from and return to the One, a cosmic totality that the poem invites us to equate with nature.[48] For modern readers, this vision of the self as diffused throughout nature, a merger of the one with the many, parallels the call for human identification with the larger biotic community, which is one of the main objectives of the ecocritical enterprise. If we see our persistence as inextricably bound up in that of the natural world, then we are prone to interact with it in a more ethical fashion, to live in a way to make it endure.

It would, of course, be a distortion to paint Spenser as a materialist, as his seven-book epic concludes with a prayer to transcend the cycle of vertiginous change in a "Saboath" of perpetual rest. In this respect the *Mutabilitie Cantos* appears to conform to the classic New Historicist dynamic of

subversion and containment. In recent decades critics adopting this methodology have tended to decipher the poem's ending as expressive of the political uncertainty in late Elizabethan England (governed by an elderly, childless queen), as well as Spenser's frustrations with the failing occupation of Ireland. Yet it is also possible to read the yearning for transcendence more generally as a testament to the arduous and uncertain effort required to eke out a living from the land in a pre-industrial society. The 1590s in particular witnessed a spate of unseasonable weather and failed harvests which would have made "this state of life" seem very "tickle" indeed, and given mutability a certain traction for Spenser's early readers.[49] The longing to rise above the chaotic muck of the material world that Spenser voices in the closing lines can hardly be considered an environmental sentiment, but it does convey an awe and humility toward nature that is the opposite of a desire to dominate and exploit it.

It is tempting to speculate what Christopher Marlowe, had he lived to read it, would have thought of the *Mutabilitie Cantos*. In lieu of direct evidence, sifting through Marlowe's published works gives us a fairly good idea of his probable reaction. In a notorious speech, Tamburlaine cites the pre-Pythagorean version of mutability as a natural precedent for his world-conquering ambitions.

> Nature that framed us four elements
> Warring within our breast for regiment,
> Doth teach us all to have aspiring minds.[50]

The harangue concludes by asserting that the human mind's capacity to survey and "comprehend / The wondrous architecture of the world" entitles man to reap "the sweet fruition of an earthly crown." While Tamburlaine's Nature, following the Heraclitean tradition, invites us to imitate its frenzied strife for supremacy, Spenser's Nature (recognizing disorder as contained by a larger order) teaches us to resist our aspirations to conquer and subdue the earth. The university-educated Marlowe was acquainted with Pythagorean doctrines, and his writings contain the most strident articulations of the *Mathematici*, or Promethean, sensibility in the literature. But the theological dimension of the Pythagorean tradition also equipped Marlowe with the conceptual weaponry to assault certain Judeo-Christian assumptions of human supremacy. Whereas Spenser envisions the "saboath" as a beatific indolence embracing the entire sublunary world, Marlowe, I believe, entertains the notion that annihilation may offer the existential release that Spenser craves.

With his diabolical pact about to expire, Faustus makes a desperate appeal:

> Ah, Pythagoras' metempsychosis—were that true,
> This soul should fly from me and I be changed

> Unto some brutish beast.
> All beasts are happy, for when they die
> Their souls are soon dissolved in elements,
> But mine must live still to be plagued in hell.[51]

As these lines insinuate, there can be no such thing as a Pythagorean tragedy; since the soul endures in the body of another creature, death cannot arouse the same degree of pity and terror. Whenever I come to this moment in the play, it always brings to mind a passage from Walt Whitman's *Leaves of Grass*:

> I think I could turn and live with the animals, they're so
> placid and self-contained. I stand and look at them long and long.
> They do not sweat and whine about their condition,
> They do not lie awake in the dark and weep for their sins,
> They do not make me sick discussing their duty to their God.[52]

Had Marlowe's soul been reborn three centuries later, one could easily imagine him penning similar lines. Faustus lies awake in the dark weeping for his sins, but wishes he could turn and die with the animals. In the eleventh hour he cannot leap up to the belief that beasts and humans die the same death. Yet insofar as the play's ending re-inscribes the Christian schism between beast and human, it registers this difference as tragic.

Faustus makes it easy to see why metempsychosis stirred so much anxiety among early modern divines. By postulating that the soul returns to the earth, transmigration bears a dangerous resemblance to materialism. In a celebrated study of atheism in the early modern period, Stephen Greenblatt concludes it was "thinkable only as the thought of another."[53] As a kind of corollary to this thesis, I would add that materialism is thinkable only as the fate of another species. A close reading of Faustus's speech supports this contention. Significantly, only the first three lines are an accurate portrayal of Pythagorean doctrine. At the precise moment the iambic pentameter is disrupted by a shortened line, the speech reverts to the orthodox supposition that death irrevocably snuffs out an animal's life. So accepting the first Pythagorean premise—"were that [metempsychosis] true"—means that Faustus's spirit would migrate into the body of an animal host. By conflating metempsychosis and the Christian denial of the animal soul, Faustus is able to imagine the possibility that human beings, too, may simply be "dissolved into elements." Juxtaposing these contradictory premises together, Marlowe draws on his training in dialectic to construct, as he does in Scene 1, a kind of syllogistic proof of divine injustice. As Donne would later write,

> If lecherous goats, if serpents envious
> Cannot be damned, alas! why should I be?[54]

Donne ultimately backs down, refusing to indict God for this cosmic sadism. But Marlowe's tragedy pursues this inquiry further, declaring that the tranquility of annihilation would be preferable to an eternity of torment: "all beasts are happy." In a universe ruled by a capricious Calvinist God, the fate of beasts becomes something to be envied, as Marlowe upends the assumption that an immortal soul renders human beings superior to animals.

Shakespeare also repeatedly toys with metempsychosis to reconfigure the human relationship with animals. In a lively study on animal imagery in early modern drama, Bruce Boehrer distinguishes three primary attitudes people in the period adopted toward non-humans: absolute anthropocentrism, relative anthropocentrism, and anthropomorphism.[55] Several of Shakespeare's narratives follow a trajectory from an absolute anthropocentric view—that people are fundamentally different from and superior to all other life on earth—to a humbling acceptance of the animalistic attributes of human beings. Metempsychosis, I would argue, often serves as a means of articulating this shift in perspective. It can, therefore, enable early modern ecocritics to re-forge the Great Chain of Being from a vertical hierarchy into something resembling a horizontal bond.[56] In *Twelfth Night*, Feste's seemingly absurd verdict that Malvolio will be deemed insane until he "hold[s] the opinion of Pythagoras" and "fear[s] to kill a woodcock lest [he] dispossess the soul of [his] grandam" is best glossed as deploying metempsychosis as a metaphor for the power of unpredictable change in human character, which Malvolio himself has experienced in his transformation from Puritan killjoy to foppish lover.[57] As if to underscore this point, during the gulling scene Toby and his pals actually refer to Malvolio as this exact bird: "Now is the woodcock near the gin" (2.5.74). Bottom's translation performs a similar function in *A Midsummer Night's Dream*. Although Pythagoras is not mentioned by name, he is cited in a probable source of the play, Apuleius's *The Golden Ass* (translated in 1566). Boehrer flags such anthropomorphism as hazardous, reflecting a fear of our capacity to degenerate, to become worse than human. But the so-called bestial side of human nature is not invariably something to be shunned. In the comedies in particular, the journey to the greenwood offers the young a chance to recapture a profound rapport with nature, which their patriarchal elders have lost or forgotten. For the young couples, the journey leads to the formation of a more humane and egalitarian society; for the audience, it reaffirms humanity's primal attachment to the biophysical world. Such anthropomorphism fosters a humility that can be a valuable corrective to Tamburlaine's pride and the sense of entitlement it sanctions.

In her ground-breaking work on the early modern passions, Gail Kern Paster calls for a more "nuanced picture of humoral subjectivity . . . as a form of consciousness that is open, penetrable, fluid, and extended outward to the higher animals with which it shared affective workings."[58] In

Shakespeare's day, Pythagorean philosophy posed a similar challenge to the Christian notion of the soul. Instead of barricading itself inside the cranium, the pre-Cartesian subject exists in a continuum with the rest of the biosphere. Like Galenic humoralism, Pythagorean philosophy is eco-systemic, predicated upon an embodied subject that does not transcend or detach itself from its environment, even in death. Crucially, this understanding of the subject has real ethical consequences: hence the sect's strictures enjoining temperance and a non-meat diet. Observing that the word "animal" trots through Shakespeare's verse a mere eight times (in comparison to the herds of 141 beasts and 127 creatures), Laurie Shannon takes this linguistic tic as evidence of "a different cosmology" that was more attuned to the polymorphous diversity of non-human embodiment, skirting the rigid dichotomy of man versus animal.[59] Pythagorean cosmology in particular expounds an understanding of the human that clashes with both Aristotelian taxonomy and the emergent Cartesian dispensation. By promoting an idea of the human body as capable of hosting other forms of life and of human souls inhabiting other creatures, metempsychosis is far less hierarchical than even Aristotle's tri-partite division of the soul into nutritive, sensitive, and rational. Pythagorean philosophy thus may contribute to the frequency and imaginative intensity with which Shakespeare wields animal metaphors to illuminate the interiority of his human characters. When, in the space of seven lines, Rosalind imagines herself as a cock-pigeon, a parrot, an ape, a monkey, and a hyena, she undergoes a kind of metempsychosis in life. Even when Shakespeare does not invoke him explicitly, Pythagoras provided a wand with which the playwright cast animals into human bodies as Christ cast demons into swine.

In advancing this claim I do not want to downplay the fact that many characters wield animal imagery with a disturbing, malicious intent. Pythagoras also makes an ignominious appearance during the trial scene in *The Merchant of Venice* when Graziano taunts Shylock for his inhumanity:

> Thou almost mak'st me waver in my faith
> To hold opinion with Pythagoras
> That souls of animals infuse themselves
> Into the trunks of men.
>
> (4.1.129–131)

In this case transmigration illustrates the dangers of what Boehrer calls "relative anthropocentrism," a tendency to discriminate against the Other by categorizing them as animals, while conferring full humanity only on those within our own social or ethnic group. The Christian characters use the word "dog" as a stick with which to beat Shylock. Shylock, however, battles back, objecting to Antonio's use of this slur. The humanity with which Shakespeare endows the character belies the Christians' attempts to brand him an animal. As Boehrer astutely notes, "the play's inconsistency

on matters of race parallels a broader inconsistency, discernible within early modern English culture in general, concerning the relation between the regimes of nature and of culture, the regiments of men and of animals."[60] In eliciting sympathy here for the "dog" Shylock, and in his later unblinkered assessments of man as a "poor, bare, forked animal," Shakespeare, too, makes the audience waver in their faith that humans are radically set apart from the rest of the natural world.

Ben Jonson's attitude toward Pythagoras is also exceptionally complex. If *Volpone* pokes fun at the Greek sage, Jonson also seems to have read him with much interest, judging by the numerous annotations in his copy of the *Pythagorean Fragments* (now in the library of Emanuel College, Cambridge).[61] Pythagorean theories about number and music, for instance, undergird the cosmic scope of his masques. In his scatological poem "On the Famous Voyage," he hails a man named Bankes—an entertainer who had trained a horse to perform feats of extraordinary intelligence that wowed Elizabethan London—as "our Pythagoras."[62] Rather than a mere parody of Pythagoras, Nano's masque could be taken as a Bakhtinian triumph of the belly and the genitals over the abstract mind and its pretensions to wisdom. Meditating on the insights Bakhtinian theory may hold for ecocriticism, Michael McDowell praises the carnivalesque for presenting a "nonintellectual bodily way of knowing the world" as a potential means "to resist the abstract, intellectual, official reality that a social hierarchy always creates for its own ends."[63] This is a perfect description of how Pythagorean ecology hammers away at the vertical rigidity of the Great Chain of Being. Although Nano's interlude lampoons this abstruse philosopher, a more nuanced reading of the play will, I think, indicate that Jonson is not satirizing Pythagoras so much as appropriating his theories to rail at decadence and hypocrisy in Jacobean London. Crucially, in the play's opening apostrophe, Volpone hails gold as "the world's soul," a blasphemous invocation of the Pythagorean *anima mundi*. Jonson's comedy thus traces the avariciousness of modern society to the tragic substitution of the market economy for the Pythagorean world soul as the animating force of the universe (cf. *Timon of Athens*, 3.2.58). In Nano's masque, Jonson rails not at Pythagoras but at the spiritualized dogma of the Puritans that denies or seeks to transcend the animality of the body. In this respect, metempsychosis is a classic example of the carnivalesque. Instead of elevating the lower half of the body over the head, it collapses any distinction between the animal and human body. If humans and beasts share a common humoral body, Jonson's comedy of humors often becomes a sardonic celebration of "the earth and the body in their indissoluble unity."[64] Tellingly, it is the comic characters in Shakespeare—Feste, Graziano, Rosalind, and Bottom—who allude to Pythagoras or undergo a Pythagorean "translation." The license of the fool grants them the freedom to subvert, at least temporarily, political hierarchy and, along with it, the orthodoxy of human dominion. Likewise, in *Faustus*, when the apprentice Wagner speaks of transforming Robin into an animal (1.4.60–61), the tone is broadly comic.

> How! A Christian fellow to a dog, or a cat, a mouse or a rat! No, no sir; if you turn me into anything, let it be in the likeness of a little pretty frisking flea, that I may be and here and there and everywhere. O I'll tickle the pretty wenches' plackets! I'll be amongst them, in faith.
> (1.4.62–66)

This scene provides an intriguing counter-point to Faustus's later allusion to Pythagoras. When Mephistopheles eventually turns the duo into an ape and a dog, they actually seem to regard this as a promotion. If the play implies that the menial characters are innately bestial—not spiritual enough to be damned, in T.S. Eliot's phrase—the comic sub-plot, nonetheless, undermines Faustus's claims of human exceptionalism. Although no transformation occurs in *Volpone*, its list of dramatis persona—Corvino, Corbaccio, Voltore, Mosca, and the Fox himself—is a veritable menagerie that forges a subliminal connection between animals and humans every time these names are uttered. Nano's masque also invites us to imagine the way the Pythagorean body lends itself to being in and knowing the world from multiple viewpoints. Just as Androgyno (and the boy actor assuming the woman's part for that matter) possesses a subjective experience of both sexes, the spirit of Pythagoras that speaks through him compels readers to imagine experiencing subjectivity in animals. The sketch's punch-line (probably modeled on Erasmus) arrives with Androgyno's declaration that these experiences have taught him that the best possible draw in the existential lottery is to be reborn a fool. The target of satire has in effect shifted from Pythagoras to human hubris in general. Finally, in representing human identity as radically unstable, transmigration has an odd affinity with theatrical performance. As Androgyno pantomimes all of his/her former lives, the masque becomes a tour de force display of the actor's protean ability to shift roles, to assume new identities. The theatre, in other words, seems to vindicate the Pythagorean notion of the soul's fluidity even as it verbally pours scorn on transmigration.

Another prime specimen of the ecological carnivalesque is Thomas Baldwin's *Beware the Cat*, a neglected gem of Tudor prose fiction. After ingesting an unsavory confection of animal by-products, the narrator becomes capable of understanding of animal speech. Its volubility overwhelms him:

> the barking of dogs, grunting of hogs, wawling of cats, rumbling of rats, gaggling of geese, humming of bees, rousing of bucks, gaggling of ducks, singing of swans . . . crowing of cocks, cackling of hens, peeping of mice . . . curling of frogs and toads in the bogs, chirking of crickets.[65]

In addition to being one of the most compendious inventories of animal verbs in English literature (an onomatopoetic *discordia concors* in which the animal names deliberately rhyme), this tale, which takes place near

Aldgate, should remind us that a sixteenth- century city was heavily speckled with urban barnyards. On the basis of this passage one might assume there were more animals than people in early modern London. Although the book is in part an allegorical spoof on Catholics, its comic register does not preclude a more serious ecological message:

> There is no kind of sensible creatures but have reason and understanding; whereby, in their kind, each understandeth other and do therein some points so excel that the consideration thereof moved Pythagoras (as you know) to believe and affirm that after death men's souls went into beasts and beasts' souls into men. . . . And although his opinion be fond and false, yet that which drew him thereto is evident and true—and that is the wit and reason of diverse beasts. (21)

Baldwin's insight here encapsulates how many early modern writers responded to Pythagorean metempsychosis; while rejecting the literal interpretation, they revive it is as a proleptic formulation of the idea that animals possess rational faculties, while humans share a great many bestial ones.

This same message radiates from the most elaborate treatment of transmigration in English literature, John Donne's *The Progress of the Soul.* The text recounts the voyage of a soul from the Apple in Eden, through a sparrow, a fish, a mouse, a wolf, and an ape (among others), all the way up to its residence in the wife of Cain. In the prefatory epistle Donne reminds his audience that "Pithagorean doctrine doth not onely carry one soule from man to man, nor man to beast, but indifferently to plants also."[66] The line foregrounds just how radical this theory is, collapsing the distinction between an emperor, a horse, and a mushroom, and positing that all forms of life are united in a common spiritual ecology. Obviously, Donne does not attempt to compel the reader's belief in transmigration; rather it serves as an example of what critics used to call a metaphysical conceit. This conceit enables him to conduct a daring thought experiment, one that wreaks havoc on early modern natural philosophy, as the poem totally defies any Aristotelian (or Linnean) taxonomy that would divide the tangled biosphere into discrete species. In stanza 16, the soul enters a mandrake, a plant (known as *atropa mandragora*), which, because its roots tend to bifurcate, was thought to resemble the bipedal human form. As a result, pre-moderns assigned it many occult properties, including the power to shriek when uprooted. When Donne refers to the plant as "this living buried man, this quiet mandrake," he deliberately destabilizes the distinctions between humans and vegetation. The meter underscores this point as the first syllable of the plant's name receives the stress. Elizabeth Harvey has spelled out the poem's implications for Christian anthropocentrism:

> If human beings are not distinguished as fundamentally different from the plants and animals with which they share the world, their ethical

> relationship with other forms of life is then no longer a natural right or innate privilege. . . . Donne's transmigrating soul defines the human subject as constituted both by the intricate linkage between soma and psyche and by extension, by a relationship with the environment that renders the body both permeable to it and also psychically contiguous with it.[67]

While Harvey goes on to frame Donne's animal soul as a premonition of the Freudian id, I would draw attention to its similarities with Darwin's bombshell about the evolutionary ascent of *homo sapiens* from apes. The ape's attraction to and sexual compatibility with Adam's daughter—at one point the ape even mimics the role of the suffering Petrarchan lover—calls attention to the permeability of the boundary between man and beast.[68] Although it is not clear whether the ape and the woman consummate their desire, transmigration allows for a kind of vicarious conception to occur, as the soul "comes out next, where th'Ape would have gone in." Insofar as Eve's daughter retains "some quality / Of every past shape" the soul inhabited, Pythagorean transmigration can be seen as the closest equivalent in the early modern world to Darwinian evolution in that no insurmountable ontological chasm separates human beings and animals. If *Progress* weaves Pythagorean teachings into the sacred biblical history of the origins of the human race, Donne omits any mention of Genesis 1:26–28, instead locating the source of human dominion in a cunning and brute strength acquired from beasts. The poem thus tacitly asserts what recent efforts to map the human genome have confirmed: the gap between animals and humans is much narrower than is dreamed of in our philosophy.

Many of the jokes lobbed at Pythagoras in the sixteenth century are uncannily similar to the reactionary parodies Darwin provoked in the Victorian era. Yet while evolutionary theory has now become (with the exception of a few pockets of rural America) widely accepted, Pythagorean philosophy never made this leap. Despite the persistence of the pre-Socratic's teachings outlined in the preceding survey, one troubling fact remains: while neo-Platonists like Henry More and Puritan Dissenters continued to insist that animals had souls,[69] the theory appears to have been too radical to have any sizeable impact on society at large. Part of the explanation may lie in that its doctrines could not be so easily assimilated into Christian theology as Plato and Aristotle. Yet this resistance may itself result from the fact Pythagoras failed to engage with the public, swearing his disciples to secrecy, eschewing the written word, and encrypting his teachings in obscure, gnomic language to prevent it from reaching the vulgar masses. Their secretiveness and righteousness contributed to their marginalization; mobs burned down their schools and killed their disciples, disrupting the sect's continuity and influence. In this respect, the ease with which Bacon could dismiss Pythagoreanism as an occult philosophy may hold a lesson for deep ecology. After all, the proposition that elementary forms of life—from

bacteria, to shrubbery, to vermin—may have just as much right to exist as humans is as shocking to the twenty-first century mind as metempsychosis was to the Renaissance. Unless deep ecology makes itself accessible to a wider audience by transplanting its metaphors and idioms into comprehensible, everyday language, it will not change engrained habits of thought and behavior that no longer appear to be sustainable.

THE TEXT AS "LITERARY MICROCOSM" REDUX

One of the main channels by which Pythagorean thought reached the Renaissance (and was "watered and nourished," to mix in Bacon's metaphor) was via Plato's *Timaeus*. The only one of Plato's works to circulate widely in the Latin West during the Middle Ages, the *Timaeus* enjoyed a particular vogue in the sixteenth century during the neo-Platonic revival. More than a monumental, paradigm-shaping work in the history of natural philosophy, the *Timaeus* also had an important influence on Renaissance literary theory. In addition to regarding the earth as "a living being with soul and intelligence," Socrates's Pythagorean interlocutor speaks of it as an aesthetic artifact forged by a divine artisan, a work of such exquisite and mysterious craftsmanship as to compel our unflagging awe.[70] The text refers to the creation of the earth and the heavens as an act of *poeisis*, a "making." Curiously, in Ancient Greek, this verb—to the delight of early modern poets and critics—was also used to describe literary composition. Although Plato in the *Phaedrus* and the *Ion* speaks dismissively of poetic inspiration as a kind of madness or *divinus furor*, the *Timaeus* permitted a more glamorous conception of the poet's achievement. In the classic work of Elizabethan literary theory, *The Defence of Poetry*, Philip Sidney records that early modern English had a similar idiom: "I know not whether by luck or wisdom we Englishmen have met with the Greeks in calling him [the poet] a maker" (77). After pondering this etymological coincidence, Sidney launches into his famous rhapsody exalting the poet's ability to fashion "another nature."

Situating this passage in the context of Plato's *Timaeus*, as S.K. Heninger has illustrated, is the only way to properly understand the rather audacious claims that Sidney advances on behalf of his craft.[71] In the Renaissance, artists had begun to devise mimetic illusions so compelling that they vied with nature itself.

> Neither let it be deemed too saucy a comparison to balance the highest point of man's wit with the efficacy of nature; but rather give right honour to the heavenly Maker of that maker, who having made man to His own likeness, set him beyond and over all the works of that second nature; which in nothing he showeth so much as in poetry, when with the force of a divine breath he bringeth things forth surpassing her doings. (79)

In some ways this manifesto expounds a literary theory that is deeply problematic for early modern ecocriticism. Sidney privileges art over nature, and views mankind's unique capacity to create poetry as validating the Judeo-Christian creation myth in which Adam is declared separate from and granted authority over the rest of the natural world. However, crucially, Sidney insinuates that this creative dominion can be used for nature's benefit. If Sidney de-emphasizes the Aristotelian vision of the poet as a mimetic artisan in favor of a Platonic visionary maker, poetry is not seen as a displacement or a nemesis of nature, but a means of glorifying and idealizing it. In reminding his readers to give thanks to the "heavenly maker of that maker," Sidney depicts the end of poetry as the exaltation of the supreme poet, God, who was (as we shall see) often conflated with the principle of order in the natural world. The ascending hierarchy of Nature, Poet, God thus appears to bend in at the edges, and literature's adulation of the creator is partially deflected back onto the creation. Although Sidney boasts that authors can fashion chimeras not found in nature, such as Cyclops and Furies, this creation is not performed *ex nihilo*. The fiction must be commensurate to the reality it purports to describe. Admiration for the poet's creative prowess is ultimately measured by the number of "pleasant rivers, fruitful trees, sweet-smelling flowers" that adorn the work. To encounter these simulacra on the page can in turn sharpen our aesthetic response to the real thing in nature, serving, in Sidney's phrase, to "make the too much loved earth more lovely" (78). Reading the pastoral idyll of *The Old Arcadia* is not so radically different from a visit to an artificially protected and maintained national park, where we find more topographical and botanical marvels concentrated in a smaller space than is ordinarily the case. For Sidney and other early modern poets, to the extent a poem is a "making" that resembles, albeit on an incalculably smaller scale, the genesis of the world, it possesses an organic quality; it confronts us with a micro-cosmos exhibiting an order and a patterned elegance that resembles that of the Pythagorean cosmos itself. Spenser famously divided his *Epithalamion* in twenty-four stanzas containing a total of 365 lines, with the phrase "now night is come" occurring a fourth of the way through the sixteenth stanza to correspond to the sixteen and a quarter hours of daylight in southern Ireland in early June.[72] Eight of the twelve eclogues in *The Shepheardes Calender*, following a pattern set forth by Virgil, synchronize with the span of natural day. While much early modern drama does not conform to the Aristotelian unities, previous generations of scholars have documented how contemporary cosmology underlies the ubiquitous *theatrum mundi* trope, as well as the architectural design of the Elizabethan playhouse.[68]

If the Pythagorean fascination with number laid the groundwork for modern science, it also infused the art of poetry with a mystical cachet. Recalling that the ancient oracles were delivered in verse, Sidney proposes that the "exquisite observing of number and measure in the words, and that high flying liberty of conceit proper to the poet, did seem to have some divine force in it" (77). He later adds that critics who scoff at rhyme and

verse are, in essence, also scoffing at "measure, order, proportion" (100) as qualities undesirable in society at large. Considering that modern critics have persistently short-changed the importance of rhyme and verse for the past three decades, Sidney's insight could, I think, open a crack in a door leading to a newfound appreciation of prosody and the formulation of a post-historicist aesthetics. Rather than explicate a poem's self-contained verbal intricacies as modernist criticism presumed to do, this new approach might bring an ecological onus to the study of prosody, as the organic unity of the literary text imitates and illuminates the organic unity of nature itself. Plato's allegation in *The Republic* that our soul becomes orderly (*kosmios*) when it understands the order (*kosmio*) in the universe" could also be applied to poetry.[74] Iamblichus reports that Pythagoras actually used music and poetry for medicinal purposes, as a kind of aural therapy. In addition to reading verses from Homer and Hesiod to his disciples, he prescribed certain meters like spondees as a way of soothing unruly passions.[75] Obviously, I am not so starry-eyed as to claim that reading a few lines of iambic pentameter will transport students into a state of ecological communion with the universe. Nonetheless, for Renaissance pedagogues, an aesthetic regard for metrical elegance was thought to have a pragmatic impact in that it makes the reader attune to rhythms and patterns pervading the material world. Puttenham and many of his contemporaries often convey this notion through the fable of Orpheus, who with his "discreet and wholesome lessons uttered in harmony . . . brought the rude and savage people to a more civil and orderly life" (96). Paradoxically, then, literature provides both a retreat from a state of a nature and a way of guiding a society and its individuals to imitate a more profound order latent within nature. Cultivating an appreciation for order in verse, syntactically balanced clauses, even wordplay (as in Plato's Greek), could, to the early modern mind, inspire readers to recognize and admire balance and correspondence in the biophysical world. This approach, admittedly, would be most germane for early modern studies, where the Pythagorean-Platonic worldview encouraged the belief that "art was intended to reflect and reveal these touches of sweet harmony which infuse [the] universe."[76]

The *locus classicus* for this principle in Elizabethan literature, as the allusion in the previous quote by Heninger betrays, is Lorenzo's monologue in Act 5 of *The Merchant of Venice*. Scholarship has long established that this passage, too well known to need repeating here, is a compendium of Platonic ideas. But the emphasis on Plato and his later commentators has sometimes obscured the fact that these beliefs are all Pythagorean in origin, which has led us to underestimate his importance to Shakespeare and to the period in general. Music sounds best at night, according to Lorenzo, against the cosmic backdrop of which it is, according to Pythagoras, an acoustic emblem. Given the setting of the play, one of the most important sources for the speech is *De harmonia mundi*, a Pythagorean treatise by a Venetian friar, Francesco Giorgi (1466–1540). This book may have contributed to Venice's reputation as a hotbed of Pythagorean thought (see Figure 1.1).[77]

Figure 1.1 Sculpture of Pythagoras (representing the art of arithmetic) on the Palazzo Ducale, Venice. Cameraphoto Arte, Venice / Art Resource, NY.

Lorenzo's speech carries a special poignancy because it falls directly after the harsh clamors of the trial scene in Act 4. As in much early modern drama, characters in the *Merchant of Venice* often harp, as it were, on

music, as it provides a convenient metaphor for social harmony.[78] Persons who feel alienated or excluded from the new society emerging at the end of Shakespeare's comedies tend to dislike music and dancing. Lorenzo's remark here that anyone unmoved by "concord of sweet sounds" (5.1.83) cannot be trusted will inevitably remind even half-attentive listeners of Shylock. As a reaction against the tendency to excerpt from this speech, it could be objected that Lorenzo's rhapsody, when read in the context of the play, sounds more like a lecture in which he tries to convert Jessica to a Christianized neo-Platonic worldview. But I prefer to think of the scene as a utopian affirmation of unity within a pluralistic society, a unity based on shared corporeal experience of the natural world—as in Shylock's speech where Jews and Christians are "warmed and cooled by the same winter and summer" (3.1.54). The syncretism of Renaissance humanists like Pico and Giorgi presupposes a common human nature, which evolutionary criticism is now seeking to recapture.[79] The play here finds common ground not simply in a mutual susceptibility to pain or pleasure, but in the capacity for human eyes and ears to take delight in—and register a profound humility before—the grandeur of the cosmic spectacle. The speech epitomizes the Orphic attitude championed by Hadot, and thus it is apt that it culminates with an allusion to Orpheus.

Lorenzo's monologue is Pythagorean through and through, but it belongs firmly to the contemplative faction of the school known as *Acusmatici*, or "listeners." Indeed the speech could be considered a meditation on the art of listening. Crucially, the invitation Lorenzo issues to Jessica to "sit, and let the sounds of music / Creep in our ears" is also extended to us, the audience.[80] A consort concealed in the balcony may accompany the speech in performance, but it is Shakespeare's language, with its metrical and rhetorical finesse, which offers here an audible approximation of Pythagoras's cosmic symphony. Admiration for this music does not require allegiance to any set of religious dogma, nor must we wait for the afterlife for the concert to begin; the dulcet cadences of Shakespeare's blank verse penetrate even through this "muddy vesture of decay."

"NATURE OF ARAY AND FACE": DAME NATURE, QUEEN ELIZABETH, AND GAIA

Over the past few decades, the image of Mother Nature, ravished by industrialization and a voracious consumer culture, has become a cliché of environmental discourse. With growing concern over climate change, Nature has begun to shed its gentle, maternal passivity and is increasingly perceived as slowly marshalling forces for retribution, as in the title of James Lovelock's recent book, written in the aftermath of Hurricane Katrina, *The Revenge of Gaia*. Lovelock first formulated this hypothesis back in the early 1970s, proposing that the earth and all the living organisms on

it formed a coordinated, holistic system that preserved the planet's biogeochemical and climatic equilibrium. At the instigation of his neighbor, William Golding (ironically, the author of the Hobbesian parable, *Lord of the Flies*), Lovelock decided to name his theory after an ancient Greek earth goddess, Gaia. The decision would prove momentous. As David Spangler observes, not many people beyond a few climatologists would have paid much attention

> had Lovelock called his theory something more prosaic and scientific, like the Theory of Atmospheric and Environmental Regulation through Biospheric Homeostasis. . . . Cybernetic feedback loops are simply not images capable of firing the imagination and launching revolutions.[81]

The wide currency this theory enjoys, its transition from academic fringe into mainstream discourse, stems in large part from its *literary* appeal. In his assessment of the theory, however, Spangler adds a caveat, which I would second, that if Gaia remains "just a clever, sweet, or sentimental image," a fanciful poetic catch-phase, it is unlikely to provide the kind of ideological jolt our civilization needs to keep the planet a pleasant, viable habitat for future generations. For Lovelock's hypothesis to perform the work we need it to, it will have to face up to the following questions: How can we think *with* Gaia to imagine more sustainable ways of inter-acting with and dwelling on the earth? How can we situate this ancient intangible Greek deitess in a wider ecological narrative in which humans, too, play a part?

In some ways, the more intently and soberly one looks at Gaia, the less appealing the concept appears. Considering that climate change is now an urgent issue, Hesiod's goddess is problematic insofar as her presence only extends through the soil; the atmosphere is the domain of the sky god. Readers of Hesiod will look in vain for any mention of Gaia circulating CO_2 through homeostatic feedback loops; she gives birth to a litter of monstrous titans after being deluged with sperm (rain?) from a castrated sky god. In *The Discarded Image*, C.S. Lewis speculates on the genesis of the myth in language that unwittingly captures some of the goddess's shortcomings:

> All earth, contrasted with all sky, can be, indeed must be, intuited as unity. The marriage relation between Father Sky (or Dyaus) and Mother Earth forces itself on the imagination. He is on top, she lies under him. He does things to her (shines and more important, rains upon her, into her); out of her, in response, come forth the crops—just as calves come out of cows, or babies out of wives. In a word, he begets, she bears. You can see it happening. This is genuine mythopoeia.[82]

Given the essentialist views of gender voiced here, many critics today would, I suspect, be quite happy to let this image lie discarded in history's dustbin. But Lewis goes on to remind us that the primal Mother Earth and the figure of Dame Nature encountered in the Middle Ages and the Renaissance

are quite different creatures. The former is a passive, diaphanous maternal force, the latter a majestic, powerful figure reigning over the entire physical universe, including the human race. Nature, or *physis* in the Greek, does not even appear in Hesiod's *Theogony*. The very concept of *physis* was not, it seems, a coherent one in 800 BCE. Although nature is one of the most semantically dense words in the language, in environmental parlance it normally signifies something like "the creative and regulative power which is conceived of as operating in the material world and as the immediate cause of its phenomena."[83] Insofar as we can speak of this understanding of nature as an invention, it was the brainchild of the pre-Socratic philosophers. Chief among them stands Pythagoras. Pythagoras's vision of nature as animated by a world soul and striving after internal harmony among its various elements was popularized and disseminated throughout Europe by Plato, and proved a decisive influence in representations of Nature's personhood in medieval and Renaissance literature. This vision of Dame Nature may be just as qualified, if not more so, to perform some of the cultural work currently being asked of Gaia. Looking at these literary texts may not offer us practical tips on reducing our carbon footprint, but it can, I think, allow us to reflect on how authors in the past crafted a mythopoeia for explicating and assessing certain scientific paradigms, and for recalibrating our relationship with this inestimably vast and bewildering force.

In poetic treatments of philosophic texts, abstract nouns have a proclivity to assume human form. It makes sense that the process would be accelerated in the case of such a colossal, polysemous word as "nature," which today requires over forty pages in the OED online to catalogue all its nuances. Anthropomorphic images of Nature can be found scattered throughout the works of ancient Greek and Roman authors. Sometime around 500 BCE Heraclitus declared, "Nature loves to hide." The line hints how the operations of natural phenomena often elude human understanding, anticipating later iconography in which Nature appears either clothed or veiled.[84] When the Greek *physis* morphed into *natura* (which is gendered feminine in Latin), Roman authors such as Pliny, Statius, Marcus Aurelius, and Claudian all sought to personify it as a goddess. The tendency to picture Nature as a woman, then, may be just as much a grammatical accident as the result of some intrinsic, mystical association with maternity. While personifications of this figure in antiquity are not uncommon, they are usually rather fleeting and metaphorical. The late Middle Ages, however, beginning in the twelfth century, witnesses a vogue for sustained allegorical depictions of Nature. She appears as a central figure in Bernard de Sylvester's *De mundi universitate* (c. 1150) Alain de Lille's *De planctu Naturae* (c. 1170) and *Anticlaudianus* (c. 1185), Jean de Meung's continuation of the *Roman de la Rose* (c. 1275), and Chaucer's *Parliament of Fowls* (c. 1380). One explanation proffered to account for this surge views it as a propaganda effort on behalf of the Christian Church to quash the Albigensian heresy. Equating matter with evil and spirit with the good, the Albigensians taught that sexual procreation is sinful because it imprisons

an eternal spirit in a corrupt body.[85] The depictions of Nature in the Middle Ages thus can be seen as evincing a greater comfort with human sexuality (or at least heterosexuality), which in the case of Chaucer's *Parliament* takes the form of an attempt to construct a sanitized, Christianized counter-part to the pagan Venus.

There is, I believe, another reason for the popularity of an anthropomorphic Nature in the era beyond doctrinal battles over sex or a medieval fondness for allegory. The book Chaucer's narrator is reading before he dozes off is Macrobius's *Commentary on the Dream of Scipio*, a neo-Platonic gloss on the tenth book of Cicero's *De re publica*. In it, Chaucer and the other medieval authors familiar with the text would have come across the following passage, which ruminates on the trope of personification:

> Divinities have always preferred to be known and worshiped in the fashion assigned to them by an ancient popular tradition, which made images of beings that had no physical form, represented them as of different ages, though they were subject to neither growth nor decay, and gave them clothes and ornaments, though they had no bodies. *In this way Pythagoras himself*, and Empedocles, Parmenides, and Heraclitus *spoke of the gods*, and Timaeus their disciple, continued the tradition that had come down to him.[86]

Macrobius excuses the tradition of anthropomorphic gods, by tracing the practice back to Pythagoras and other Greek thinkers influenced by his teachings. But which gods did Pythagoras speak of in this way? Macrobius does not say. While Pythagoras was sometimes linked with the Delphic Apollo, in the mind of medieval and Renaissance writers the name of Pythagoras (especially when yoked with Empedocles, Heraclitus, and Timaeus) would most readily be associated with the idea of Nature and the *anima mundi*. The re-emergence of *anima mundi* as a viable intellectual hypothesis, triggered by the interest in Plato's *Timaeus* in twelfth-century Chartres and again in late fifteenth-century Florence, helped vivify the representation of Nature's personhood in medieval and Renaissance literature.[87]

During the High Middle Ages, the *Timaeus*, explicated with glosses by Chalcidius, ranked among the most frequently consulted texts on natural philosophy. In Plato's dialogue, Timaeus refers to the world as both "a living being with soul and intelligence" and a body consisting of the four elements. The world soul is discrete and self-sustaining but owes its existence to the demiurge from which it emanates. This seemingly contradictory view of Nature as both discrete and inherently entwined with the demiurge helps account for the medieval Christian exegesis assigning Nature the role of the vicar of God. In *The Parliament of Fowls,* for instance, Chaucer introduces her as both a "goddess" and as

> Nature, the vicaire of the almighty Lord,
> That hot, cold, hevy, light, moyst, and dreye

> Hath knyt by even noumbres of accord,
> In esy voice began to speke.[88]

Does Nature "knyt" the elements together or does the Lord? The syntactical ambiguity in this passage reflects the ambiguity within the relationship. By personifying and conferring the title of Goddess on Nature, however, Chaucer does grant a considerable agency and authority to it as the force that unifies the cosmos and most immediately governs the lives of plants, animals, humans, or, in the case of Chaucer's dream vision, talking humanoid birds. Following the humanist revival of pagan cosmology, there is less emphasis on the medieval notion of Nature as God's vicar, and more awareness that it might claim the status of a divinity in its own right.

Although Aristotle continued to dominate the natural philosophy curriculum in universities throughout Renaissance Europe, the *Timaeus* again emerged as the vital force in the formation of what James Hankins calls a "countercultural science of the later sixteenth century."[89] Tellingly, John Dee's famed library in Mortlake contained four editions of the treatise. Thanks to the humanists' dissemination of ancient Greek and Roman texts, knowledge of and interest in the Pythagorean school snowballed. In 1484 Ficino completed his *Compendium in Timaeum*, a detailed gloss on Plato's text in which he sought to establish its Pythagorean origins. Ficino based his conclusion in part on a treatise *De natura mundi et anima*. Although it is now thought to be a later digest of the Platonic original, early modern readers believed it to be an authentic work by the same Timaeus who appears in Plato's dialogue. The text was widely known in the early modern period. Milton studied it closely, and it may very well have provided the primary inspiration for the celebrated moment in *Paradise Lost* when the earth shrieks in response to Eve's transgression (see Chapter 4). In addition to biographies of Pythagoras by Iamblichus, Diogenes Laertius, and Porphyry, early moderns gleaned further information on the school from Philostratus's life of the neo-Pythagorean saint, Apollonius Tyanna. Ralegh refers to Apollonius by name no less than eighteen times in *The History of the World*, and this book is probably the source for Bacon's claim that the Pythagoreans interpreted the swelling and ebbing of the tides as a kind of global respiration.[90]

Another precedent for Gaia theory can be glimpsed in *The Natural History* of Pliny, Englished by Philemon Holland in 1603. Pliny opens his study with an overview of Pythagorean cosmology, which concludes with the audacious declaration: "whereby (no doubt) is proved, the power of Nature, and how it is she, and nothing else, which we call God."[91] A similar reverence for Nature is also voiced in the famed Book 6 of Virgil's *Aeneid*. With the peculiar authority of the dead, Anchises' ghost informs his son "a spirit within sustains, and mind, pervading its members, sways the whole mass and mingles with its mighty frame."[92] Cicero's *On the Nature of the Gods* was another key vehicle for importing (via Italian thinkers) *anima mundi* into Renaissance England. In it, Cicero records that the world soul garnered a large following among the Roman Stoics. The speaker Cotta gives a synopsis

of Chrysippus's teaching that a divine power resides "in the soul and mind of the natural world as a whole; that the world itself is God, and that its universally diffused soul [the world-soul] . . . pervades all things." The Stoic Balbus gives a more extended oration on the *anima mundi*:

> But when we Stoics say that the universe both coheres and is ordered by the work of nature, we do not regard it as being like a clod of earth, or a pebble, or something of that kind which lacks organic unity, but rather to be like a tree or a living creature which does not present a haphazard appearance, but bears clear evidence of order and similarity to human design.[93]

While it is true that Cicero does not allow these Stoic theories to pass uncontested and that Balbus even suggests this order had been contrived to benefit humans, *De natura deorum* remains an important source for classical and early modern environmental thought in that it contrasts various religious and philosophic persuasions and their attitudes toward the natural world. It is particularly noteworthy in the context of this study, since it exposed early modern readers to the Pythagorean/Stoic implication that Nature alone orchestrates the cosmos and is deserving of the worship normally directed at the gods.

Anima mundi also seemed to receive a further, separate validation from the Hermetic texts, a compilation of theological-philosophical writings attributed to the legendary Hermes Trismegistus, a supposed contemporary of Moses. The *Asclepius*, among the best known of these works, declares, "The world was and is and will be a living thing that lives forever."[94] While the text disavows transmigration, it does espouse another Pythagorean creed: the ethical consideration of non-humans.

> There is a community of souls: the souls of the gods commune with the souls of humans, those of humans with souls of unreasoning things. The greater take charge of the lesser: gods of human, humans of living things without reason. (35)

While the *Asclepius* is known for its self-enraptured rhetoric deifying man, it also reveals how belief in the planet's sentience promotes a sense of a "community (*koimonia*) of fellowship" with the natural world.

The concept of the *anima mundi*, then, came down to the Renaissance with a sterling pedigree, championed by some of the greatest cultural figures of antiquity, such as Plato, Pliny, Virgil, Cicero, Hermes Trismegistus, and even Ovid who—in the bible of Elizabethan poets—has Pythagoras reflect on volcanism and earthquakes and propose that the earth may be a living creature. Through these conduits the idea that a spiritual energy infused all organic life on earth was carried into the literary culture of Elizabethan England. English authors, however, did not simply regurgitate the opinions of their pagan predecessors.

One of the most characteristic twists on the *anima mundi* in England comes from the pen of Walter Ralegh. His *History of the World* makes an audacious bid to reconcile Pythagorean cosmology with the account of creation in Genesis. Ralegh reads the scriptural verse where God breathed upon the waters as the breath of the *anima mundi* permeating creation and concludes: "The same power which they called *animam* [sic] *mundi*, the soul of the world, was no other than that incomprehensible wisdom which we express by the name of God" (2:39). The explanation is typical of much neo-Platonic or, more accurately, neo-Pythagorean theology. So, too, is his oft-cited spiel exalting man as a little world: human bones resemble rocks, veins transport blood as rivers carry water, hair covers the skin like grass does a field, and the mind rules over the flesh like God over the earth. This self-congratulatory rhapsody, however, ends with a sobering admission, echoed by Shakespeare in Sonnet 15, that human beings, for all their remarkable attributes, are rooted in an almost literal sense to the earth. "As there is a continuance in all living things, and as the sap and juice, wherein the life of plants is preserved, doth evermore ascend or descend; so it is with the life of man" (2:61). As with Spenser, this pessimism entails a certain ecological humility. Unfortunately, Ralegh's grim view of the human condition infects the personification of Nature in one of his best-regarded poems:

> Nature, that washt her hands in milke
> And had forgott to dry them
> Instead of earth tooke snowe and silke
> At loves request to try them.
> If she a mistress could compose
> To please loves fancy out of those.[95]

Nature's attempt ultimately fails, as Time spoils her mistress's charms. Arguably, Nature's mistake, or Ralegh's rather, is not giving the lady a heart of stone but to assume that snow and silk are qualitatively different from earth. The opening lines have often delighted and puzzled critics; while I, too, find them enigmatic, one plausible explanation is that Ralegh expects the reader to infer that Nature is elderly. Well-to-do Elizabethan ladies (most famously the aging Queen herself) often bathed their hands and faces in milk as a kind of homeopathic moisturizer to prevent wrinkles. Forgetting to dry her hands afterward could, meanwhile, be construed as the kind of memory lapse common in old age. Considering that the poem is believed to take its impetus from the witch's cloning of Florimell in Book 3 of Spenser's *Faerie Queene,* Ralegh may even have thought of Nature as a sort of hag. The sonnet, then, not only conveys a sense of the transience of human beauty, but also may play on contemporary fears of Nature's senescence.[96] Although anxieties about Nature's aging are voiced as far back as Lucretius, they became especially acute in late Elizabethan/Jacobean England, as evident in Donne's *Anatomy*, the opening lines of Shakespeare's

Timon of Athens, and Jonson's *Mercury Vindicated from the Alchemists at Court*. While a student at Cambridge in the 1620s Milton wrote a Latin exercise disputing this theory, *Naturam Non Pati Senium* (That Nature Is Not Subject to Old Age). From an ecocritical viewpoint, this mounting concern that the earth was aging and exhausting its fertility could be linked to harvest failures and periods of scarcity in a nation in the midst of a population boom. Imagery of Nature's aging, then, was one of the ways in which early modern authors expressed an alarm that we would now recognize as ecological concern. In Ralegh's poem, however, it is the philosophical abstraction of Time rather than inclement weather and poor environmental management that bears the blame for both Nature's and the mistress's decay. In depicting Nature as vulnerable to Time, the poem does not endow it with the eminence afforded God—at least not a God worth worshipping. Instead the sonnet gives us a picture of *Natura naturans* as a flawed, aging, hapless artisan.

A very different portrait of Nature and the *anima mundi* emerges in the works of Giordano Bruno, perhaps the leading exponent of Pythagorean teachings in early modern Europe. In his controversial treatise *Cause, Principle and Unity*, Bruno posits

> that the first and principal natural form, formal principle and efficient nature, is the soul of the universe; which is the principle of life, vegetation, and sense in all things that live, vegetate, and feel. And further, by way of consolation, that it is unworthy of a rational subject to believe that the universe and its principal bodies are inanimate, since from the parts and residues of these bodies derive the animals that we call most perfect.[97]

For Bruno, all the living organisms on the earth are connected; as in Donne's *Progress,* the difference between a human and a horse is merely one of degree. Reason does not exalt humans above the rest of nature since more perfect (i.e., rational) beings are "derived" from the less perfect. All the biological world constitutes a vast continuum, deserving of our devout respect:

> There is nothing whatever so defective, broken down, diminished, imperfect, which from its ownership of the formal principle, does not similarly own a soul, even when it lacks the kind of external activity that we call animal. And we conclude, with *Pythagoras and others*, who have not opened their eyes in vain, that an immense spirit, according to diverse manners and degrees, fills out and contains the whole. (49, italics added)

It is easy to see why the Roman Inquisition perceived Bruno's Pythagorean theories as a threat. While his natural philosophy never stipulates a denial of God, it essentially relegates him to an ineffectual, hopelessly insulated demiurge. If Nature is God's vicar, then she is now the vicar of a *deus absconditus*:

> So then, that God, as absolute, has nothing to do with us except insofar as he communicates with the effects of Nature and is more intimate with them than Nature herself. Therefore, if he is not Nature herself, he is certainly the nature of Nature, and is the soul of the Soul of the world, if he is not the Soul herself.[98]

Bruno wrote these books subscribing to an animistic universe during his two-year residence in England. He lectured on these theories at Oxford before large audiences, one of which included the poet Samuel Daniel. While the dons appear to have been unimpressed, Philip Sidney, Fulke Greville, and John Florio (the translator of Montaigne) all befriended the Italian philosopher. During their conversations and dinner parties, the charismatic, outspoken Bruno would certainly have shared with them his convictions regarding Pythagorean cosmology and the *anima mundi*. Over a half century ago, John Buxton noted that "Bruno's influence on the [Elizabethan] poets has not yet been thoroughly investigated," and the remark—despite the path-breaking work of Frances Yates and Hilary Gatti—remains more or less valid.[99] While this is not the place for a comprehensive monograph on the topic, I would like to suggest that Bruno's Pythagorean view of Nature had a decisive impact on Elizabethan literature, in particular the pastoral. The pastoral convention of a responsive, animate landscape (which I will explore in Chapters 2 and 3) received a degree of scientific credibility from the *anima mundi*. Moreover, it is the Pythagorean deification of Nature that we find in Bruno, fused with that of Alain de Lille and Chaucer, which provided the cloth from which English poets cut their allegorical representation of Nature, a pattern that can most readily be discerned in the final canto of Spenser's *Faerie Queene*.

In a recent study on the iconography of Nature's personhood, Katherine Park asserts that the medieval figure of Dame Nature gradually disappeared and was re-imagined in the early modern period as a multi-breasted, lactating woman.[100] In advancing this case, Park primarily draws her evidence from visual engravings originating in Italy, brushing Spenser aside as an anomaly, or medieval throwback. In fact, personifications of Dame Nature are not all that rare in early modern England, appearing in (in addition to Spenser) Lyly's pastoral comedy *Woman in the Moon* (c. 1595), Jonson's masque *Mercury Vindicated from the Alchemists at Court* (1616), John Hagthorpe's *Visiones Rerum* (1623), and Margaret Cavendish's "Nature's Dress" (1653). None of these depict Nature as a naked, suckling mother. Lyly represents this figure as a benevolent, omnipotent cosmic artisan, who outranks the Roman gods and reconciles her servants Concord and Discord. Jonson's Nature, while maternal, also has a decidedly regal, commanding manner, a cross between an empress and a divine dancing master. Dismissing reports of her senility, she proclaims herself to be "young and fresh."[101] Nor has science stripped Nature bare. On the contrary, Nature banishes the antemasque of Vulcan's alchemists, whose pursuit of lucre impugns on

her authority. The Chorus greets Nature's entrance with the Pythagorean invocation, "prove all the numbers then, / That make perfection up," as music and dance restore the order Promethean science has violated. Hagthorpe, likewise, rejects the slander of Nature as elderly, describing her as a "frugall Dame," who

> Doth in her secret Cabinet still hold
> Some thing for after times (for feare the shame
> Of pouertie should brand her being old).

Hagthorpe's Nature appears so heavily draped in garments—a green kirtle embroidered with plants, a blue scarf depicting all forms of marine life, and a purple robe showing all the land animals—one has a hard time imagining any visible skin on her at all. Cavendish embellishes this iconographic tradition even further, decking Nature in accessories like earrings and necklaces. Arguably, Cavendish's personifications celebrate Nature's femininity in a bid to place women in a position of epistemological privilege. Her twists on the tradition attest that the figure (and, by extension, Pythagorean philosophy) can be amenable to ecofeminist recuperation.[102] Dealt only a glancing blow by Bacon, Dame Nature survived well into the early modern era. It was not until Boyle traduced her in his *Free Inquiry into the Vulgarly Received Notion of Nature* (1685), that her credibility among the scientific community evaporated.

This tradition of dressing Nature in an elaborate gown embroidered with all forms of life on earth can be traced back to Alain de Lille's early thirteenth-century text, *De planctu Naturae*. Alain describes it, shimmering alternately in iridescent shades of white, red, and green, as a veritable bestiary in cloth, adorned with the images of thirty-three birds, eighteen fish, twenty-seven beasts, and an unspecified number of herbs, trees, and flowers. As Nature moves, the gown rustles, and the creatures pictured on it seem to stir to life. In *The Parliament of Fowls*, Chaucer states that his Nature appears

> Right as Aleyn, in the Pleynt of Kynde,
> Devyseth Nature of aray and face,
> In swich aray men myghte hire there fynde.
> (316–318)

Although it may seem a paradoxical image, since clothing is a product of human artifice, the robe is a fitting accessory for Nature in that it complicates the anthropomorphic fantasy of Nature's personhood. The plants and animals embroidered on it invite the perception of multiplicity within unity, of numerous individual species woven together in a sprawling ecological tapestry. Unlike the Chain of Being, the Robe of Nature is not necessarily hierarchical; Alain and most of his imitators follow Aristotle in classifying the

creatures by habitat. The robe also serves to literally invest the natural world, in all its teeming biological diversity, with tremendous mystery and splendor.

In the *Mutabilitie Cantos* Spenser follows Chaucer by advising his reader to "seek out that Alane" for a full account of Nature's appearance. Previously, Spenser's critics were content to take him at his word. Recent studies, however, have argued that this allusion is something of a smokescreen, obscuring how much Spenser deviates from his supposed model.[103] Most conspicuously, Alain de Lille and Chaucer both imagine Nature as female while Spenser makes his personification androgynous.

> Yet certes by here face and physnomy,
> Whether she man or woman inly were,
> That could not any creature well descry:
> For with a veile that wimpled euery where,
> Her head and face was hid, that mote to none appeare.
>
> (7.7.5)

Although he still uses the feminine pronoun, and outfits Nature in a "wimple" (a kind of veil traditionally worn by women) rather than a robe, Spenser asks readers to envision Nature as a being that transcends gender. Subsequent stanzas continue to describe Nature as a compound of contradictory qualities:

> Great Nature, ever young, yet full of eld,
> Still moving yet unmoved from her sted;
> Unseene of any, yet of all beheld.
>
> (7.7.13)

Depicting Nature in terms that totally defy mimetic representation, Spenser confronts us with an anthropomorphic image that underscores the limitations of anthropomorphic imagery.[104] Represented as un-representable, Nature contains paradoxes that, as Donald Cheney observes, were conventionally attributed to the Christian God. The poem thus carries some shocking theological implications.[105] The figure we encounter in the *Mutabilitie Cantos* is not merely a vicar, delegated to carry out divine fiats on a material plane; Spenser's Nature *is* God. The Titaness Mutabilitie recognizes Nature's divinity when she asks her to adjudicate the dispute, referring to her not as Dame but as "the Father of Gods" and "The God of Nature" (7.6.35). It would be difficult to exaggerate the audacity of these lines. As H.L. Weatherby remarks, "however powerful the various medieval versions of the personification, none of them makes Spenser's apparent identification with God as Christians conceive Him."[106] No one since the first century had a made such a bold claim for nature's divinity before; no one, that is, except for Giordano Bruno. Bruno's *Expulsion of the Triumphant Beast* implies that God is best understood as nature, or the nature of nature. Furthermore, his treatise

is structured as a kind of parliament among the gods, which has a definite resemblance to the trial scene in Spenser's poem. Evidence that Spenser read the Italian philosopher is circumstantial; but regardless of whether or not a direct line of influence exists, he still would have known about the *anima mundi* and the Pythagorean theories of the sentience and sanctity of the earth through some of the same sources familiar to Bruno. When an earthquake on April 6, 1580 damaged churches in England, Spenser's friend, the scholar Gabriel Harvey, wrote him a letter in which he concludes that nature has a certain amount of autonomy from divine control. While Harvey allows for a more secular understanding of nature, he implies that Spenser sides with "the olde philosophers" who equated "very Nature self . . . *Natura Naturans*" with God.[107] Harvey neglects to specify which old philosophers he has in mind, but it is this tradition of regarding nature as a divine, active, semi-autonomous order, a tradition that can be traced back to Pythagoras, which lends such an august vitality to Spenser's Dame. Like the 1572 supernova, the 1580 earthquake seems to have rattled the Elizabethan World Picture, unsettling the neo-Platonic merger of God and Nature. Only three years after this quake Bruno arrived in England. Did some early modern thinkers begin to imagine a third alternative in between the stance of Harvey and the neo-Platonists? What if Nature possesses a power over human affairs equivalent to that of a deity, but one not entirely subject to Christian providence?

Shakespeare makes several fleeting but significant personifications of Nature. Sonnet 20 situates Nature in a workshop like the one in Lyly's comedy, *Woman in the Moon*. Perdita invokes "great creating Nature," *Natura naturans*, as a sacred animating force with which humans should not tamper. A kinder, more domestic cousin of the Dame appears in Timon's astonishing overture to "the bounteous housewife nature" (4.3.413). Not coincidentally, this version appears in a play steeped in Stoic philosophy, which subscribed to *anima mundi*. Edmund's sinister prayer salutes Nature as a goddess, but his understanding of the term aligns more with the dour glosses of medieval scholasticism on natural evil in a post-lapsarian world or the proto-Hobbesian rhetoric of Greek sophists rather than the benign deity of the Pythagoreans.[108] His goddess is not really pagan at all but Dame Nature's evil predecessor; she is the wicked witch that Dame Nature was partially summoned from the Platonic heavens to crush. The word "nature" occurs in the conflated text no less than thirty-nine times. In ringing changes on this word, *King Lear* illustrates how one's understanding of nature dictates one's moral and socio-political outlook. The plot can be framed as a competition to control its meaning. As Shakespeare so powerfully dramatizes during the storm on the heath, Kings do not control it, nor do malcontented brothers. Neither, for that matter, does the Judeo-Christian God. While retaining the awesome might of the Old Testament God of Job, Nature stands up for herself, despite human attempts to invoke or delimit her. In this regard the play offers a corrective to simplistic versions of Gaia theory, which misconstrue the biosphere as purely benevolent to human beings. Yet it is worth noting that Gloucester's grim state of

the disunion speech—"in cities, mutinies; in countries, discord; in palaces, treason; and the bond cracked 'twixt son and father"—is an almost verbatim inversion of a famous Pythagorean apothegm.[109] Significantly, it is the younger generation's rejection of Pythagorean attitudes toward nature that ignites the play's apocalyptic vision.

Perhaps more remarkable than these scattered allusions in the plays, however, is Shakespeare's power to generate personifications of Nature in readers, writers, and critics. Of the countless passages that could be cited from the eighteenth century onward, my personal favorite is found in *Mrs. Dalloway*:

> At every moment Nature signified by some laughing hint like that gold spot which went round the wall—there, there, there—her determination to show, by brandishing her plumes, shaking her tresses, flinging her mantle this way and that, beautifully, always beautifully, and standing close up to breathe through her hollowed hands, Shakespeare's words, her meaning.[110]

The critical reception attesting to the mimetic power of Shakespearean drama represents a staggering vindication of the Renaissance belief in art as micro-cosmos.

Although not explicitly invoked, Dame Nature haunts one of the most strident articulations of a rationally ordered universe in early modern literature, the dispute between Cecropia and Pamela in Sidney's *New Arcadia*. Significantly, Sidney added this passage to the revised text after his meeting with Bruno. In order to refute her captor's impiety, Pamela resorts to an argument from design that has only a bare-bones resemblance to orthodox Christianity.

> You may perhaps affirm that one universal nature, which hath been for ever, is the knitting together of these many parts to such an excellent unity. If you mean a nature of wisdom, goodness, and providence, which knows what it doth, then say you that which I seek of you. (361)

The debate highlights why natural theology flourished in the early modern era: in order to ward off atheism, Renaissance humanists like Sidney were compelled to conflate God with a benevolent, providential Nature. The speech reveals Pamela to be an avid student of philosophical debates on *anima mundi*. Echoing Bruno, she avers it is impossible to suppose that mortal humans can possess reason while "this universality whereof we are but the least pieces, should be utterly devoid thereof, as if one should say that one's foot might be wise, and himself foolish" (362). In this account humans are connected and subservient to Nature as the foot is to the body, an ecological variation on the fable of the belly that Shakespeare recounts in *Coriolanus*. In an anecdotal aside (that sounds like Sidney speaking), Pamela relates that a scholar once attempted to rebuff this by contending, "our bodies should be

better than the whole world" unless the world possessed "a spirit that could write and read too" (362). But Pamela again dismisses this idea as absurd. The natural world has no incentive to understand itself, but manifests self-understanding in the cooperation of the various elements toward stability. Anthropomorphism should not be taken too literally. The world, she concludes, must be sustained by a mind that is either its creator "or the soul and governor thereof" (362). The second clause admits the possibility that God may be no different than an immanent *anima mundi*. Although Sidney favors the neo-Platonic theory of a divine overseer whose power permeates yet "is above either his creatures or his government," Pamela's spirituality presupposes the sanctity of the natural world.

Christianity's impact on the environmental history of the West remains a debate as heated as that of Cecropia and Pamela. Despite the legitimate grievances voiced by Lynn White (which I qualify and amplify in Chapter 3), most early modern thinkers did not regard God and Nature as antagonists. An extant memento of this adorns the Royal Portal of Chartres Cathedral in the form of an effigy of Pythagoras strumming a lyre alongside Aristotle and Christian theologians (see Figure 1.2). The preceding pages have, I hope, demonstrated that Renaissance humanists

Figure 1.2 Detail from the royal portal of Chartres Cathedral depicting the Seven Liberal Arts. Pythagoras (pictured left), associated with music, plays a tintinnabulum.

showed a remarkable willingness to marry Christianity with pagan philosophy. Certainly, it is true that the two did not always make amicable bedfellows. Tillyard strikes the right note when he calls the *anima mundi* "mildly unorthodox," as some early modern divines worried that the theory could devolve into hylozoism, a belief in the divinity of the natural world.[111] Unfortunately, certain clergy regarded hylozoism as a species of atheism. A reputation for atheism dogged Ralegh, Marlowe, and Dee, and the Church subjected Bruno to an auto de fe. Christianity's ambivalence toward Pythagoreanism is most vividly illustrated in the fate of Bruno's disciple, Julius Caesar Vanini. In 1616 (the same year in which Nature makes a grand appearance in Jonson's *Masque*), Vanini published his Pythagorean treatise, *Mysteries of Nature, Queen and Goddess of Mortals*, and a church council at the Sorbonne approved the work's orthodoxy. Three years later it was cited as evidence of his heresy when Vanini had his tongue cut out and, like Bruno, was immolated at the stake. When Nature begins to inspire a respect that rivals the Judeo-Christian God, the Church could prove intolerant. Yet some early modern intellectuals were able to conceive of a God that was far less jealous. This is a project that ecocriticism should carry forward. While I concur whole-heartedly with Steve Mentz's analysis of Providential design (operative even in the fall of sparrow) as cultivating a proto-ecological mindset, the figure of Nature seems a more capacious and flexible conduit for establishing the "strained continuity" between ecology and natural theology.[112]

Early modern ecostudies can make a positive contribution to environmentalism by resurrecting the era's understanding of nature (possessed by an *anima mundi*) as a quasi-deific force. In order to ease the strain further, we must undo the neo-Platonist hijacking of this Pythagorean concept, liberate it from the role of mere vicar, and revive an understanding of the organic world as spontaneously designing rather than passively designed. Via reverential personifications of Nature that eschew or downplay the patriarchal sky-God, Renaissance literature offers a precedent for this new ecospirituality. If the Latinate phrases *anima mundi* and *Natura naturans* sound too erudite, Dame Nature may represent a more appealing literary icon. Her appearances in Renaissance literature may offer one of our best hopes for "re-mything nature as a speaking, 'bodied' subject."[113] Like photos of the earth from outer space that often accompany Sierra Club publications, the figure of Dame Nature and the religious veneration it commands can, moreover, serve an activist impulse. In the early modern period, Dame Nature could be invoked to promote an understanding of the natural world as a locus of power and majesty that transcends the nation-state.

The personification of Nature in Renaissance literature, I have argued, can be seen in a continuum with the branch of Pythagorean philosophy that encouraged its followers to become pious, awestruck observers of the harmony

in the natural world. A curious development unfolds in late sixteenth-century England, however, when the cult of Elizabeth appropriates this cosmological allegory to portray the Queen herself as Dame Nature, encouraging people to become pious, awestruck subjects of the Tudor regime.

One of the most blatant examples of this neglected sub-genre of Elizabethan pastoral is the poem "Theorello." Though little known today, as the second entry in the popular pastoral anthology *England's Helicon* (1600) it was no doubt widely read. In this excerpt, the shepherd describes the appearance of his love:

> Nor cloathed like a Sheepheardesse,
> But rather like a Queene:
> Her mantle dooth the formes expresse,
> Of all which may be seene.

The author, believed to be the antiquarian Edmund Bolton, refers to the shepherd's love as Cosma (evoking the Pythagorean term "cosmos") instead of *Natura*, but the debt to Alain is unmistakable.

> Who ever (and who else but Jove)
> Embroidered the same:
> He knew the world and what did move
> In all the mightie frame.
> So well (belike his skill to prove)
> The counterfeits he wrought:
> Of wood-Gods, and of every groave,
> And all which else was ought.
> Is there a beast, a bird, a fish worth noate?
> Then that he drew, and pictured in her coat.
> ....
> A little world her flowing garment seemes:
> And who but as a wonder thereof deemes?[114]

The allusion to Jove as the great cosmic tailor corresponds to the idea of the neo-Platonic demiurge. But just as Bruno delegates God to an absolute that has nothing to do with humans except as manifested in the physical world, the poet confines Jove in a parenthesis, elaborating on the attractions of his mistress instead. Remarkably, the poem blends pastoral with medieval cosmological allegory to express a sense of the beauty and dignity of the natural world. When Bolton writes that his love appears appareled "like a Queene," he sees the gown as an ornament of statecraft, endowing Nature with the authority and mystique of a monarch. Of course, the allusion also flatters Elizabeth as a monarch who commanded a similar authority and who happened to own a gown exactly like the one described by Bolton.

Over the past fifty years, Roy Strong, Frances Yates, and Louis Montrose have studied the iconography of Elizabeth in scrupulous detail.[115] Surprisingly, however, these cultural historians all overlook the Hardwick Hall portrait of the Queen (see Figure 1.3) wearing a dress that is almost certainly modeled on the one worn by Nature in Alain de Lille. Bess of Hardwick, the Countess of Shrewsbury, commissioned the painting to commemorate her presenting this dress (which she also commissioned) as a New Year's gift to the Queen.[116] Unusual Bess's choice may be, but not illogical. Most often Elizabeth's courtiers flattered her under the guise of Astraea, Diana, or Cynthia, goddess figures associated with virginity. Depicting Elizabeth the aging virgin as a topless mother with suckling children in her arms—the image of Nature Park claims was predominant in Italy—would not only have been in poor taste, it very well could have landed an artist in the Tower. But Dame Nature, who was not necessarily maternal, represented a powerful female authority figure which, in a nation with a female ruler presiding over her share of regional factions and rowdy Parliaments, provided a convenient image for naturalizing the monarch's authority over the realm. Like the better-known Ditchley portrait of the Queen (see Figure 1.4) as a giant titaness bestriding England, the Hardwick Hall painting of Elizabeth as Dame Nature asserts her power over the land.[117]

The Hardwick Hall portrait provides an object lesson in the potential dangers of personifying nature. Embodying the natural world in a human being can be taken as sanctioning "human lordship over the universe."[118] Poems or paintings associating the Queen with Dame Nature belong, then, in the same category as the royal progress or country house revels that "subject" (in both senses of the word) the landscape to royal authority.[119]

Richard Helgerson detects a similar ideological bent in Tudor cartography, while suggesting how Michael Drayton's chorographical poem *Poly-Olbion* resists royal centrism in responding to the unique topography of each county, and removing the royal insignias from the maps he included in the book. In the Jacobean era, the authority of Dame Nature could not be claimed so easily by the monarchy. Barbara Ewell has noted how Drayton's use of personification "infuses into the static mass that is England the vitality of an organism teeming with life and activity." It is this over-arching vision of the majestic, sentient land that trumps the brief salute to James as colossus who "shall clip the Ile on every side" (5.660). This reading becomes even more compelling once we perceive the figure of Poly-Olbion depicted in the frontispiece as a literary descendant of Dame Nature (see Figure 1.5). The land does not belong to the monarchy, the monarchy belongs to the land, as the spelling of Stuart as "Steward" (5.60) seems to punningly remind us.[120] Yet Helgerson contrasts Drayton with Spenser, whom he sees as a devout idolater in the Queen's cult. In this he concurs with Louis Montrose's argument that Spenser's encomia to Elizabeth as Queen of Shepherds served to mystify monarchal power. Reading the *Mutabilitie Cantos* alongside the Hardwick Hall portrait of Elizabeth

Figure 1.3 The Studio of Nicholas Hilliard, *Queen Elizabeth I (The Hardwick Hall Portrait)* Hardwick Hall / The Devonshire Collection (Acquired through the National Land Fund and transferred to the National Trust in 1959), ©NTPL John Hammond.

Figure 1.4 Marcus Gheeraerts the Younger, *Queen Elizabeth I (The Ditchley Portrait)* © National Portrait Gallery, London.

suggests that something like the opposite was occurring in the later poem. Spenser draws upon the grandeur and statecraft of the monarchy to mystify and exalt nature. Rather than glorify the Queen as the undisputed sovereign of the cosmos, the political allegory of the *Mutabilitie Cantos* associates Elizabeth with Cynthia, the embattled, hapless goddess of the moon, who is threatened by Mutability and clearly subordinate to Nature. Repeatedly the *Mutabilitie Cantos* evokes a sense of Nature's divinity by insisting how much her majesty and regalia surpass those of a mortal ruler. When Nature appears on Arlo Hill she rests in a pavilion

> Not such as Craftes-men by their idle skill
> Are wont for Princes states to fashion
> *But th'earth her self of her owne motion,*
> Out of her fruitfull bosom made to grow
> Most dainty trees; that, shooting up anon,
> Did seeme to bow their bloosming head full lowe
> For homage unto her, and like a throne did shew.
> (7.7.8)

The perennial fantasy of the Elizabethan country house entertainments, the land's spontaneous homage to its human ruler, is here rewritten to deflect that homage back to the land. While Spenser certainly does on occasion relish the role of Tudor propagandist, by the time he composed the *Mutabilitie Cantos* he appears to have become disgruntled with England's failures in Ireland and increasingly skeptical about the monarchy's imperial power.[121] In Spenser's poem, the land is now not only the monarch, but also a goddess.

In departing from Alain and Chaucer's personifications, Spenser intends, in the words of H.L. Weatherby, "to challenge our traditional theology of nature and direct us toward a new one."[122] This is, in essence, precisely the project that ecocriticism has started to undertake. In modern secular democracies skeptical of monarchs and gods, Gaia lacks the trappings of authority and dignity in which Spenser clads Nature. Yet for Lovelock's hypothesis to develop into something resembling a green theology it cannot remain an abstract slogan, a name without a narrative. Many environmentally minded writers, such as Bruno Latour and Timothy Morton, remain wary of the whole concept of nature, regarding it as "a transcendental term in a material mask," which ecocriticism must somehow strip away or pulverize into countless little particulars.[123] The concept of nature, like the Great Chain of Being, affirms multiplicity and unity, "but only insofar as they can be traced back or added up to a higher, marcotranscendent unity."[124] Morton, consequently, wants us to jettison the idea of nature as "an authority for which you sacrifice your autonomy and reason." In rebuttal, I would argue that the Enlightenment elevation of human autonomy and reason over and against the nonhuman environment has a far more ecologically dubious track record.

Figure 1.5 Frontispiece of Albion, from Michael Drayton, *Poly-Olbion* (London: 1613). Reproduced with permission of the Folger Library.

Rather than ban all talk of Nature, perhaps we need to recapture an earlier pre-Enlightenment notion of it as *Natura naturans*. For the ancient Greeks and Elizabethans (as with most pre-industrial peoples), nature is emphatically not a term from which humanity can exempt or extricate itself. As opposed to an unfeeling, self-contained system of dead matter, apprehending nature as organic, sentient, and ensouled enables a "participation mystique," or a sense of reciprocity, which promotes an ethos of gratitude and stewardship. When executed with the complexity found in Spenser and Shakespeare, personification can contribute to this mindset. In the words of Bruce Foltz, "What faces us has an inside, and what has an inside is alive."[125]

In early modern culture, the figure of Nature primarily serves as a focal point of reverence, not a tactic for discursively transcending the environment. Thanks in part to the Pythagoreans, early moderns were capable of imagining a unity that is not macrotranscendent. Personifying nature as a being capable of unconscious generosity may help us to fathom the "radical given-ness" of the earth, a given-ness which green philosophers like Heidegger believe that art can unveil.[126] A sense of a reciprocal obligation for the environment arises from an understanding of it as a totality in which we too are integrated. Pulverizing the biosphere into infinite particulars, in contrast, would inhibit any shared understanding of it as a site of ecosocial community and hinder our ability to imagine how minute actions impacting the environment can ripple outward through space and time. While its normalizing potential will require frequent deconstruction, nature can and should remain a conceptually potent force for motivating positive changes in human thought and behavior in the public sphere.

Literature should not be mistaken for a direct encounter with the natural world, but it can, I think, enhance our perception of an intelligence, agency, and order in non-human nature even if, ironically, it renders nature human-like in the process. In a religious and allegorical-minded age, Chaucer and his contemporaries thought of nature as the vicar of God. Perhaps the task facing ecocritics in the twenty-first century will be to demonstrate how literature can, through its traffic in metaphors and correspondences, its celebration of the beauty of a diverse biosphere striving after order, provide a vicarious (which shares an etymological link with vicar) intimation of the earth as an integrated entity. Perhaps literature can be the vicar of nature.

2 Mute Timber?

Environmental Stichomythia in *The Old Arcadia* and *Poly-Olbion*

> [In tragedy] consciousness . . . pays the penalty of trusting a knowledge whose ambiguity, for such is its nature, also becomes explicit for consciousness and a warning to it. The ravings of the priestess, the inhuman shape of the witches, *the voices of trees and birds*, dreams and so forth, are not the ways in which truth manifests itself; they are warning signs of deception, of an absence of self-possession, of the singularity and contingency of the knowing.
>
> —G.W.F. Hegel[1]

THE LITERARY ARBORETUM: "MUCH CAN THEY PRAISE THE TREES"

In 1590, two years after its original quarto publication, Thomas Harriot's *A Briefe and True Report of the New Found Land of Virginia* received a second lavish printing complete with twenty-eight engravings of the Southeastern Algonquin. Although the text has recently gained notoriety as a prime example of early modern ethnography, critics have sometimes overlooked its main purpose: to drum up investment in the colonial venture. The first half of the book is in fact nothing more than an inventory of the abundant "marchantable commodities" of the New World that await only the hand of an intrepid entrepreneur to be converted into a handsome profit. Chapter 3, titled "Of commodities for building and other necessary uses," turns out to be a list of various trees species native to the Eastern seaboard accompanied by a detailed description of their numerous commercial applications.

> *Okes*, there are as faire, straight, tall, and as good timber as any can be, and also great store, and in some places very great.
> *Walnut trees*, as I have said before very many, some have bene seen excellent faire timber of foure and five fadome, and above fourescore footstreight without bough.
> *Firre trees* fit for masts of ships, some very tall & great.
> *Rakiock*, a kind of trees so called that are sweet wood of which the inhabitants that were neere unto us doe commonly make their boats or Canoes of the forms of trowes . . . the timber being great, tal,

> streight, soft, light, & yet tough enough I thinke (besides other uses) to be also for masts of ships.
> *Cedar* a sweet wood good for seelings, Chests, Boxes, Bedsteeds, Lutes, Virginals, and many things else . . .
> *Maple*, and also *Wich-hazle*, wherof the inhabitants use to make their bowes.
> *Holly* a necessary thing for the making of birdlime.
> *Willowes* good for the making of weares and weeles to take fish after the English manner . . .
> *Beeche* and *Ashe*, good for caske, hoopes; and if neede require, plowe worke, and also many things els [sic].[2]

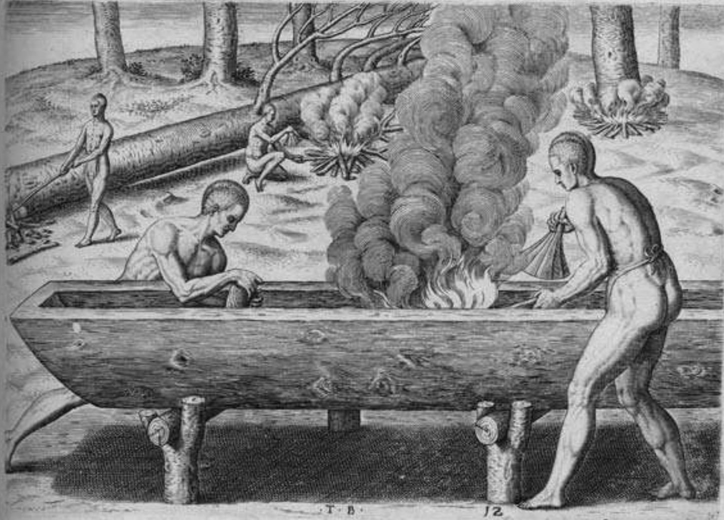
The list goes on. Fir trees are trimmed into ship-masts, willows whittled to fishing poles, maples bent into bows, beeches converted to barrels, and cedars re-born as chests, lutes, and virginals. It is characteristic of the text as a whole that the courteous walnut trees are seen as having virtually pruned themselves to make their transformation into timber as painless as possible.

Around the same time as Harriot's *Report* reached England, Christopher Marlowe composed *Doctor Faustus*, in which the eponymous hero asks Mephistopheles for a magic book listing "all the plants, herbs, and trees that grow upon the earth" (A 2.1.170). Marlowe, who reportedly knew Harriot, here voices the drive of the Renaissance intellectual to possess a god-like knowledge of the natural world.[3] While herbals, which often include lists of trees, date back to the time of Theophrastus (d. 287 BCE), and a few examples in Latin circulated during the Middle Ages, burgeoning confidence in mankind's capacity to survey and comprehend its environment ignited tremendous interest in the genre in the second half of the sixteenth century. In 1538 William Turner produced the first study of British flora, *Libellus de re herbaria*, issued a decade later in English as *The Names of Herbes*; his efforts were soon followed by Anthony Ashcam (1561), Thomas Hill (1571), Nicolas Monardes (translated in 1577), Rembert Dodens (translated in 1578), and John Gerard (1597).[4] Chapter 3 of the *Report* represents a new twist on the genre in that it elucidates the commercial as opposed to the medicinal properties of the plants. But Harriot was not the only Elizabethan author to tamper with the herbal.

In the same decade in which Harriot's book and Marlowe's play appeared, manuscripts of Sir Philip Sidney's *Old Arcadia* were circulating among English literati with ties to his sister, the Countess of Pembroke.[5] Early readers of the romance familiar with Turner's *The Names of Herbes* or Harriot's *Report* may have experienced a mild sense of *déjà lu* upon encountering yet another botanical census. In the first eclogue a heartsick courtier seeks refuge in the woods where he directly addresses the trees and suggests how each variety figures forth his inner state. Since the passage is not widely known and paraphrasing would rob it of its encyclopedic pretensions, I have cited it in its entirety.

And when I meet these trees, in the earth's fair livery clothed,
Ease I do feel (such ease as falls to one wholly diseased)
For that I find in them part of my estate represented.

The manner of makinge their boates. XII.



THe manner of makinge their boates in Virginia is verye wonderfull. For wheras they want Inſtruments of yron, or other like vnto ours, yet they knowe howe to make them as handſomelye, to ſaile with whear they liſte in their Riuers, and to fishe with all, as ours. Firſt they chooſe ſome longe, and thicke tree, accordinge to the bignes of the boate which they would frame, and make a fyre on the grownd abowt the Roote therof, kindlinge the ſame by little, and little with drie moſſe of trees, and chipps of woode that the flame should not mounte opp to highe, and burne to muche of the lengte of the tree· When yt is almoſt burnt thorough, and readye to fall they make a new fyre, which they ſuffer to burne vntill the tree fall of yt owne accord. Then burninge of the topp, and bowghs of the tree in ſuche wyſe that the bodie of theſame may Retayne his iuſt lengthe, they raiſe yt vppon potes laid ouer croſſ wiſe vppon forked poſts, at ſuche a reaſonable heighte as they may handſomlye worke vppó yt. Then take they of the barke with certayne shells: thy reſerue the, innermoſt parte of the lennke, for the nethermoſt parte of the boate. On the other ſide they make a fyre accordinge to the lengthe of the bodye of the tree, ſauinge at both the endes. That which they thinke is ſufficientlye burned they quenche and ſcrape away with shells, and makinge a new fyre they burne yt agayne, and ſoe they continne ſomtymes burninge and ſometymes ſcrapinge, vntill the boate haue ſufficient bothowmes. This god indueth thiſe ſauage people with ſufficient reaſon to make thinges neceſſarie to ſerue their turnes.

Figure 2.1 "The Manner of Makinge Their Boates," from Thomas Harriot, *A Briefe and True Report of the New Found Land of Virginia* (London: 1590). Harriot's target audience, consisting largely of investors eager to supply the shipping industry, no doubt would have found this woodcut of particular interest. Reproduced with permission of the Newberry Library.

Laurel shows what I seek; by the myrrh is showed how I seek it;
Olive paints me the peace that I must aspire to by conquest:
Myrtle makes my request, my request is crowned with a willow.
Cypress promiseth help, but a help where comes no recomfort.
Sweet juniper saith this, though I burn, yet I burn in a sweet fire.
Yew doth make me bethink of what kind of bow the boy holdeth
Which shoots strongly without any noise and deadly without smart.
Fir trees great and green, fixed on a high hill but a barren,
Like to my noble thoughts, still new, well placed, to me fruitless.
Figs that yield most pleasant fruit, his shadow is hurtful,
Thus be her gifts most sweet, thus more danger to be near her,
But in a palm when I mark how he doth rise under a burden,
And may I not (say I then) get up though griefs be so weighty?
Pine is a mast to a ship, to my ship shall hope for a mast serve?
Pine is high, hope is as high; sharp-leaved, sharp yet be my hope's buds.
Elm embraced by a vine, embracing fancy reviveth.
Poplar changeth his hue from a rising sun to a setting:
Thus to my sun do I yield, such looks her beams do afford me.
Old aged oak cut down, of new works serves to the building:
So my desires, by my fear cut down, be the frames of her honour.
Ash makes spears which shields do resist, her force no repulse takes:
Palms do rejoice to be joined by the match of a male to a female,
And shall sensive things be so senseless as to resist sense?
Thus be my thoughts dispersed, thus thinking nurseth a thinking,
Thus both trees and each thing else be the books of a fancy.
But to the cedar, queen of woods, when I lift my be-teared eyes,
Then do I shape to myself that form which reigns so within me,
And think there she do dwell and hear what plaints I do utter:
When that noble top doth nod, I believe she salutes me;
When by the wind it maketh a noise, I do think she doth answer.[6]

While his contemporaries were compiling lists of trees in herbals and investment brochures, Sidney turns to a classical poetic device sometimes referred to as a tree catalogue. One of the most stirring examples occurs in Ovid's *Metamorphoses* when Orpheus, standing alone in a clearing, strums his lyre; all the nearby trees, tip-toeing on their roots, slowly gather within earshot and shade him as he sings (10.92–110). Chaucer memorably features one in *The Parliament of Fowls*, though Sidney was most likely inspired by his primary source, Sannazaro's *Arcadia*, an Italian romance published in 1502.[7] Another tree catalogue adorns the pseudo-Virgilian *Culex*, which was translated by Sidney's friend, Edmund Spenser—who later inserted one in the opening canto of *The Faerie Queene*.[8] Sidney's rendition, however, is unprecedented both in its length and the complexity of associations the trees evoke. Sidney's revival of this poetic exercise in the late sixteenth century merits further scrutiny in that it is one of the first to circulate alongside catalogues

compiled in scientific treatises, herbals, and agricultural texts that, characteristic of the age's increasingly proprietary attitude toward nature, visualize the woods as a storehouse of raw materials.

At first glance Sidney's tree catalogue appears to participate in this trend in that it substitutes the bewildering, haphazard spectacle of the forest for a tidy, legible landscape. But if Harriot describes the forest in documentary prose, Sidney decks his in effusive and highly figurative poetry. Rather than a manifestation of "verbal power over nature," Musidorus's botanical rhapsody points to a symbiotic relationship between nature and art.[9] In pointed contrast to the *Report*'s fixation on the commercial properties of the trees, *The Old Arcadia* painstakingly inventories the various cultural meanings assigned to each species. Many of the associations are traditional, derived from scripture, popular folklore, natural historians such as Pliny, or classical mythology: the olive symbolizes peace; the willow is an emblem of grief; the yew conjures images of Cupid's bow; and the laurel, sacred to Apollo, betokens poetic glory. At times the metaphors and allusions latent in the landscape almost seem to unwittingly possess the speaker's awareness and transform the woods into a dense semantic thicket, a place of pure poetry. The appearance of this device in the first eclogue, at a point where the text makes a transition from prose to verse, is significant in that it functions, as it does in the first canto of Spenser's epic, as a kind of gateway between the prosaic commercial world of the present and the timeless realm of chivalric romance. The shift is reiterated within the catalogue itself in the tension between the fiscal and the emblematic readings of the various species. But Sidney's version, far more than those of Chaucer or Spenser, underscores the cultural and psychological value of the forest. Of the seventeen different varieties named in *The Old Arcadia*, only three—the pine, oak, and ash—have a technological application. Even these are reinscribed in a discourse that values them primarily for their ability to act as poetic signifiers. Whereas Harriot sees the living pine as a mast, Musidorus sees the mast as a metaphor for the hope that sustains his quest for Pamela's affections. Likewise, Sidney's shepherd repeatedly deciphers the peculiar natural properties of the various species as evidence of the ubiquity of sexual desire in nature. From the way the vine entwines the elm and the palm responds to its pollination by the opposite sex, Musidorus infers the forest also experiences his erotic yearning. In the process the eclogue bends the woods to the will of the perceiving subject, treating it as "a mirror of the Petrarchan lover's torment,"[10] as Sidney himself acknowledges when he refers to trees as "the books of a fancy." But if the catalogue serves to naturalize Petrarchan desire, it also dissolves the irksome barrier between human and non-human nature, appropriating Petrarchan rhetoric to make a cedar the object of the same intense adoration that Sidney later bestows on Stella. Through the shepherd's gaze the forest may be gendered female, but is by no means passive. The trees writhe, blush, paint, promise, embrace, rejoice, nod, and salute the speaker in a manner that attributes both sensual beauty and a

mysterious agency to the natural world. Although Musidorus stops short of an actual embrace, this extraordinary scene makes a bid to be the first tree-hugging in English literature—albeit an unconsummated one since, like Stella, a pure unmediated encounter with nature remains perpetually beyond Sidney's grasp.

In its recognition of how culture not only shapes but also enriches our experience of landscape, and in its assault on a purely utilitarian outlook toward the non-human world, Sidney's catalogue shares concerns with contemporary ecocriticism. A half century ago one of the godfathers of the movement, Aldo Leopold, bemoaned that certain trees that either grew too slowly or failed to fetch a high price as timber were being "read out of the party" by modern forestry. To counteract the trend, Leopold proposed accrediting these trees with "biotic capital" to better appreciate their vital role in an ecological ensemble.[11] Sidney, I believe, attempts something very similar. He invests the trees with a *poetic capital*, portraying the forest as a quasi-sacred space for meditation, for confronting certain primal aspects of human biology, and for communing with the pastoral poets of antiquity. By reviving the tree catalogue he found in Ovid, Virgil, and Sannazaro, Sidney performs an act of literary stewardship that traces a profound rapport between art and nature.

But it was not only his reading of pastoral literature that endeared the rural landscape to Sidney. In the revised *New Arcadia* the courtier-shepherds wander through another arbor where "grew such a sort of trees as either excellency of fruit, stateliness of growth, continual greenness, or poetical fancies have made at any time famous" (111). In addition to celebrating trees as literary symbols, the passage evinces sheer delight in their "stateliness" and "greenness," finding pleasure in them for their own sake rather than for their tangible financial benefits to people. Other passages illustrate the forest's importance as both a psychological sanctuary and a moral touchstone for exposing corruption in human society. In the second eclogue, Musidorus bursts into an ode with the refrain: "O sweet woods, the delight of solitariness / O how much I do like your solitariness" (166). Like many pastoral poems the song proceeds to define nature in opposition to the hectic scrum of urban life; however, it is also exceptionally eloquent in its praise of uncultivated wilderness as a refuge where "man's mind hath a freed consideration / Of goodness to receive lovely direction" (166). Contrary to generalizations about the pastoral as promoting a tame and passive view of nature, here the Arcadian forest transmits while the mind "receive[s] lovely direction."[12] Like the Duke in *As You Like It*, and minus the cynical asides of Shakespeare's "cunning humorists," Musidorus celebrates the power of the natural world to sharpen our aesthetic and moral sensibility.

This deep appreciation for nature was likely engrained in Sidney at an early age, growing up on his family's estate at Penshurst. The picture Ben Jonson paints of it in his famous loco-descriptive poem as "fertile of

wood," a place "to which the Dryads doe resort" (88) gives us a glimpse of the idyllic setting in which young Philip spent his formative years. Interestingly, at one point during his tour of Penshurst, Jonson stands in awe beneath the sprawling shade of a tree and notes that Sidney's parents, like many aristocratic families in the period, had planted it to commemorate their son's birth on November 30, 1554. Sidney would have known about his birth-tree, and the custom may have contributed to his acute sense of a correspondence between the human and the sylvan. If Penshurst provided a model for *The Old Arcadia* so, too, did the "the romancy plains and boscages" of Wilton and Ivychurch (another property of Lady Pembroke's near Salisbury) "conduce to the heightening of Sir Philip Sidney's fancy." Aubrey reports that on his rides and walks around the estates Sidney would "take his table book out of his pocket, and write down his notions as they came into head, when he was writing his *Arcadia*."[13] Sidney's romance thus stands among the first literary works that we know to have been composed—at least in part—outdoors. Although some of the Romantics may have found his densely rhetorical style off-putting, Sidney's behavior anticipates the Romantic view of nature as a wellspring of poetic inspiration.[14]

If the English countryside stoked Sidney's enthusiasm for natural beauty, his travels on the continent fanned the impulse further. Through his mentor Hubert Languet, Sidney established contacts among scholars in the vanguard of early modern botany, and these individuals seem to have regarded Sidney as something of an amateur botanist himself.[15] Although he famously opens the *Defence* by recounting his conversation with the Holy Roman emperor's riding master, John Pietro Pugliano, Sidney befriended another individual at Maximilian's court with whom he felt a much greater camaraderie, Charles L'Ecluse. Better known under his Latin name Clusius, L'Ecluse was a renowned botanist and the head of the Imperial Gardens in Vienna. If Pugliano's orations on the noble art of the equestrian almost "persuaded [Sidney] to wish [himself] a horse," L'Ecluse's enthusiasm for botany may have stirred a similar envy of plants. L'Ecluse was the first person to introduce the tulip to Europe (and possibly England), an early experimenter with the cultivation of potatoes, and the author of several studies on vegetation and fungus as well as a French translation of Doden's herbal. In 1573 he and Sidney are thought to have traveled together to Hungary to look for rare plants, and the two men continued to correspond throughout the next decade, most of the letters touching on their two mutual interests: continental politics and botany. In 1576 L'Ecluse sent Sidney a copy of his natural history on the plants of Spain and three years later, about the time Sidney began work on *The Old Arcadia*, L'Ecluse paid him a visit after stopping off in London to see some of the botanical specimens brought back from the Americas by Drake.[16] L'Ecluse represents a new breed of natural philosopher in that he was truly "a botanist not a herbalist," someone who "was interested in plants as living creatures and not merely for their usefulness to man."[17] Judging by the paeans to organic nature in *The Old Arcadia*, some of L'Ecluse's fascination with flora

appears to have rubbed off on the young English poet. Sidney's admiration of nature for its own sake, along with his awareness of the forest's function as a repository of cultural and familial memory, shapes Musidorus's address to the trees, which makes an implicit argument for biodiversity by glorifying varieties that have little or no commercial value. Thus, to refer the passage cited previously as a "tree catalogue" somehow rings false. The phrase smacks of a mercantilism that runs counter to the precapitalist, aristocratic ethos of Sidney's poetry. Faced with these objections, the device might be more appropriately termed a "literary arboretum," a poetic forerunner of the field guide.

In the emerging field of ecocriticism, "Arcadia" has become something of a dirty word, synonymous with a static and hopelessly anthropocentric view of nature.[18] Raymond Williams's influential study characterizes the Arcadian pastoral as an "enameled world" that obscures the "living tensions of the agrarian process."[19] Sidney himself seems to invite such interpretations in an infamous passage from the *Defence of Poetry* where he vaunts the poet's unique ability to "grow in effect another nature, in making things either better than nature bringeth forth, or quite anew. . . . Nature never set forth the earth in so rich a tapestry as divers poets have done. . . . Her world is brazen, the poets only deliver a golden" (78). Here Sidney appears to participate in the Renaissance exultation of "man" and mankind's creative prowess at the expense of the natural world. One might easily gloss it as the literary equivalent of Genesis 1:26–28, granting the courtier-poet a mimetic dominion over the birds of the air, the fish of the sea, or, in this case, the trees of the forest. Yet a closer examination of Sidney's writing in its cultural milieu reveals that the relationships between nature and culture, between romance and reality, are far more complicated than is generally suspected. As it turns out, many of these critical orthodoxies spawned by Williams lean too heavily on a false binary of myth and history. In undertaking a defense of the *Defence* I instead adopt as a guidepost Adorno's insight that "the image of undistorted nature always emerges as its opposite in distortion."[20] With this maxim in mind, it is worth recalling that the environmental havoc perpetrated by the Roman navy inspired Ovid's vision of a Golden Age when "the loftie Pynetree was not hewen from mountains where it stood, / In seeking straunge and forren landes to rove upon the flood" (1.109–110).[21] Following a more dialectical approach likewise uncovers how the golden world of the *Arcadia* takes root in Sidney's imagination as a rebuttal to what he perceived as the increasingly brazen world being forged in the English countryside.

Situating *The Old Arcadia* alongside the *Report* serves as a reminder that, far from being an escapist fantasy of a remote past, the pastoral vision of a pristine wilderness had been catapulted to a position of cultural urgency by the English encounter with a "virgin" continent. Not only did the lure of timber launch a thousand ships, but writings by advocates of English expansion reveal that the tree farm provided one of the key metaphors for

conceptualizing the venture: the plantation. In his essay on the topic, Francis Bacon rebukes impatient investors by reminding them that "planting of countries, is like planting of woods; for you must make account to leese [sic] almost twenty years' profit, and expect your recompense in the end"(6:457).Essentially, Bacon pens the essay as a mini-handbook for prospective colonists, recommending how to negotiate with the natives as well as where and what to plant. Timber, unsurprisingly, is high on his list of the commodities to be extracted from the colonies. He even characterizes its presence as an embarrassment of riches: "Wood commonly aboundeth but too much; and therefore timber is fit to be one" (6:458). Too much: the phrase betrays the anxiety of many colonists confronting the spectacle of disorganized wilderness. In the Lord Chancellor's essay, as in Harriot's *Report*, the commercial value of the woods entirely eclipses whatever value they might possess as a hunting ground or spiritual venue for the natives, or as a habitat for flora and fauna.

Born at a time of intense curiosity about the New World, Sidney was inescapably caught up in the expansionist fervor engulfing late Elizabethan England. His own father served for many years as the head of the English government in Ireland and his father-in-law, Francis Walsingham, was a leading advocate of the exploration and settlement of the Americas. Revealingly, Richard Hakulyt, often dubbed the chief propagandist of English imperialism, dedicated his *Divers Voyages touching the discovery of America* (1582) to the author of the *Arcadia*. No doubt Sidney would have read Hakluyt's book with much interest. Like many young men of his generation, he fantasized about journeying to see the new continents for himself and in 1585 he considered enlisting in Drake's expedition to Virginia.[22] But instead of the anxiety wilderness so often provokes in early modern travel writing, his pastoral romance celebrates the serenity, beauty, and cultural value of non-human nature. Sidney in effect undermines the reductive readings of the landscape peddled by Harriot and Bacon by insisting on the semantic fecundity of the biophysical world. Specifically, *The Old Arcadia* problematizes the re-visioning of trees as mere timber that occurred during the rise of "fiscal forestry" practices in the early modern era.

"OUR SPOILED FORESTS": THE GEORGIC REVOLUTION INVADES THE WOODS

> It was not at Tower Hill that the axe made its most lasting contribution to English history.
>
> —Keith Thomas[23]

The tree catalogue in Harriot's *Report* is a remarkable confirmation of Heidegger's theory on the penchant of a technological society to perceive the natural world simply as *Bestand*, or "standing reserve." Assuming an anthropocentric outlook (which Heidegger labels "enframing"), the subject

takes a myopic view of the environment, seeing a field in terms of soil quality, rivers as sources of hydroelectric power, and reducing forests "to the orderability of cellulose."[24] While his essay traces the origin of this mentality back to Plato, Heidegger underestimates the extent to which it was exacerbated by the intellectual ferment of the Renaissance. Although environmental historians generally consider eighteenth-century Prussia and Saxony as the birthplace of scientific forestry, population growth, an increasingly sophisticated market economy, the rise of mechanistic science, and contemporary interest in agrarian improvement spawned similar attitudes in early modern England.[25]

In late 1579 when Sidney sat down to write the first version of *The Old Arcadia* on his sister's estate in Wiltshire, he had a firsthand glimpse of the reshaping of the English landscape in the aftermath of the Reformation. Less than fifty years before, the dissolution of the monasteries had upset the traditional management of the woodlands. Acres of disendowed territory fell into the hands of financially strapped aristocrats and ambitious gentry, many of whom began converting the "idle" woods on the property into more liquid capital. In the words of the second Earl of Carnarvon, trees were simply "an excrescence of the earth, provided by God for the payment of debts."[26] That the Earl was not an anomaly in this regard may be inferred from the name Thomas Middleton gives the bankrupt gallant in *Michaelmas Term*: Salewood. Sadly, the upwardly mobile urban bourgeoisie proved no better stewards. In the play the woolen draper Quomodo imagines his neighbors gawking in admiration at the bounty of his new country estate: "Whence comes those goodly load[s] of logs? From his land in Essex!"[27]

Eventually the market for timber prompted experiments in fiscal forestry. One of the leading authorities on the English forests, Oliver Rackham, notes that it was precisely in the closing decades of the sixteenth century that tree plantations first started to dot the rural landscape, conspicuously altering the composition of the woods:

> Many early plantations were coppices made in imitation of existing woods by sowing and planting a mixture of trees such as "mast of okes, beech and chats of ashe, bruised crabbes," but there was an increasing tendency towards planting for timber and only using one or two species."[28]

In 1580, right around the time Sidney began work on his romance, Lord Burghley founded the nation's first tree farm in Windsor Great Park: thirteen acres of sturdy, useful, profitable English oak.

Fueling this interest in scientific forestry, as well as in the search for stockpiles abroad such as those advertised by Harriot, was a huge spike in the price of timber on the domestic market. Between 1580 and 1590 the price for oak in Cambridgeshire leapt from 5*d* to 7*d* per cubic foot. While

the exact numbers vary across counties, records indicate that the national price index of timber more than tripled during the sixteenth century, with a steady increase from 1550 onward, in accordance with the economic law of supply and demand.[29] The frequently vilified practice of enclosure certainly contributed to the scarcity; acres of forestland were converted into pasturage to support the lucrative wool trade. Three other equally important factors include population growth (with its attendant energy demands), an increasingly vigorous industrial sector (such as iron works that relied on timber for fuel), and the grubbing up of woodlands to make way for agriculture. An understanding of this third development is particularly important in order to recognize the environmental ethic of *The Old Arcadia*. Already in the late sixteenth century it appears England was experiencing the first burgeoning of a cultural phenomenon that would fully blossom in the seventeenth: a back-to-the-land movement that literary historian Anthony Low has termed the "Georgic Revolution."[30] At this period, along with herbals, an unprecedented number of husbandry manuals began to roll off the presses and into the libraries of English manor houses. Taking a cue from Virgil's *Georgics* and, like the pastoral, often interpreted as stemming from a disillusion with the strife of court, these manuals laud the simple joys of country living. But while the pastoral makes a virtue of indolence and stewardship, the georgic mode sings the praises of labor, envisioning it a moral obligation to maximize the productivity of the land. Two of the most consulted texts were Conrad Heresbach's *Foure Bookes of Husbandry* (published in Latin in 1570 and translated by Barnaby Googe in 1577) and the *La Maison Rustique* (printed as *The Country House* in 1554, 1570, and again in 1600). Versified accounts in English also appeared and proved instrumental in disseminating the rhetoric of agrarian improvement further down the social scale. The most popular was Thomas Tusser's *A Hundred Good Pointes of Husbandrie*, which debuted in 1557 and went through twenty-three editions in the next eighty years, making it one of the fifteen top-selling books in Elizabethan England.[31] Though scholarly accounts of these texts tend to focus on agriculture, the Georgic Revolution was not confined to the fields; as the price of timber rocketed, its philosophy and praxis inevitably spread to the forest. The second book of Virgil's *Georgics* again offered a precedent by dispensing advice on planting and caring for trees. It even featured a tree catalogue enumerating the technological uses of various species that can be seen as a distant progenitor of Harriot's inventory.[32] Early modern agricultural writers such as Tusser sought to imitate Virgil by offering similar tips to the enterprising woodcutter:

> Save eleme ash, and crabtree, for cart and for plough
> Save step for a stile, of the crotch of the bough,
> Save hazel for forks, saue sallow for rake
> Save huluer and thorne, there of flaile for to make.

Heresbach, meanwhile, devotes forty pages of prose in his second book (following the pattern established by Virgil) to "the ordyring of orchards" and "the ordyring of woodes."[33]

While husbandry manuals often advocate environmentally sound methods to reduce waste—note the repetition of "save" in Tusser's poem—not everyone embraced this policy of treating timber as just another crop or squeezing the land to "yeeld usurie of grain," as the satirist Joseph Hall wrote in 1598.[34] Sidney, too, felt a sense of disdain for this rhetoric of agrarian improvement, as evident through his scathing parody of the character Dametas in *The Old Arcadia*, who serves as the overseer of the king's estates and the chaperone of his two daughters. Derided as a coward and a social climber, Dametas speaks a language ripped straight from the pages of contemporary husbandry manuals. Frequently he bores the princesses with "rustic lectures" on riveting topics such as the best time to feed the oxen and how to sweep manure from the stables. His eagerness to exploit the land for a profit contrasts unfavorably with the aesthetic view of nature espoused by the courtiers and shepherds. Near the end of the book Dametas is appropriately duped when Musidorus tells him of a fabulous treasure buried beside "an ancient oak" (187). Dametas digs for hours—while Musidorus elopes with the princess—only to uncover a piece of vellum that Musidorus had stashed there himself, inscribed with the following verse: "Who hath his hire hath well his labour plac'd / Earth thou didst seek and store of Earth thou hast" (265). The couplet is an unmistakable send-up of the Georgic mode, unmasking the hypocrisy of profit-driven farmers who pretend to relish labor for labor's sake, while mocking their habit of literally equating earth (as in property) with wealth.

Despite several perceptive historicist readings of *The Arcadia*, no one has, to my knowledge, noticed that Dametas is a caricature of Lord Burghley—the very man who founded the first oak farm in England.[35] In the 1550s Burghley had served as the surveyor of Princess Elizabeth's lands and was later appointed Master of the Queen's Court of Wards, positions analogous to those of Dametas who oversees the King's estate and acts as Pamela's guardian. Sidney had a strong motive to lampoon Burghley in 1580, having recently quarreled with him over his support of the queen's proposed marriage with the Duke of Anjou.[36] More importantly for my purposes, Burghley stood at the forefront of the Georgic Revolution, cultivating large fields and lavish gardens on his Hertfordshire estate known as Theobalds. Burghley's mania for horticulture was well known to his contemporaries. Through the Duke of Somerset he met with William Turner, the author of the first English herbal; Thomas Hill's *Gardener's Labyrinth* was dedicated to Burghley, as was the 1597 herbal of John Gerard, who had served as his personal gardener at Cecil House and Theobalds.[37] Tellingly, he even seems to have subscribed to a mechanistic view of nature, referring to it as "a shop of instruments, whereof the wiseman is master." As a newly dubbed peer eager for the trappings of gentility, Burghley's policy of land management bespeaks an interest in status and profit rather than stewardship.

Sidney, in contrast, was the scion of an established family who could sniff at the ostentatious building projects of the nouveau riche, as Ben Jonson does in his poem to the poet's younger brother: "Other lords have built / But thy Lord dwells."[38] Sidney was not the only author to take a swipe at Burghley in 1580. The wily fox in Spenser's *Mother Hubberds Tale* is also believed to be a satiric sketch of Elizabeth's chief advisor. The poem draws an explicit contrast between the fox—who traffics in "bargaines of woods, which he did lately fell" (872) and erects "loftie towres" (1173) at his manor house—and an ideal courtier who may have been modeled on Sidney.[39] While Sidney knew better than to pen a *roman à clef*, it is highly likely that some of the flak taken by Dametas is in fact aimed in Burghley's direction. Unmasking the rustic "clown" as a parody of Cecil further illuminates the conservationist ethos of Sidney's pastoral romance.

Viewed in a more charitable light, however, Burghley's founding of a tree farm in the 1580s makes a certain amount of ecological sense and, indeed, was probably perceived as a patriotic act, as a spate of forestry laws passed in the late sixteenth century present telltale signs of growing concern about an Elizabethan energy crisis. In 1543 Parliament passed "a bill for the preservation of the woods," which was reinstated in 1570 due to the "great decay of timber and woods universally within . . . this realm of England." The authors of the bill voice dismay at the "great and manifest likelihood of scarcity" and propose a few remedies such as protecting coppices, improving storage facilities, and expanding enclosures of woodlands.[40] The government also took steps to curb the depredations of the booming industrial sector. A bill from 1558 protected any tree growing within fourteen miles of the ocean or other major waterways from iron-mongers; a similar law in 1581 outlawed the construction of new ironworks near the city of London and forbade the use of wood for fuel.[41] Unfortunately these measures failed to stem the nation's appetite for timber. Exact figures are rare but what statistics have come down to us paint a grim image: in 1560 foresters counted 92,232 trees in Duffield Forest; thirty years later that number had been thinned to only 5,896.[42] Small wonder the shepherd Klaius in Sidney's famous double sestina laments the condition of "our spoiled forests" (330).

By 1592 deforestation had become such a problem that it inspired the first book on English forestry law, written by a man whose last name is so apt one might mistake it for a nom de plume: John Manwood. *A Treatise and Discourse of the Lawes of the Forrest* is a fascinating document—at once a compendium of ancient forestry policies and an urgent polemic entreating the monarch to protect the country's beleaguered woodlands. In recirculating some moldering legal document from the reigns of the Plantagenets and even as far back as the era of Danish rule (all of which favor royal authority), Manwood insinuates that current regulations are lax and offers a precedent for action. While some environmentally minded critics might accuse the *Arcadia* of perpetrating an artificial and static view of nature, Manwood reminds us that the forest itself, like a National Park today, is an artificial human creation. The word in fact originates as a juridical term

in the Merovingian period in France, crossing the Channel with the Norman Conquest. Initially it designates a patch of land set aside for the king's hunting grounds. As the gamekeeper of Waltham Forest, Manwood asserts that for a swathe of land to qualify as a forest it must consist of both "vert and venison."[43] He even performs some creative etymology by suggesting that the word "forest" derives from a compound of the Latin words *fera* and *statio*, that is "for rest," indisputably indicating that its true function is to serve as a "secret abode for wild beasts." The fact that the word was frequently spelled with two Rs throughout this period would have made Manwood's etymological fable more plausible to his contemporaries. Again and again he proclaims that trees alone do not a forest make; it must provide both shelter and sustenance for a variety of animal species. On the surface the *Treatise* beseeches the queen to re-implement this policy of afforesting woodlands to create what are basically royal game preserves. From a twenty-first-century perspective, however, it is tempting to read Manwood as slyly co-opting royal power to protect thriving ecosystems and effectively exempt them from the ravages of history.

Manwood's mission, I would argue, shares an affinity with Sidney's project in *The Old Arcadia*. While the disgruntled gamekeeper cites ancient forestry law to preserve the nation's environmental heritage, the poet conjures a vision of a romantic wood-scape as part of the nation's cultural heritage. The fact that Sidney makes a forester the hero of his first written work, *The Lady of May*, further suggests that he may have been sympathetic with Manwood's agenda.[44] For Sidney, the English countryside offered both a haven from the bustle of court and a site for communing with the classical past. Many of the same plants featured in the verse of Theocritus and Ovid could also be encountered on a leisurely stroll through Wiltshire. To raze the forests, to alter the apparent permanence of nature, would jeopardize a sense of continuity with the cultures of antiquity. As Drayton would write, "Fayre Arden, thou my Tempe art alone" (1:104).

This fear of cultural decline figures prominently in the *Defence*: "That poesy, thus embraced in all other places, should only find in our time a hard welcome in England, I think the very earth lamenteth it, and therefore decketh our soil with fewer laurels than it was accustomed" (110). The word "laurels" here can also be read as "poets," implying that a culture that fails to value poetry will nurture few people who excel in it. But the more literal reading of the metonymy suggests a correlation between the aesthetic sensibility of a culture and the ecological stability of the land it inhabits. Ostensibly a jeremiad on the cultural malaise of the mid-Tudor period, the *Defence* borrows some of its imagery and urgency from the Georgic Revolution. Although laurels (or bay trees) were a relatively recent import to the British Isles, the population of oaks, elms, beech, and other species used for timber had indeed plummeted in the sixteenth century.[45] The passage reflects contemporary anxieties surrounding deforestation, as Sidney rewrites an ecological crisis as a cultural one.

Across the channel in France, members of the coterie of poets known as the *Pléiade* were waging a similar battle. In 1584 Ronsard published his *Elegie XXIV*, posthumously titled *Elegie contre les bûcherons de la forest de Gatine* (Elegy against the wood-cutters of Gatine). As the unofficial title suggests, the poem responds to an actual event. Eleven years before it appeared in print, Henri de Bourbon ascended to the throne of Navarre and, to pay off some of his predecessor's debts, green-lighted the felling of the woods near Ronsard's home. In a recent study Louisa Mackenzie explains how the text responds to the destruction by consecrating the Gatine as a space sacred to the muses.[46] Like Sidney, Ronsard primarily envisions the forest as a poetic rather than a biotic space. The twenty-fourth elegy, in Mackenzie's apt phrase (that could also be alleged of *The Old Arcadia*), "brims with classical references to the point of not seeing the wood for the Ovids and Horaces." Nevertheless, the invective against contemporary fiscal forestry practices in both texts rings through loud and clear. Sidney, even more deliberately than Ronsard, places the forest in an "agonistic relationship to history" to protect it from and tacitly critique the material practices that besiege it. Too often critical studies have underestimated the extent to which *The Old Arcadia* responds to an actual case of environmental trauma. Myron Turner observes that "the disfigured face of nature" represents "one of [Sidney's] central metaphors," but interprets it merely as a symbol of moral depravity and alienation. In their influential anthology of *English Pastoral Verse*, John Barrell and John Bull claim "Sidney's nostalgia is implicitly recognized by him as being for an ideal literary world, and not for any real or possible alternative way of life."[47] In light of the rampant deforestation documented in this essay, such assertions desperately need to be reassessed. The literary arboretum in the first eclogue appraises the cultural value of diverse woodlands at a crucial historical juncture when they had been wrested from the stewardship of the Church and were increasingly threatened by agrarian capitalism.

"TONGUES IN TREES": PROSOPOPEIA AND THE PASTORAL FANTASY OF AN ARTICULATE NATURE

> The passing of sensory givens before our eyes or under our hands is, as it were, a language which teaches itself, and in which the meaning is secreted by the very structure of the signs, *and this is why it can be literally said that our senses question things and that things reply to them*. . . . The relations between things or aspects of things having always our body as their vehicle, the whole of nature is the setting of our own life, or our interlocutor in a sort of dialogue . . . [in which] the thing achieves that *miracle of expression*; an inner reality which reveals itself externally, a significance which descends into the world and begins its existence there.
>
> —Maurice Merleau-Ponty[48]

If *The Old Arcadia*'s vision of ecological stability reflects a reactionary nostalgia for the political stability of feudal society (tellingly, the adjective most frequently used to praise old trees is "stately"), it also anticipates some radical premises of deep ecology in its profound regard for the sentience of the natural world. In a curious phrase from the first eclogue Sidney refers to trees as "sensive things," a line that requires a gloss for modern readers. In lieu of the rigid distinctions between the plant and animal kingdom spun by Enlightenment taxonomy, medieval and Renaissance science subscribed to a more holistic view of the universe famously summarized by the intellectual historian Arthur Lovejoy as "the Great Chain of Being."[49] A key component of this theory was Aristotle's "psychic hierarchy" with its three gradations of the soul—the nutritive, sensitive (or "sensive"), and rational—which correspond to the respective ontological differences between plants, animals, and people.[50] According to Aristotle's schema the difference is of degree rather than kind, and this tenet of early modern science encouraged people to see the biophysical world as fundamentally connected. This tendency was reinforced by a foundational work on botany by one of Aristotle's disciples, Theophrastus, which consistently envisions trees as the supreme plant, assigning them a position analogous to humans among the other animals.[51] But in the sixteenth century, Protestant scholars such as Sidney's acquaintance Ramus had begun to explode some of Aristotle's doctrines. If the Athenian philosopher's hierarchical model reflects the experience of a class-bound society, the increasing social mobility in early modern Europe conspired to corrode this taxonomy. Sidney participates in this trend as he scrambles Aristotle's categories by attributing to plants the sensitive and rational faculties reserved for animals and humans and vice versa, as when a lovesick shepherd is teasingly called "this man, this talking beast, this walking tree" (147).

Sidney and his contemporaries were further aided in their assault on Aristotle by one of the best-loved and oft-quoted books of the period, Ovid's *Metamorphosis*. A staple of the Elizabethan curriculum, Ovid's text has a distinct ecological undertone with its graphic insinuations of the innate kinship of all creation. The same chapter in which Sidney would have encountered Orpheus's aria to the forest features three different tales of humanoid trees: Daphne/Laurel, Attis/Pine, and Cyparisssus, the namesake of the cypress, whose transformation was vividly rendered by Golding:

> Anon through weeping overmuch his blood was drayned quyght
> His limbes wext greene: his heare which hung upon his forehead
> whyght
> Began to be a bristled bush: and taking by and by
> A stiffnesse, with a sharpened top did face the starrie skye.
> (10.142–145)

The image of human beings changed into trees, and vice versa, might be described as a kind of *ecological uncanny*. By detecting a subtle congruence in their physiognomy, poets convey an intimation of the interdependence of

the plant and animal kingdoms. Characters may sometimes perceive this resemblance as uncomfortably strange, as with Donne's mandrakes, but such Ovidian images do not always evoke a sense of the *unheimlich*. Rather they can remind civilized readers of the homeliness of the organic world, its fitness for human dwelling. In an era of migration to the city, this sense was sharpened by the urbanite's nostalgia for the countryside; it is this homeliness that Elizabethan pastoral seeks to recover and celebrate. Instances of the ecological uncanny abound in Sidney's writing, from his verse translation of the first psalm—which asserts that an upright man "shall be like a freshly planted tree / To which sweet springs of waters neighbours be" (187)—to the final entry in his tree catalogue in *The Old Arcadia*:

> But to the cedar, queen of woods, when I lift my be-teared eyes,
> Then do I shape to myself that form which reigns so within me,
> And think there she do dwell and hear what plaints I do utter:
> When that noble top doth nod, I believe she salutes me;
> When by the wind it maketh a noise, I do think she doth answer.

From such passages, one can assume that Sidney shared Emerson's sense of "an occult relation between man and vegetable."[52] Beyond its anthropomorphic vision of the tree nodding, the passage indulges in a perennial fantasy of Sidney's poetry: that plants are not only sentient but also rational and capable of speech.

Although it is something of a literary commonplace, the trope of "tongues in trees" occurs with stunning frequency in texts from the 1580s, soon after Sidney's manuscript swept through the Elizabethan literary scene. During the country house revels at Woodstock in 1585, the queen was escorted before a large oak tree that promptly intoned some tortured, apologetic verses. While Gascoigne's chronicle does not disclose the name of the courtier ensconced in the trunk, Katherine Duncan-Jones has identified the author as Sidney's close friend, Edward Dyer.[53] A similar metamorphosis occurs in John Lyly's *Endymion* (c. 1588) in which an enchantress transforms her maid into an aspen.[54] Spenser also toys with the psychic hierarchy in *The Faerie Queene* when Redcrosse, resting beneath a tree, is startled by a disembodied voice and thinks he has encountered a ghost.

> Then groning deepe, Nor damned Ghost, (quoth he,)
> Nor guilefull sprite to thee these wordes doth speake
> But once a man *Fradubio*, now a tree,
> Wretched man, wretched tree; whose nature weake,
> A cruell witch her cursed will to wreake
> Hath thus transformed, and plast in open plaines,
> Whereas *Boreas* doth blow full bitter bleake,
> And scorching Sunne does dry my secret vaines:
> For though a tree I seeme, yet cold and heat me paines.
> (1.2.33)

The passage is a prime example of the ecological uncanny in that it erases the distinction between sentient human subject and callous natural object. Furthermore, it entreats the reader to pity the person and the plant both ("wretched man, wretched tree"), while the use of the possessive pronoun "whose" syntactically grafts the arboreal and the human together to suggest they share a common nature. If Golding's 1567 translation of Ovid sparked the vogue for images of an animate, articulate landscape, its prevalence in the 1580s among writers in Sidney's circle attests to the popularity of *The Old Arcadia*. It was Sidney and his admirers who helped make "tongues in trees" the poetic cliché that Shakespeare gently mocks in *As You Like It*, a play that happens to have premiered shortly after a new edition of Sidney's romance hit the bookstalls in 1598.[55] To be sure, Sidney was not the first writer to endow nature with emotions and speech. The "pathetic fallacy" is a time-honored convention of pastoral, stretching back to the very first line of the first poem in the genre, Theocritus's *Idyll I*, where a shepherd discerns music in a rustling pine. Virgil carried on the tradition in his *Eclogues,* when the echoes of the Arcadian shepherd's pipes serve as an audible emblem of nature's ability to inspire, transmit, and emanate poetry: "*Non canimus surdis, respondent omnia sylvae*" [Nor do we sing to the deaf: the forests echo all] (10.8).[56] Sannazaro was especially enamored with this device; variations on the following passage occur throughout the work on which Sidney based his *Arcadia*:

> Not wholly mute, my Fronimo, are the woods,
> As men believe; but rather they so resound
> That I judge them almost equal to the ancients. (112)

Today literary critics tend to scoff at such flagrant use of the "pathetic fallacy" as mawkish and absurdly sentimental. But this negatively charged phrase, coined by Ruskin, did not exist in the sixteenth century. Early modern readers, at least those with the requisite training in rhetoric, instead referred to it as "Prosopopeia," defined by George Puttenham as language that "attribute[s] any humane quality, as reason or speech to dumb creatures or other insensible things . . . to give them a humane person" (239). Far from finding it cloying, Elizabethans considered prosopopeia a "lively figure." Sidney himself implicitly champions it in the *Defence* when he asserts that animal fables impart valuable lessons through their "dumb speakers."[57] And he explicitly admires its use in the Psalms to tell "of the beasts' joyfulness and hills leaping." Given his approval of the device, Sidney would likely agree with Bruce Foltz, who dubs the Psalms "the first . . . collection of nature poetry in the literature of humanity."[58] It thus represents another green feather in his hat that Sidney collaborated with his sister on an English translation, including the biblical pastoral of Psalm 23 ("He rests me in green pasture his"), in which the speaker likens himself to a sheep. Perhaps the most famous example of prosopopeia in *The Old Arcadia* is Philisides' poem known as "Ister Bank," a provocative reimagining of Genesis that is overtly

apologetic about human dominion over the rest of creation: "But yet, O man, rage not beyond thy need; / Deem it no gloire to swell in tyranny / Thou art of blood; joy not to make things bleed" (259). Critics have invariably interpreted the piece as a political critique of absolutism while willfully ignoring its ecological moral.[59] But viewed through an ecocritical lens, the fable raises genuine concerns about humanity's ethical responsibility toward non-human nature (see Chapter 5). In *The Old Arcadia* this concern extends to the trees, which also merit the oxymoron "dumb speakers" thanks to Sidney's rhetorical flights that violate assumptions about the passive objectivity of the natural world. Just as "Ister Bank" denounces hunting as a cruel blood-sport, the recurring imagery of an animate forest opposes early modern England's reckless exploitation of its woodlands.

Of course speaking for nature is a ticklish business, as it often conceals, like Dyer in the hollow oak at Woodstock, an ideological agenda that is all too human. While some environmentalists loudly oppose anthropomorphism, declaring a moratorium on such representations (were such a thing feasible) would be even more hazardous since the gagging of the natural world is another major grievance of ecocritical theory and rightly so. As Christopher Manes observes, it is "within the vast, eerie silence that surrounds our garrulous human subjectivity that an ethics of exploitation regarding nature has taken shape."[60] In contrast Sidney outsources some of his teeming subjectivity to the natural world, as the Arcadian landscape resounds with "purling" streams (*NA* 111), brooks that "lament" (15), birds that "chattereth" (58), and lambs that bellow a "bleating oratory" (*NA* 11). Verbs and nouns normally reserved for human deeds grace the feats of non-human nature, forcing readers to re-evaluate the way they ordinarily assign agency. A burning grove "cries" (58) in agony; another performs a "dreary recital" (84). In addition to the cedar, the juniper in the tree catalogue also speaks: "though I burn, yet I burn in a sweet fire" (87). The forests in *The Old Arcadia* positively seethe with psychic energy:

> You living powers enclos'd in stately shrine
> Of growing trees; you rural gods that wield
> Your sceptres here, if to your ears divine
> A voice may come, which troubled soul doth yield
> This vow receive. (109)

Here Princess Philoclea consecrates the forest as a sacred place populated by sentient trees and "sylvan gods," as she strives to puncture the language barrier between humans and the natural world. The shepherd Philisides makes a similar apostrophe: "And you O trees (if any life there lies / in trees) now through your porous barks receive / The strange resound of these my causeful cries" (345). Likewise, the shepherds who sing the double sestina imagine the forest "made wretched" by their woeful dirges, while the repetition of the end-rhymes weaves a subliminal association between

"mountains," "valleys," "forests," and "music" (328–329). In an earlier scene that aptly captures the author's awareness of the way pastoral inscribes human meanings onto nature, Pamela and Musidorus address a pine-tree in the second person while carving poems in its bark: "Do not disdain, O straight upraised pine / That wounding thee, my thoughts in thee I grave" (199). Directed at the reader as much as the pine, the verses read like an apology for the pathetic fallacy, which to Sidney was no fallacy at all but a vital means of endowing nature with a dignity and honorary subjectivity that helps to justify its preservation. Shortly before his friend wanders into the literary arboretum, Prince Pyrocles broods on the paradox of "mute timber" (82) fashioning the lute on which he strums, in a line that seems a fitting metaphor for poetry's ability to make nature speak with a clarity and intensity beyond the ken of ordinary perception.

Perhaps the most striking fantasy of articulate nature in *The Old Arcadia* occurs in the second eclogue, which opens with a dialogue between Reason and Passion done in the conventional rapid-fire exchange of rhyming couplets referred to as stichomythia. Enter Philisides, a heartsick exile, who—as his name suggests—is a stand-in for Philip Sidney himself. He performs a curious song in which, by throwing his voice to accent the last syllable of each line, he performs a duet with his own echo.

Philisides	**Echo**
Fair rocks, goodly rivers, sweet woods, when shall I see peace?	*Peace.*
Peace? What bars my tongue? Who is it that comes to me so nigh?	*I.*
Oh! I do know what guest I have met; it is Echo.	*'Tis Echo.*
Well met echo, approach: then tell me thy will too.	*I will too.*
Echo, what do I get for yielding my sprite to my griefs?	*Griefs.*
	(160)

Although the figure of Echo haunts the poetry of Horace and Ovid, the inspiration for this scene most likely came from one of the royal entertainments at Kenilworth that Sidney attended in 1575.[61] Without question, Sidney's version, which continues on in witty hexameters for another eighty lines, outstrips that of Gascoigne's in its lyrical virtuosity. But more than just a display of poetic bravura meant to impress his uncle Dudley, the passage dramatizes an encounter with a natural world that talks back, that responds to—but is not controlled by—the human subject. In contrast, the Echo who appears in much classical poetry merely parrots the speaker's words in a way that insists on the primacy of the human and the docility of the landscape. Sidney's Echo, meanwhile, is an incorrigible smart aleck whose repartee renders the plaintive cries of Philisides retrospectively ironic. The scene also differs from those in Gascoigne and Ovid in that it never clarifies whether the mythological figure actually exists. Echo's absence, or "flickering materiality," leaves the reader free to imagine that it is not the wood nymph but the acoustic powers of the woods

that distort and slur the words: "Course" becomes "curse," "joys" morphs into "toys," "do evils" contracts to "devils." Other times the forest retorts with homonyms—Pried/Pride—or repeats only the last syllable: heart/art, desire/ire. This "echo-logue," as I have playfully dubbed it, is also a kind of inventory, as the puns and homonyms catalogue the instability of human speech while calling into question the autonomy of the speaking subject.[62] Given the theatrical ambiance of the scene, and Sidney's fondness for rhetorical schemes, this exchange might even be described as a kind of environmental stichomythia.

In its persistent attempts to converse with trees and wood nymphs *The Old Arcadia* could be seen as endorsing the epistemological theory known as pan-psychism. Once regarded merely as a fanciful thought-experiment, the idea that some dim level of consciousness pervades the natural world has recently begun to provoke serious debate among philosophers.[63] Its defenders, such as David Abrams and Galen Strawson, have sought to heal the Cartesian split by positing the "embodied mind" as the locus of subjectivity. Building off the work of the French phenomenologist Merleau-Ponty, they explain how the carnal subject intuits a gestural language in the phenomena of nature.[64] Such a notion would not have been foreign to Renaissance thinkers; after all, Cartesian dualism did not fully emerge until the mid-seventeenth century. Judging from *The Old Arcadia*, Sidney's take on the psychic hierarchy falls more in line with that of his contemporary Montaigne, whose *Apology for Raymond Sebond* rails against human presumption in dismissing the entire animal kingdom as deaf and dumb: "This defect that hinders communication between them and us, why is it not just as much ours as theirs?"[65] Montaigne's recognition of a quasi-language in the grunts, barks, yelps, howls, chirps, crows, moos, and roars of certain animals, and his understanding of "the grammars in gestures" (332), anticipates current aspects of green epistemology. Not coincidentally, Montaigne is also among the first early modern authors to espouse an environmental ethic. In another essay that bears a conspicuous resemblance to "Ister Bank," he observes: "there is a certain respect, and a general duty of humanity, that attaches us not only to animals, who have life and feeling, *but even to trees and plants*. . . . There is some relationship between them and us, and some *mutual obligation*" (318, italics mine). Reading *The Old Arcadia* today it is difficult to resist the conjecture that its author shared this sense of a "mutual obligation" between humanity and non-human nature. But what Montaigne bluntly preaches, Sidney—as he expounds in the *Defence*—inculcates more effectively through fiction.

To clarify, the upshot of this chapter has *not* been that Sidney believed trees really speak, or have the same cognitive capacity as human beings. Rather the motif affords a means to acknowledge nature's signifying power to the embodied mind, particularly an embodied mind steeped in pastoral literature. Finally, the talking tree is also, as the epigraph from Hegel implies, a sign of the contingency of the knowing, or more precisely, the

singularity and contingency of merely *human* knowing. The cedar's vitality is a reminder of the "mutual obligation" that has been shirked. *The Old Arcadia* thus imparts a valuable environmental lesson that must be set beside and modify our understanding of Sidney's more notorious proclamations lifting the poet above nature. If the *Defence* praises the poet's ability to forge fabulous new worlds, it also depicts the poet as "hand in hand with nature" and asserts that this imaginative license can be deployed for nature's benefit, to "make the too much loved earth more lovely." In *The Old Arcadia*'s dazzling applications of prosopopeia Sidney does exactly that: complicating reductive views that fail to see the forest for the commercial trees and amplifying a voice in nature at a time when it was increasingly muted by agrarian capitalism.

While the current surge of interest in ecological criticism is encouraging, most studies have focused on the Romantics or late twentieth-century writers. Renaissance pastoral, when mentioned at all, typically receives only a few lines dismissing it as anthropocentric and divorced from its historical matrix. As this section of Chapter 2 has hopefully demonstrated, there is a solid case for a nascent environmental ethic in early modern English literature. Sidney's self-conscious use of pastoral conventions, his interest in botany, his misgivings about treating the land simply as a deposit of biomass resources, his belief that literature can rattle people from their complacency and inspire virtuous actions, and above all the complexity of his response as both a poet and a theorist to the nature/culture binary should make his corpus a lush field for further green readings of early modern literature to come and graze.

"MAN'S DEVOURING HAND," DRAYTON'S PROTESTING FORESTS

As deforestation grew more widespread in the seventeenth century, writers continued to find solace and a weapon of protest in Arcadian pastoral. Abraham Cowley, who imitated the Sidneys' Psalm translations, also echoed Philip in his disdain for architects, the developers of his day, "That can the fair and living Trees neglect; / Yet the Dead Timber prize."[66] Mary Wroth, Sidney's niece, also consecrates the forest as a place of aesthetic communion in her pastoral romance *Urania*. Repeatedly, Wroth's heroines find the forest a refuge from patriarchal confinement where they may vent their heartache in a sympathetic landscape. The romance opens beneath "the shade of a well-spread beech," and wanders through countless arbors, orchards, and groves that seem to have been modeled on the garden woods at Penshurst.[67] As in *The Old Arcadia*, the landscapes of *Urania* display a horticultural *sprezzatura*, as when Pamphilia strolls through "a fine wood, delicately contriv'd into strange and delightful walkes; for although they were fram'd by Art, nevertheless they were so curiously counter-feited as

they appeared natural" (90.30–34). The line bespeaks a policy of forest management that seeks to replicate actual environment conditions. Like Pamela, Pamphilia, too, engrafts verses in tree bark:

> My thoughts thou hast supported without rest,
> My tyred body here hath laine oppresst
> With love and fear: yet be thou ever blest;
> Spring, prosper, last. (93.11–14)

Even as it literally inscribes human emotion onto the ash, the poem expresses delight in its beauty, gratitude for its comforts, and a desire that it will endure. Limena's doltish husband sees the forest simply as a hunting ground, and later attempts to sacrifice his wife there in a fit of jealous pique. In contrast, Wroth's female protagonists, like Sidney's Amazon, perceive the forest as a place of psychic release. It provides a sense of liberation as well as a storehouse of imagery—in its topography, flora, fauna—through which her heroines articulate their grief. If, as Sylvia Bowerbank has astutely noted, Wroth's melancholic wood-scapes "encode a class-based grieving for the passing of a cultural system based on the integrity of the great forests," her romance, nevertheless, celebrates the woodlands as "a desirable space of freedom, belonging, and well-being in resistance to the rise of utilitarianism . . . and disenchantment." In an era of lax environmental oversight, Wroth uses the Arcadian pastoral to appoint poetic sensibility as the "cultural guardian of the forest."[68] Like her Forest Knight, who bears a "great and pleasant Forrest" (76.42) emblazoned on his shield, Wroth champions the cause of a habitat in distress in a book whose frontispiece depicts a prospect studded with lush orchards and woodlands (Figure 2.2).

But the most ecologically minded of Sidney's literary heirs, and the most outspoken defender of the English forests in early English literature, is Michael Drayton. Indeed, where Sidney's critique of contemporary forestry practices is often tacit or elliptical, Drayton's comes across with unmistakable rancor. Over a century ago, in the first book-length study devoted to the poet, Oliver Elton claimed that "the Renaissance feeling of the wreck and destruction accomplished by Time upon beauty, power, and noble visible monuments" infuses Drayton's writing.[69] In our critical climate, it hardly needs to be pointed out that a grand abstraction like Time must always sub-contract its destructive energies to certain physical or socioeconomic forces. In fact, Drayton himself specifically fingers industrialism, overpopulation, and consumption for depleting the natural resources of the realm. Rather than treat this destruction as foreordained, however, Drayton melds this "Renaissance feeling" of Time's corrosive effects into a conservationist ethos, hailing the forest itself as a "noble visible monument" like Stonehenge or Westminster, an organic emblem of England's antiquity.

Figure 2.2 Frontispiece, from Mary Wroth, *The Countess of Montgomery's Urania* (London: 1621). Penshurst featured orchards, groves, and mounts like those depicted here. The voyeuristic dominion of looking down upon the garden landscape, which is replicated in the engraving, is disrupted by both Sidney and Wroth in their narratives. Reproduced with permission of the Folger Shakespeare Library.

Over the past decade, environmental historians have begun to crown John Evelyn England's first environmentalist[70]; yet fifty years before Evelyn delivered the lecture that would become the basis for his *Sylva* (1664), Drayton issued a dire report on the state of English woodlands in his chorographical epic, *Poly-Olbion* (1613). It is Drayton, not Evelyn, who deserves the credit for first raising the alarm that in England "no man ever plants to our posterite" (2.68). Informed by the deep historical perspective of the English chronicles, *Poly-Olbion* evokes a vision of the land as vast and inconceivably ancient, and individual human subjects as puny and transitory beings. The land itself becomes invested with an enduring majesty, deserving of loyalty. As Richard Helgerson cogently observed, the epic amounts to a coronation of the land itself, personified in the map-draped figure of Albion (see Figure 1.5). Although Evelyn is not oblivious to the ecological, aesthetic, and spiritual value of the forest, he ultimately treats them as subordinate to political purposes. The woodlands should be replanted to provide "Magazines of Timber for the benefit of His Royal Navy and the glory of His kingdoms."[71] Evelyn, like Pope in *Windsor Forest,* seems to relish the technological metamorphosis of the trees into the British fleet. In contrast, Drayton condemns and reverses the process, comparing the oak's overarching canopy to a ship at full sail. Not so long ago in the forest of Blackmore

> Bigge and lordlie Oakes once bore as brave a saile
> As they themselves that thought the largest shades to spred:
> But mans devouring hand with all the earth not fed
> Hath hew'd her timber downe. (2.62–66)

For Drayton, deforestation does not simply imperil the human economy and national defense. The poem also forces us to empathize with the suffering of woodland animals such as "harmless Deere" exposed to ocean gusts and winter storms now that their habitat has been destroyed.

Book 2 concludes with an appeal to the poet in which all the forests of Dorsetshire and Hampshire join in a plangent chorus:

> Deere Muse, to plead our right, whom Time at last hath brought,
> Which else forlorne had lyen, and banisht everie thought,
> When thou ascend'st the hills, and from their rising shrouds
> Our sisters shalt commaund, whose tops once toucht the clouds;
> Old Arden when thou meet'st, or doost faire Sherwood see,
> Tell them that as they waste, so everie day doe wee:
> Wish them, we of our griefes may be each others heirs;
> Let them lament our fall, and we will mourne for theirs.
> (2.473–480)

This passage offers incontestable evidence that deforestation was not simply a regional problem. Significantly, the forest here is not only a backdrop

for melancholy reflections; rather, the vanishing of the forest itself becomes a source of poetic melancholy, a melancholy of which the trees themselves become capable through Drayton's prosopopeia. In such passages, Drayton imparts literature with a mandate to speak for the land that cannot speak for itself. Without the paleo-botanical labors of the poet, the alterations wrought upon the landscape would "else forlorne had lyen," resigned to oblivion. It is worth remarking that Drayton is not merely appealing to a chimerical Golden Age. Like an Arbor Day Foundation documentary, the poem, complete with endnotes providing historical corroboration, juxtaposes the forests as they as are with how they were, either within the memory of a single lifetime or as preserved in the cultural memory of the chronicles.

In a prophetic moment in Book 3, Drayton looks ahead with trepidation to the environmental legacy his contemporaries have bequeathed to future generations:

> But Forests, to your plague there soone will come an Age,
> . . . .
> An Age! What have I said! Nay, Ages there shall rise,
> So senselesse of the good of their posterities,
> That of your greatest Groves they scarce shall leave a tree
> (By which the harmless Deere may after sheltred bee)
> Their luxurie and pride but onely to maintaine,
> And for your long excesse shall turne ye all to paine.
> (3.149–156)

In his dismay over the breakdown of a stewardship ethic, and his somber vision of a virtually tree-less Britain that will result, Drayton's poem qualifies as an ecocritical dirge along the lines of the grim fable that opens *Silent Spring*. The comparison with Carson becomes even more apposite when placed beside passages like this haunting prophecy from Book 19:

> And for those prettie Brids, that wont in us to sing,
> They shall at last forbeare to welcome in the Spring,
> When wanting where to perch, they sit upon the ground,
> And curse them in their notes, who first did woods confound.
> (19.57–60)

At the end of Book 2, the forests of the Southwest beseech Drayton's Muse to report their plight to the forests in the Midlands, and the ensuing chapters relay the S.O.S. In Worcestershire, we encounter the forest of Wyre

> Ashamed to behold
> Her straight and goodlie Woods unto the Fornance sold
> (And looking on her selfe, by her decay doth see
> The miserie wherein her sister Forrests bee).
> (7.257–260)

Instead of chaining himself to tree-trunks in the axe's path, Drayton, like Sidney, peoples them with the wood-spirits of Greco-Roman mythology.

> You *Driades*, that are said with Oakes to live and die,
> Wherefore in our distresse doe you our dwellings flie;
> Upon this monstrous Age and not revenge our wrong?
> (7.271–273)

Here Arcadian pasotal counteracts an economic rationalism that treats the environment simply as "standing-reserve," with a poetics of ecological enchantment. After recounting the Nymphs' avenging the felling of a sacred oak in Dodona by cursing the perpetrator with an insatiable hunger, Drayton laments their present inaction:

> This did you for one Tree: but of whole Forrests they
> That in these impious times have been the vile decay
> (Whom I may call their Countries deadly foes)
> Gainst them you move no Power, their spoyle unpunisht goes.
> (7.285–288)

The excerpt seems to convey an awareness of the avenging dryad as a mere compensatory fantasy.[72] This jeremiad spoken by the Forest of Wyre reflects the poet's sense of the impotence of literature against the juggernaut of fiscal imperatives. Yet Drayton was also incensed by the attempts of Polydore Vergil and other Tudor historians to debunk the tales of King Arthur and Brute as mere fables. In a fierce rebuttal to these revisionists, Drayton defends oral traditions and the legendary work of Geoffrey of Monmouth, whose *History* often personifies the rivers and forests of ancient Albion. As one of the last stands of enchanted historiography, *Poly-Olbion* thus chafes against the rationalism that would (as Chapter 3 will unfold) evict the "topick gods" from the land.

The passage decrying the ruin of Arden features some of the book's most poignant writing since Drayton, like Shakespeare, was a Warwickshire native. In a trope that recurs throughout the epic, the forest itself speaks, becoming the indignant chronicle of its own destruction:

> For, when the world found out the fitnesse of my soyle,
> The gripple [greedy] wretch began immediately to spoyle
> My tall and goodly woods, and did my grounds inclose:
> By which, in little time my bounds I came to lose.
> (13.21–24)

A marginal note reminds readers that many Warwickshire towns end with the suffix "in-Arden," yet are no longer surrounded by woods, leading Drayton to conclude that the forest originally stretched from the Trent to the Severn.

In imaging how the forest so drastically contracted, he composes what must stand as one of the first depictions of suburban sprawl in English poetry:

> Her people wexing still, and wanting where to build,
> They oft dislodg'd the Hart, and set their houses, where
> He in the Broome and Brakes had long time made his leyre.
> (13.26–28)

Though classified as a chorographical epic, *Poly-Olbion* also comprises an environmental history of the English landscape. Similar to Manwood's campaign to re-afforest more land, Drayton's poem "revives old Ardens ancient bounds."

Not all the deforestation in *Poly-Olbion* results from human misconduct. Drayton also calls attention to places like Hoar-Rock in the Wood in Cornwall (also known as St. Michael's Mount), and Narber in Pembrokeshire, where forestland has been submerged by rising sea-levels: "Wallowing Porpice sport and lord it in the flood / Where once the portly Oke and large-limb'd Popler stood" (5.237–238). Soil erosion is a geological phenomenon that the English had particular reason to dread. As inhabitants of an island

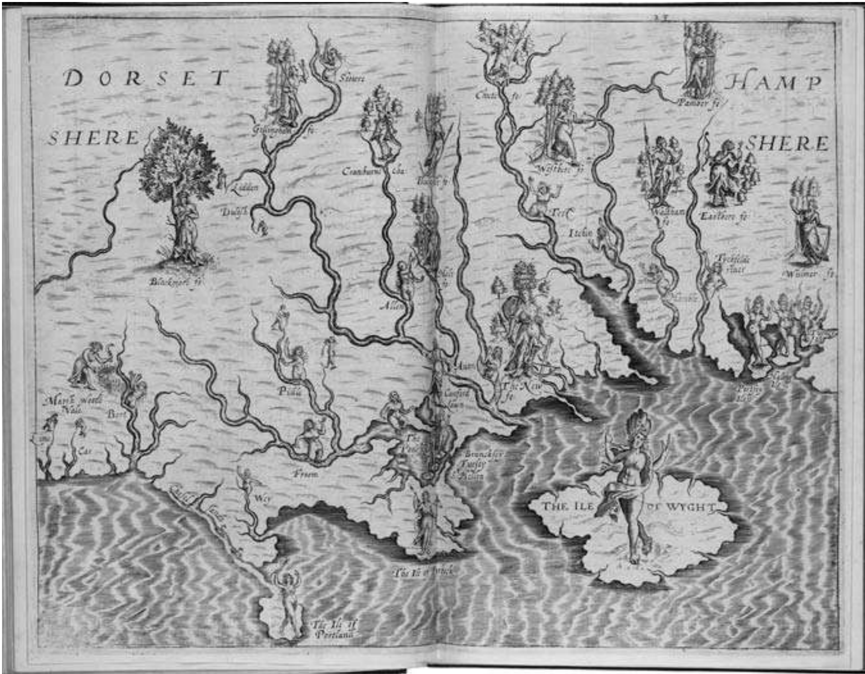


Figure 2.3 The Forests of Dorsetshere and Hampshere, from Michael Drayton, *Poly-Olbion* (London: 1613). The personified forests, reminiscent of Tolkien's tree Ents, are a prime example of the ecological uncanny. Reproduced with permission of the Folger Library.

nation, the English were more keenly aware than their continental counterparts that their natural resources were finite. As Timothy Sweet has brilliantly elucidated, it was Thomas Harriot's fear that England would someday exceed its "carrying capacity" that prompted his support of colonization outlined in the opening section of this chapter.[73] But whereas Harriot calls for importing natural resources from abroad, Drayton advocates a conservationist approach.

Human consumption, however, remains the primary catalyst behind the decay of Albion's forests. Specifically, Drayton lambastes the industrial sector for its reckless exploitation of the woodlands. In Book 14 the Hill of Clent, personified as a shepherd, complains that the nymph of Feck'nham Forest has shunned his advances in favor of the river Salwarpe, who scorns her. Out of a suicidal devotion for Salwarpe, Feck'nham forest "prodigally gives her woods to those strong fires / Which boyle the source to Salts" (15.45–46). In this remarkable passage, without precedent in English literature, Drayton reworks the topos of the pastoral love triangle into an etiological fable about environmental decay. The jilted Clent rebukes the forest, although the real target of the invective is, once again, human avarice:

> Fond Nymph, thy twisted curles, on which were all my care,
> Thou lett'st the Furnace waste; that miserably bare
> I hope to see thee left, which so doost mee despise;
> . . . .
> The time shall quickly come, thy Groves and pleasant Springs,
> Where to the mirthful Merle and warbling Mavis sings,
> The painfull laborers hand shall stock the roots, to burne.
> (14.49–51, 55–57)

Elsewhere in Book 17, "the anvils weight, and hammers dreadfull sound" (17.383) spook the wood nymphs of Kent, an unequivocal critique of the depredations of the iron-mongers.

> What should the Builder serve, supplies the Forgers turne;
> When under publike good, base private gaine takes holde,
> And we poore woefull Woods, to ruine lastly solde.
> (17.406–408)

As the allusion to the builder indicates, *Poly-Olbion* does not cling to some utopian dream that humans need never utilize natural resources for their own purposes. But it does aver that some purposes are more legitimate than others and that "publike good" must be the yardstick by which they are measured.

Mercifully, Drayton's survey of the forests is not all one glum threnody. *Poly-Olbion* does offer a few vignettes of more equitable interactions between humans and the landscape. In Book 13, a Hermit in Arden

"gather[s] wind-falne sticks . . . which every aged tree still yeeldeth to his fire" (13.182–183). In an ode to the fecundity of Kent, Drayton praises the labor of the Gardener, who "scrapeth off the mosse, the Trees that oft annoy" (18.697). The description of the beavers in the River Tivy gathering wood to make their "fort" (6.81) may also offer a tutorial on sustainable building in contrast to rapacity of humans. (Unfortunately in Drayton's day beavers had already fallen victim to this same rapacity, driven to extinction by over-hunting.)[74] Waltham Forest, a rare exception, appears to have survived the timber famine relatively unscathed. The poem also speaks in rapturous terms of the woodlands management in Windsor Forest. If Drayton's verse occasionally smacks of lickspittle adoration of the monarchy, it also depicts the state as a bulwark against industrial capitalism, as the only viable means to defend the "publicke good" against "private gaine."

Yet cheerful notes are rare among the twenty-six songs. In hindsight, *Poly-Olbion* can be heard as the lament of a society without an Environmental Protection Agency or properly staffed Forest Service. The overall impression, as Andrew McRae has commented, is one of "profound disgust" with "the exploitative desires of humanity."[75] Sadly, *Poly-Olbion* has never enjoyed the wide readership that it deserves. It is a book far ahead of its time, as even seventeenth-century readers, judging by Drayton's frustrated preface to the second edition, were under-whelmed. In an irony that would no doubt make Drayton wince, the cottage in Hartshill thought to be the childhood of England's first ecological poet was demolished in 1939 to make room for a parking lot.[76] The fate of Drayton's home could also be taken as emblematic of his neglect in early modern scholarship. As ecocriticism gradually begins to teach us how to read books that lack a human protagonist, however, Drayton's chorographical epic (and its beleaguered forests) may speak to us more audibly than to any previous generation. The prophecy George Wither includes in his commendatory verses may come true after all:

> For, when the Seas shall eat away the Shore
> Great Woods spring up, where Plaines were heretofore;
> . . . .
> This POEME shall grow famous.[77]

3 The Reformation and the Disenchantment of Nature

Fiscal forestry and the Georgic Revolution were not the only forces reshaping the experience of the English landscape in the sixteenth century. The Reformation, in addition to opening vast tracts of land to commercial exploitation, heavily impacted the way people thought and felt about the presence of the sacred in nature. Long before the first Christian church was erected on English soil, Ancient Britons, under the auspices of the Druids, worshipped in sacred groves known as *nemeton*. Although the association of the Druids with Stonehenge has been exposed as an eighteenth-century fabrication, archeological evidence and the writings of Roman historians such as Tacitus confirm their ceremonial use of forest sites.[1] When Christianity arrived, it grudgingly assimilated many of the old rites and customs into its own praxis. Two letters written by Pope Gregory at the time of St. Augustine of Canterbury's expedition to England shed light on the compromise adopted by the early missionaries. In the first, dated June 601, Gregory urges King Ethelbert of Kent to completely suppress the native pagan faiths. But before the convoy reached Canterbury, Gregory changed his strategy.

> Do not, after all pull down the fanes. Destroy the idols; purify the buildings with holy water; set relics there; and let them become temples of the true God. So the people will have no need to change their places of concourse, and where of old they were wont to sacrifice cattle to demons, thither let them . . . slay their beast no longer as a sacrifice, but for a social meal in honour of Him whom they now worship.[2]

A survey of sacred sites and religious practices in medieval England suggests that the early proselytes took Gregory's advice to heart. In his magisterial study, *Religion and the Decline of Magic*, Keith Thomas amply documents the persistence of old pagan beliefs in the numerous rituals conducted outside church walls in the fields and forests of the English countryside. Many of these ceremonies consisted of petitionary prayers to saints to bring good weather, protect the crops, and ensure a bountiful harvest; some of them even involved the woodlands. For instance, a ceremonial

"blessing of trees" to encourage their regeneration was regularly observed on the Twelfth Day after Christmas in many parts of the country. Foresters likewise often recited special prayers when planting or grafting to aid the sapling's growth. Although the early Church had uprooted the groves of the Druids, medieval churchyards themselves almost invariably featured a sacred yew. Vestiges of tree worship can even be detected in Gothic architecture, which has been seen as simulating in stone the experience of walking beneath a forest's soaring canopy.

In the medieval and early modern era the performance of these animistic rites reached a peak during the festival known as Rogation, or "Gang" week. Evidence attests the celebration of the holiday in England was already thriving as far back as 747, when the Council of Cloveshoe issued a statement recognizing its observance twice per year: first on April 25 (St. Mark's Day), in keeping with Roman Church tradition, and again during the three days prior to Ascension Thursday (the fortieth day after Easter) "according to the custom of our ancestors."[3] Though eliminated by Vatican II in 1970 and overlooked by many cultural historians today, Rogation Week was one of the most sacred events in the medieval Church calendar.[4] Similar to Lent, which enjoined fasting to help reduce consumption of scarce foodstuffs during the meager winter months, Rogation was a time of penance. The community sought to purify itself in a bid to ensure the fertility of the land. After fasting for much of the day, the congregation would gather for a communal feast or Church ale in the open air. Rogation, then, was a time to re-affirm the individual's participation in their community and to reflect on humanity's connection with and dependence upon its natural surroundings.

Anglo-Saxon homilies trace the origins of the festival to Bishop Mamertus of Vienne in the fifth century, and through him back to St. Peter, who had initiated it to take the place of a pagan thanksgiving known as the *ambarvalia*.[5] The word "Rogation" derives from the Latin verb *rogare*, "to ask," and became attached to the festival because the scriptural reading of the week included a verse from John 16: "Ask and ye shall receive, that your joy may be full."[6] The highpoint of festivities took the form of a communal perambulation around the parish grounds with the gospels or holy relics triumphantly in tow, as prescribed by the Anglo-Saxon homilies:

> We sculon beon Gode lofe secgende, and Cristes rodetacen for∂beran and his tha halige godspell and o∂re halignessa, mid tham we sceolon bletsian ure tha eor∂lican speda, thaet synd aeceras and wudu and ure ceap and eall that thing the us God for-gyfen hafa∂ to brucanne the we bileofian sceolon.[7]
>
> [For God's love, we ought to carry forth the sign of Christ's cross and his holy gospels and other holy things with which we must bless our worldly riches, that is *fields and woods and our cattle* and all the things God has given us to enjoy which we must live by].

On a pragmatic level, Rogation was a way of re-affirming communal solidarity, an enactment of its unity through its fasting, feasting, professing its faith, and physically marching around its geographical boundaries. But the custom is also a classic example of what anthropologist James Frazer referred to as sympathetic magic—a ritual performance that aims to trigger a desired event by re-creating it on a smaller scale.[8] Parading relics and images through the fields was thought to drive away demons and infuse a divine blessing throughout the land, while dousing the soil with holy water would conjure ample rainfall during the dry summer months ahead. Frazer cites several examples of perambulations and similar rain-making rituals among the indigenous peoples of New Guinea, the American Plains, and the Australian Outback, but scants the persistence of these practices in medieval Europe.[9]

Rogation survived relatively unchanged up until the sixteenth century when the Reformation gripped England and zealous Protestants sought to debunk these rituals as absurd superstitions utterly void of any scriptural basis. Tyndale, for instance, railed against what he called "saying of gospels to the corn in the field in the procession week, that it should the better grow."[10] These objections sprouted teeth with the Edwardian Royal Injunctions of 1547, which outlawed the perambulations at any time not previously designated by the Church calendar. To beg God for rain during a period of drought, for example, smacked of magic and was forbidden. Like many of the Catholic festivals, the perambulations were revived under Queen Mary. The journal of the Merchant Taylor Henry Machyn mentions numerous processions in 1550s with the clerks decked out in copes and garlands, carrying the host and banners alongside marching consorts of musicians known as "waits." Shortly after Elizabeth ascended the throne, amendments to the Injunctions in 1559 reinstated Edwardian policy and overturned the Council of Cloveshoe, which had approved the Roman observance of Rogation on St. Mark's Day. The procession was now limited to an annual event to be conducted only on the first three days of Ascension week in keeping with the original native custom.[11] By the century's end the splendor of the old ceremonies was fading from the cultural memory, preserved only in the wistful reminiscences of recusants like Roger Martyn, who fondly recalled in his diary the perambulations he had seen as a child and presumably participated in while serving as a church warden during Mary's reign.

> On Corpus Christi day they went likewise with the blessed sacrament in procession about the church green in copes, and I think also they went in procession on St. Mark's day about the said green, with handbells ringing before them, as they did about the bounds of the town in Rogation week, on the Monday one way, on the Tuesday another way, on the Wednesday another way, praying for rain or fair weather as the time required.[12]

Though the Anglican Church continued to observe Rogation, it did away with much of the spectacle and pageantry described in such loving detail by Machyn and Martyn. The reading from John 16 still appears in the 1559 *Book of Common Prayer* as the official lection for the Sunday before Ascension; however, the bells, relics, holy water, crosses, and the banners painted with images of the saints that adorned the processions were greatly reduced or outlawed altogether. Some parishes now prohibited or discouraged women from participating as well. Even after the festival was divested of its magical trappings, many staunch Protestants refused to attend and denounced the processions as a remnant of popery. Though the extent of the rupture with tradition varied from parish to parish depending on the sway of the Reformers—in 1571 Archbishop Grindal was still complaining about the persistence of Catholic paraphernalia in processions in York—most conforming Protestants now thought of the procession as nothing more sacred than a property survey, a mere "beating of the bounds."[13]

Few historians would dispute that the Reformation marks a sea-change in the history of Western consciousness. The Protestant "disenchantment" of nature both encouraged and was abetted by other historical forces—a spike in urbanization, the maturation of a market economy, and the advent of mechanistic science—which collectively transformed European conceptions of the biophysical world and mankind's relationship to it.[14] However, our picture of the Reformation has sharpened considerably over the past two decades, as scholars have recovered ample evidence that the split between a Catholic Middle Ages and a Protestant Renaissance was by no means surgically neat and clean. This same pattern holds true for Rogation as well.[15] As with the Catholic missions during the barbarian conversions, the Reformers' campaign to purge the Rogation customs of their magical impetus may not have resulted in a swift and decisive victory. In the literary culture of the English Renaissance the assault on animistic beliefs was further checked by the pervasive influence of the humanist inheritance. If the old faith in magic had become taboo, classical poetry, with its fables of groves consecrated to Diana and peopled by wood nymphs and other strange beings such as Echo, provided a vocabulary and a cast of characters to aid in the re-enchantment of the natural world. Aesop inoculated generations of schoolchildren with the seemingly fantastical premise that human beings are not the only articulate, intelligent creatures on the planet, while the transformations in Ovid's *Metamorphosis* reinforced a sense of the fundamental kinship of the material world. Both authors were staples of the sixteenth-century grammar school curriculum.[16] The responsive landscapes of classical pastoral brought to life by Theocritus and Virgil offered a poetic precedent for animistic impulses similar to those behind Rogation.

Unsurprisingly, early modern English authors often wrestle with the conflict between the creeping rationalism of the Reformers and the more magical worldview they suckled from Greco-Roman literature and native folklore. This chapter will examine this dispute—specifically the persistence

of Rogation rituals—as a formative element in four different authors: Spenser, Shakespeare, Nashe, and Milton. Though all are ostensibly Protestant (Shakespeare's faith remains hotly contested), these four individuals represent a fairly broad spectrum of religious persuasions and when taken together they showcase some of the various means by which early modern English literature resists, qualifies, or facilitates the broad cultural movement toward an Enlightenment sensibility that viewed non-human nature as essentially passive and radically Other.

REVIVING ROGATION IN SPENSER'S *SHEPHEARDES CALENDER*

Many of the poems in Spenser's *Shepheardes Calender* demand to be read as religious allegories. The double entendre of shepherd as spiritual leader in Renaissance pastoral may activate such a reading even in the very first lines of the opening eclogue.

> A shepeheards boye (no better doe him call)
> When winters wastful spight was almost spent,
> All in a sunneshine day, as did befall,
> Led forth his flock that had bene long ypent.
> ("Januarye," 1–4)

For sixteenth-century English readers, the image of a shepherd nudging his flock outdoors for the first time after a long winter would likely spark a recollection of the priest leading his congregation around the parish bounds in early spring. The connection becomes even more probable given that the chief literary model for Spenser's calendrical poem, Ovid's *Fasti*, contains a similar depiction of the Roman festival of Terminalia. Like the Catholic clergy, Colin, too, tends to address Nature in the second person. At first he implores Pan—a classical deity associated with fertility (whom the *Calender* later links with Christ)—to hear his complaint. Oddly enough, this corresponds to the start of Rogation Monday with its supplications to God to look favorably upon the upcoming rituals and the lection from John 16 insisting on the efficacy of prayer: "Ask and ye shall receive." Soon after, we encounter three stanzas which open with the following three invocations: "Thou barrein ground," "You naked trees," "Thou feeble flocke" ("Januarye," 19, 31, 43). It is, I believe, highly significant that Colin calls upon the very three natural phenomena—fields, woods, livestock—that were blessed during the Rogation processions, and in the precise order specified by the Anglo-Saxon homilies. Although the post-Reformation celebrations no longer addressed the soil, plants, and animals directly, Spenser's verse continues to perpetuate the fantasy that nature is responsive to human speech, effectively transforming a now taboo ritual into the metaphors that enliven his poetry.

The allusions to Rogation are both more evident and more problematic in "Februarie." As with all twelve poems in the *Calender*, this eclogue has been subjected to a barrage of historicist readings in the past few decades.[17] In the field of Renaissance scholarship, murmurs of dissatisfaction with such strictly historicist approaches have grown increasingly audible. While I believe that the methodology is far too useful to abandon completely, this book also seeks to acknowledge the aesthetic, didactic, and spiritual dimensions of literary texts, while expanding the myopic focus on discourses of power to situate the human subject in the vaster matrix of non-human nature. Criticism that simply plays pin the tail on the peer too often results in reductive readings. In the case of the "Februarie" eclogue, for instance, Paul McLane's unmasking of the Oak as the arch-Protestant Leicester fails to consider how the poem explicitly associates the tree with Catholicism.

Spenser's fable of the Oak and the Briar, though adapted from Aesop, grapples with post-Reformation attitudes toward the religious supplication of nature. More than an innocent symbol of longevity, old-growth trees were at the center of Elizabethan controversies over religious reform. During the Rogation processions, large trees frequently served both as landmarks and pit-stops along the way where the congregation would pause to hear a sermon or a Bible verse read in the shade. Records of such practices survive well into the late Tudor period; in the town of Clare in Suffolk the townsfolk would gather "at a tree called Perryes Crosse" where they would listen as "the vicare redde a ghospell at the uttermoste part of their bounds. And then they had there some ale or drinkings." Often the clergy carved crosses into the bark of the chosen trees that signaled *noli me tangere;* the trees were under Church protection and could not be cut down.[18] In the following excerpt, Spenser provides the most explicit account of the Rogation rituals in Elizabethan literature:

> For it had bene an auncient tree,
> Sacred with many a mysteree,
> And often crost with the priestes crewe,
> And often halowed with holy watere dewe.
> ("Februarie," 207–210)

At "thrise thirty years," Thenot would have an even better recollection than the recusant churchwarden Roger Martyn of these seasonal rituals. But for the younger generation of readers, perhaps unfamiliar with these now antiquated customs, the mysterious commentator E.K. must provide a further helpful gloss:

> The priestes crewe) holy water pott, wherewith the popishe priest used to sprinckle and hallowe the trees from mischaunce. Such blindnesse was in those times, which the Poete supposeth, to have bene the finall decay of this auncient Oake.

While E.K. disavows that this poem is "bent to any particular purpose,"' the aforementioned remark invites us to read the fable of the Oak and Briar, as well as the debate between Age and Youth, as a meditation on the rivalry between the old and new faith. As is often the case, however, E.K. here fails to do justice to the text's complexity. The mention of the ancient Catholic practices, long ignored in Spenser criticism, has recently achieved notoriety as an "interpretive crux." Given his attacks on clerical abuse and defiant support for Bishop Grindal, Spenser's religious mindset at the time he composed *The Shepheardes Calender* has been characterized as "zealous, militant Protestantism." But if the poem dismisses the ritualistic anointing of the tree as "foolerie," it also extols the Oak itself as venerable and chides the foolhardy briar for "scorning Eld" ("Februarie," 238). With a greater appreciation of the tensions in the text, John King sees the poem as articulating a "qualified stand for reform."[19] Yet scholarship has yet to fully unravel the correlation between Catholicism, Thenot, and the Oak, or explain why Spenser harbors such respect for the tree.

A crucial, as it were, piece of evidence overlooked in this dispute stares out from the woodcut that originally accompanied the poem: a cross carved in the palm of Thenot's hand (see Figure 3.1). Ruth Samson Luborsky first drew attention to the cross in a study of the *Calender*'s iconography, but concludes it is most likely "not a religious symbol but rather a way of showing age and care."[20] This verdict, however, seems highly questionable given the explicit comparison of Thenot to an old tree that "hast lost both lopp and top" ("Februarie," 58) and the allusion to the Catholic practice of carving crosses in tree bark. The woodcut seems to tease out the idea that Thenot *is* the ancient oak, as if the cross were a scar remaining after a reverse Ovidian metamorphosis into human form. The illustration thus brilliantly accentuates the link the poem forges between Catholicism and Thenot, as well as foregrounds the fact that people—and religious faiths—participate in the larger biological cycle of birth, growth, decay, death, and rebirth, which is, after all, the predominant theme and structural premise of the *Calender* itself.

The religious significance of the oak is complicated further by comparing the fable with another poem in Spenser's own corpus, *A Theatre for Worldlings*. The fifth verse prophecy, translated from du Bellay's *Songe*, praises the sacred oak of Dodona.

> Ravisht I was to see so rare a thing,
> When barbarous villaines in disorderd heape
> Outraged the honour of these noble bowes.
> I hearde the tronke to grone under the wedge.
> And since I saw the roote in hie disdaine
> Sende forth againe a twinne of forked trees.
>
> (*Theatre*, 5.9–14)

A popular shrine in the cult of Zeus and later Jove (an association that remained in Renaissance England as both Rosalind and Prospero designate the oak as Jove's tree), the Dodonian oak was believed to possess the power of speech; priests claimed to translate the sounds of its rustling leaves into verses, which were credited as oracles. Odysseus, for example, consults it for advice on returning to Ithaca.[21] A totem of civic glory and an object of religious veneration, the tree in this sonnet bears more than a passing resemblance to the oak in the eclogue. It is worth remarking, however, that the reason for the tree's decline in the *Theatre* differs from the diagnosis offered in "Februarie." Rather than blaming its decay on the crosses carved into its bark, the sonnet speaks glowingly of the "trophees" and "goodly signes" that decorate the tree. In his revised version of the poem published in 1591, Spenser hails the oak as the site of "many a goodly show" ("Visions of Bellay," 5.63). For some readers, the notion of worshipers performing shows and erecting idols around a sacred tree would unavoidably recall the games, processions, and painted banners associated with Rogation. Spenser's caustic critique of the "barbarous villaines" defacing the "noble bowes" reads like a denunciation of Puritan iconoclasts who opposed the old lustrations. If we take the old-growth tree as a symbol of the primitive church, the final two lines further confirm Spenser's support for the Anglican compromise, prophesying the regeneration of the Reformed Church from the stump of the Catholicism.

Figure 3.1 "Februarie," from Edmund Spenser, *Shepheardes Calender* (London: 1580). The cross is on Thenot's left palm. Reproduced with permission of the Newberry Library.

The portraits of the two oaks would thus appear to be fraught with cognitive dissonance: the idolatry he condemns in Roman Catholicism he celebrates in Roman antiquity. This apparent contradiction nicely illustrates Spenser's divided sympathies with both the Puritans' assault on ritual and with the humanist inheritance. Beyond fashioning a gentleman, Spenser's literary project was to forge a Protestant art that avoided the conflation of carnal signifier and spiritual signified found in Catholic ritual, a point superbly stated by C.S. Lewis in contrasting the Bower of Bliss with the Garden of Adonis.[22] To be sure, not everyone agrees that Spenser succeeded in adequately disentangling the two, and many critics continue to see his theology and poetics at cross-purposes. In an attempt to resolve this tension so characteristic of Spenser's writing, Kenneth Gross notes that *The Faerie Queene* in effect displaces the theological problem of idolatry into a secular, aesthetic realm of experience. Gross advises scholars of early modern English culture "to look closely at the partial survivals of and substitutions for images, at the forms or fragments left behind and at what was raised up in their place."[23] Not only does Spenser's poetry feature many such dangerous images, it also engages in ekphrasis, imbuing the text itself with the aura of a verbal icon. Turning again to E.K.'s preface, we see he praises the immediacy of the verse that represents the Oak and Briar's dispute "as if the thing were set forth in some Picture before our eyes" ("Februrarie").

This same ambiguity colors Spenser's portrayal of the traditional folk festivals. The fifth poem in the *Calender* affectionately depicts the fetching home of May, when the young venture out into the woods and fields

> To gather may buskets and smelling brere:
> And home they hasten the postes to dight
> And all the Kirke pillours eare day light
> With Hawthorne buds, and sweete Eglantine.
> ("Maye," 11–14)

Piers, an Elizabethan Puritan disguised as an Arcadian swain, frowns upon the superstitious folly of the youth. But Pallinode, the Catholic spokesperson, defends the right of young to divert themselves with these pleasant pastimes. If Piers wins the theological debate, it is a pyrrhic victory, as the aesthetic appeal of Pallinode's message accords better with the aesthetic medium of poetry in which it is couched. Spenser's evident fondness for the old customs also shines forth in Colin Clout's famous roundelay from "August":

> It fell upon a holly eve,
> Hey ho hollidaye,
> When holly fathers wont to shrieve.
> ("August," 53–55)

Spenser does not specify which holiday Colin has in mind. The "bonilasse" who catches Colin's eye is dressed in a green kirtle and wears a crown of violets on her head, which might suggest May Day or Midsummer's Eve rather than August. But penance was not customarily a part of these celebrations; shriving, however, was performed during Rogation week. Regardless of which particular holiday, if any, he intends, the song attests that Spenser has far more in common with Robert Herrick than Malvolio or Phillip Stubbes. Like Herrick's "Hock-Cart," Spenser's verse often strives to capture in writing the joyous exuberance of these folk celebrations. "August" emphasizes the connection by twice rhyming the words "holidaye" and "roundelay," as if the song has become an extension of the festival. Indeed, a roundelay is not only a song but also a type of dance in which participants join hands and move about in a circle. The roundelay thus makes a convenient symbol for the circular perambulations during Gang Week.

If "Maye" and "August" seeks to salvage a glowing coal from the festival bonfires that were sputtering out across England, so, too, the "Februarie" eclogue functions as a substitute for the very Rogation rituals it ostensibly critiques. The poem draws a subtle distinction between the absurd "fancies" of the ancient ceremonies that fail to protect the tree and the imaginative "tales" of poets that can act as vehicles for moral instruction, encouraging reverence for nature and the aged. Just as early modern theatre appropriates the dramatic energy of the outlawed Catholic rituals, Spenser's poetry thus perpetuates the kind of magical thinking about nature that motivated the Rogation ceremonies. Spenser's discomfort with his debt to paganism registers in the fact that he cites Chaucer—hailed as a proto-Protestant thanks to apocryphal texts attributed to him in the sixteenth century[24]—as the source of the fable rather than Aesop. While he criticizes the hocus-pocus of the clergy, he embeds this critique in a fable that asks readers to entertain the notion that plants have the power of speech. Line 151 likely puns on "plant" and "plaint," as if the tree's very existence were a type of utterance. Furthermore, the eclogue abounds with personification: the trees have "arms" and a "body"; the Briar "bleeds," while the axe "wounds" the Oak which "oft groned under the blow, / And sighed." Though modern critics tend to sniff at the "pathetic fallacy," Renaissance readers do not seem to have found such language contrived or sentimental. On two different occasions in the critical apparatus of "Februarie," E.K applauds the use of such "*lively* figure(s), whiche geveth sence and feeling to unsensible creatures." E.K. may also have been recalling these lines in his preface to the eclogue when he praises Spenser for narrating the fable of the Oak and Briar in "so *lively and feelingly*" a style. From these comments one can infer that E.K. chiefly admires "Februarie" for the way it not only simulates sensory experience but also evokes the splendor and sentience of the biophysical world, disturbing conventional assumptions of a radical chasm between the animate and inanimate, between human and non-human nature. To read *The Shepheardes Calender* thus offers a chance to

temporarily revert to the same kind of enchanted sensibility that prompted the Rogation ceremonies.

Like many folk rituals, the outpouring of magical beliefs during Rogation served a pragmatic purpose. In saluting the return of spring, the parish expresses an agrarian society's awareness that its survival depends upon the bounty of nature. From an anthropological perspective, the processions can also be seen to encourage a proper respect for and management of the community's natural resources. Though boundary disputes occurred on occasion, Rogation was a time for settling grudges, showing largesse, and bonding via communal fasts followed by communal feasts. Underlying the custom is an understanding that shared land (as much as shared faith) defines and sustains human community. Moreover, by blessing the animals and plants, the human participants recognize their membership in a larger ecosocial community. To note the persistence of these beliefs is not to insinuate that the ceremonies stem from some trans-historical yearning to live in harmony with nature. Rather they arise out of the perennial anxieties of an agricultural society whose standard of living could fluctuate wildly from year to year, as it was contingent on a proper mixture of sunshine and rain to ensure a successful harvest.

In an era when maps were still rare, the ritual represents a kind of experiential cartography, in which the participants physically engage with the land rather than look down upon it with god-like detachment. By staking out a small bioregion as a locus of community, the Rogation procession is astonishingly similar to the narrative structure of Drayton's *Poly-Olbion*. Hailing the unique terrain, flora, and fauna of an animate landscape, this chorographical epic may stand as another example of a post-Reformation literary text energized by this pre-Reformation ritual. Taken as a whole, the epic could be read as forging British identity via a poetic perambulation of the entire kingdom. This identity is established and maintained by assuming collective responsibility for the sustainable use of the land's resources.

Rogation was, among other things, also a ceremonial occasion for the town elders to share their oral knowledge about the parish bounds with the young. When an insufficient number of either agreed to march, the processions were often cancelled. With this in mind, the dispute between youth and age in "Februarie" becomes more than a mere literary topos. The poem dramatizes a generational breakdown in the stewardship and understanding of the land as the focal point of early modern community, a breakdown that Spenser openly mourns. Perhaps one reason why the Edwardian Injunctions did not trigger more of an uproar is that for many people the rituals no longer possessed their former urgency, as sixteenth-century England was itself undergoing a rapid social transformation. Early modern scholars have long been aware of this demographic shift; the population of London swelled from roughly 50,000 in 1500 to 200,000 by the close of the century: a fourfold increase.[25] Thus Spenser's account of a dispute between youth and age also captures some of the social upheaval generated

by the transition from a predominantly rural and agrarian-based society to an urban one with an increasingly developed market economy.

For the considerable segment of the populace who stayed in the countryside, however, or whose income was tied to the productivity of the land, anxieties about living in such "an intensely insecure environment" remained acute.[26] While the Reformers managed to ban petitionary prayers in the communal processions, they could not as easily allay the apprehensions that gave rise to them in the first place. To assuage them, many inhabitants in rural England turned to another form of magical writing that bears an intriguing connection with Spenser's pastorals: the almanac. During the second half of the sixteenth century, almanacs positively streamed off the English presses. Editions were produced by Anthony Ashcam (1548), Cunningham and Williams (1558), Vaughan (1559), Hill (1560), Mounslow (1561), and Securis (1562). It is, I believe, not coincidental that the number of almanacs in print sees a notable spike in the years immediately following the Injunctions restricting the Rogation processions. Indeed, the leading historian on the subject accounts for the surge of interest in astrological texts as "supplying a need apparently ignored by the English Church after the Reformation."[27] Now that people could no longer ask God to intercede with the weather, there is an acute need to appease uncertainty through prophecy and meteorological forecasts.

Due to the contempt for astrology among modern intellectuals, surprisingly little has been said about the influence of almanacs on Spenser's pastorals, despite the fact that he pilfered his title from one of the most popular specimens of the genre: *The Kalendar of Shepheards*.[28] Published originally in French as *Le Kalendrier des Bergiers* in 1499, and first Englished in 1502, the *Kalendar* remained a perennial best-seller throughout the sixteenth century. While an exact estimate of the *Kalendar*'s readership is impossible, it would not be unreasonable to suppose that it numbered ten times that of Spenser's pastorals.

Literary historians tend to dismiss the almanac as a hodge-podge of astrological babble and absurd prognostications. Early modern readers, however, were just as likely to consult them for utilitarian purposes. A cursory glance at a table of contents from a few editions reveals that they were packed with practical information: lists of fairs and market-days, lunar phases (Bottom and Quince consult one to determine whether the moon will shine on their performance of Pyramus and Thisbe), tidal charts, tables of weights and measures, time-tables for the postal service, herbals and homeopathic remedies. They also listed the dates of moveable feasts, such as Rogation-tide. In addition, many almanacs proffered advice on the best days "to set, sowe, plant, or grafte." This type of natural astrology should not automatically be derided as pseudo-science: in a culture where calendars and weather forecasts were not widely available, the position of the stars was a reliable means of synchronizing various agricultural activities. Many English almanacs featured gardening tips on growing staple crops

such as wheat and assorted produce like turnips, beets, hemp, melon, flax, vines, and hops. In other words, the almanac was a compendium of agricultural folklore and knowledge about the natural world. In the postscript to a recent French reprint of *Le Kalendrier* the editors call it "le Whole Earth Catalogue du XVème siècle." With its series of primers on agriculture, geography, meteorology, astronomy, medicine, and Christian theology, the almanac provides a far more vivid and unmediated glimpse of the late medieval/ Elizabethan World Picture than Tillyard ever etched.[29]

The critical apparatus of *The Shepheardes Calender* trumpets the poem's classical pedigree to promote it as a work of high culture, while downplaying Spenser's debt to a slightly disreputable folk genre. Too often criticism seems content to follow E.K.'s lead by implying that Spenser derived all his knowledge of the countryside from Virgil but had never seen a sheep himself or strolled across the "Kentish downes." Though heavily influenced by the conventions of classical pastoral, Spenser's poems are also unavoidably shaped by encounters with the material world of sixteenth-century England and Ireland, and exhibit a rudimentary knowledge of some basic precepts of husbandry. For instance, Spenser likely chose to place the fable of the oak and briar in "Februarie" because it was the customary month for pruning and felling dead trees. Other poems depict the best way to go about gathering walnuts, or fetching raven eggs. "Februarie" even seems to offer advice on maintaining what ecologists today would call "biotic equilibrium." The destruction of the Oak exposes the now "solitarie Brere" to the chill gusts of "blustring Boreas," with predictably dire results:

> For nowe no succoure was seene him nere.
> Now gan he repent his pryde to late:
> For naked left and disconsolate,
> The byting frost nipt his stalke dead,
> The watrie wette weighed down his head,
> And heaped snowe burdned him so sore,
> That nowe upright he can stand no more.
> ("Februarie," 228–234)

Though the poem primarily stands as a meditation on generational and religious conflict, it also imparts a fundamental lesson in ecological interdependence: without the protection of the oak, the briar dies.

To better appreciate the environmental ethic of the almanacs, it is worth recalling that the word "ecology," coined by German zoologist Ernst Haeckel in 1869, extends the notion of *oikologia*—the study of household management—to the interactions of organisms in a shared habitat.[30] By stipulating that human beings adapt their dress, diet, and daily chores according to the "regimen" of the seasons, and by advocating a responsible and efficient use of natural resources, almanacs represent some of the first truly "ecological" texts in European culture. Spenser, in effect, applies a

similar principle to his poetic vignettes "proportioned to the state of the xii. monethes." He inserts a flower catalogue in "April," declares "myrth in May is meetest for to make," and composes a dirge for "November." *The Shepheardes Calender* essentially outlines a sort of emotional regimen that corresponds to the physical regimen prescribed in early modern almanacs.

Spenser's decision to model his poems on the almanac was a bold move, both stylistically and doctrinally. Just as the Puritans denounced Rogation, they also inveighed against the almanacs for their supposed Catholic bias. Some objected to the fact the calendars kept alive the memory of Saints' Days. Others, like the celebrated divine William Perkins, censured them on the grounds that astrology displayed "contempt for the Providence of God."[31] In the centuries that followed, post-Enlightenment science would continue the campaign, albeit with different motives, to discredit it as intellectually untenable. To be sure, judicial astrology, with its vague and kooky predictions, is patently fraudulent. But insofar as astrology insists human individuals are not radically free and independent agents, but fundamentally rooted in a biological and cosmic cycle, the early modern almanac boasts a certain amount of ecological credibility. To the extent it adopts this same cosmic framework and even more eloquently appraises the physical and psychological dynamic that exists between mankind and nature, so, too, does Spenser's *Calender.*

A MIDSUMMER NIGHT'S DREAM, ROGATION, AND THE "LITTLE ICE AGE" OF THE 1590S

Of all the Protestant attacks on magic, Reginald Scot's *Discoverie of Witchcraft* stands as the most fascinating and, from a literary perspective, the most influential. First published in 1584, the text opens by boldly proclaiming that God long ago issued a moratorium on miracles. Assembling evidence from books on natural philosophy and the confessions of confidence men, Scot exposes every conceivable kind of supernatural occurrence as either an outrageous fable or a cunning piece of chicanery exploited by priests to keep the gullible peasantry in awe. Repeatedly throughout the treatise, Scot blames "Papists and Poets" for fanning the flames of superstition. In Book 12 Scot charges several classical authors—Virgil, Ovid, Horace, and Lucan—with perpetuating supernatural beliefs and reprints offending extracts from their verse, including Ovid's account of Medea's magical powers that Shakespeare pilfered to compose Prospero's résumé. Early modern witch-mongers, according to Scot, were unable to sift fact from fiction and often cited such passages as classical precedents indisputably proving the reality of witchcraft.[32] Thus it no doubt would have pained Scot to learn that his book was ironically destined to become a major source-book for English writers who dabbled in the supernatural. Jonson, for instance, credits him in the apparatus to *The Masque of Queenes*

he prepared for Prince Henry. It is widely known that Shakespeare, too, sampled from the *Discoverie* to concoct the witches in *Macbeth*, but it is sometimes forgotten that the text also exerted a profound influence on *A Midsummer Night's Dream*.

The *Discoverie* dismisses Robin Good-Fellow as an embodiment of absurd folk beliefs (the Elizabethan equivalent of the boogey-man), refutes a current report of a man metamorphosed into an ass by a witch, ridicules the use of spells and charms to protect oneself from harm, and denies the efficacy of love philters.[33] Last but not least, Scot ridicules the belief in the existence of fairies, inserting a famous passage from Chaucer in which the Wife of Bath blames their disappearance on the mischievous friars who have occupied their niche in society. The thrust of Scot's attack is that Catholicism had nurtured a kind of magical thinking that enabled gross superstitions to thrive. In portraying a fantastical world inhabited by faeries, Robin Good-Fellow, a man translated into an ass, and lovers entranced by a magical love juice, Shakespeare's comedy would undoubtedly have made Scot cringe. With one notable exception: the lawyer from Kent would have heartily applauded Theseus's famous speech in Act 5 that begins: "I never may believe / These antique fables, nor these fairy toys" (5.1.2). As Barbara Mowatt has observed, the Duke's scoffing comments reiterate some of the key arguments advanced in the *Discoverie*.[34]

It would, however, be misleading to imply that *A Midsummer's Night's Dream* endorses Scot's skepticism. In a play that so vividly dramatizes the enchanting powers of the poet's pen, Theseus's critique rings hollow. Furthermore, as Shakespeare seems to suggest via the Duke's derisive ad-libbing during the Pyramus and Thisbe masque, such a mindset could hardly be considered conducive to appreciating the flagrant illusions of theater. Despite his wise-cracks, Theseus seems far more receptive to antique fables after watching the masque, explaining that the wedding party must call it a night for "'tis almost fairy time" (5.1.343). In the final scene the faeries invade Athens, the domain of civilization, and sprinkle "field-dew consecrate" in the palace bedrooms. As Stephen Greenblatt has noted, the line unmistakably alludes to the Catholic practice of dousing the bridal bed with holy water.[35] But the references to the old rituals verging on nature worship are, I think, even more extensive than has previously been recognized. When the first fairy appears, the text immediately calls attention to her mobility, how she wanders across the rural landscape to "dew her orbs upon the green." The OED cites this line as an early example of the use of "orb" to signify any generic circular form, not just the movement of the heavenly bodies. The word here is usually understood to refer to the circular fungus still known today as fairy ring, similar to the "sour ringlets whereof the ewe not bites" (5.1.38) mentioned by Prospero. But the line may also glance at the circular processions around the Church green during Rogation in which the priests would sprinkle the soil with holy water.

Such a connection between fairy lore and Catholicism was not uncommon in early modern England, as illustrated in a ballad by Richard Corbett, one of the sons of Ben, titled *The Fairies' Farewell*:

> Witness those rings and roundelays
> Of theirs, which yet remain,
> Were footed in Queen Mary's days
> On many a grassy plain
> But since of late Elizabeth
> And Later James came in,
> They never danced on any heath
> As when the time hath been.
> By which we note the fairies
> Were of the old Profession.
> Their songs were Ave Maries,
> *Their dances were procession.* [36]

The ballad proudly declares that fairies were of "the old profession" (i.e., Catholics), comparing their dances with the Rogation processions. This same analogy between faeries and the old faith also crops up in Robert Herrick's poem *The Temple*:

> Now this the Faieries wo'd have known,
> Theirs is a mixt Religion.
> And some have heard the Elves it call
> Part Pagan, part Papisticall.[37]

As an Anglican with a decidedly jovial temperament, Herrick opposed the Puritan assault upon the traditional folk pastimes; his poetry contains some of the most boisterous depictions of rural holidays in English literature. Though Corbett's ballad and Herrick's poems date from the late Jacobean/early Carolingian period, there is a good reason why Shakespeare and his contemporaries would also have felt pangs of nostalgia for the old rituals in 1595.

Late sixteenth-century Europe was in the grip of what paleo-climatologists call the "Little Ice Age."[38] In the mid-1590s, "the beginning of the apogee" of this meteorological phenomenon, England suffered four consecutive years of unseasonably cold and wet summers. Crops failed and the price of grain skyrocketed, resulting in widespread famine known as the Great Dearth. The weather in 1594 had been particularly harsh. The historian John Stow complained in his *Annals* that it had rained almost unrelentingly from May until St. James Day (July 25), while fierce windstorms in March had toppled trees throughout the realm; in Worcestershire 1,500 oaks were blown down in a single day. The chronicle of one Midlands town records "great wet" all throughout the summer and harvest time, and as a result wheat leapt from 8 groats to 5s 4d a bushel. The most

likely date for *A Midsummer Night's Dream*, 1595, was even worse. Stow reports that bitterly cold temperatures prevailed from April 20 until the end of May (the period during which Rogation normally fell), sabatoging that year's harvest. Public unrest mounted, and many people were eager to find a scapegoat to blame for the tempestuous weather.[39]

At the dawn of the twenty-first century, modern industrialized nations have gradually begun to confront the fact that human actions can have a drastic and potentially catastrophic effect on the stability of the climate. Environmentalists and earth scientists have issued increasingly ominous warnings that deforestation, voracious energy consumption, suburban sprawl, automobile exhaust, and industrial pollution are turning the planet's atmosphere into a noxious cocktail, a foul and pestilent congregation of vapors. Early modern Europeans also believed in manmade climate change. But instead of blaming the discharge of prodigious amounts of greenhouse gases, they were more inclined to seek a theological explanation, tracing the cause to a moral disturbance in society. In a sermon preached at York in 1594 the future Bishop John King boomed: "Behold! What a famine God has brought upon our land!" In a letter written in 1596 to Archbishop Whitgift, William Barlow intoned:

> Yet who so obserud our heauie heuens this present yeare, the like not remembred by any man liuing, by any record remaining, if he fauor of any religion he cannot ascribe it either to the Climate, or inclination of our Skie, or to the Vicinitie of the sea, but crie out as they did in *Exod.8.19. This is the finger, if not the heauie hand of God*.[40]

If such logic strikes most people today as absurd, it at least enabled premoderns to alleviate their sense of powerlessness when victimized by natural forces beyond their control. By identifying and repenting for the community's collective sin, they believed they could appease divine wrath.

Titantia's lament about the "contagious fogs," "drowned fields," and rotten corn has long been recognized as an allusion to the storms, floods, and ensuing dearth that traumatized the country during this decade.[41] What scholars have failed to note is that she specifically blames the natural disaster on the disruption of a certain ceremony.

> And never since the middle summer's spring
> Met we on hill, in dale, forest or mead,
> By pavèd fountain or rushy brook
> Or in the beachèd margin of the sea
> *To dance our ringlets* to the whistling wind
> But with thy brawls thou hast disturbed our sport.
> *Therefore the winds*, piping to us in vain,
> *As in revenge* have sucked up from the sea
> Contagious fogs.
>
> (2.1.82–90)

Assuming that Shakespeare, like Corbett, saw fairy dances as metaphorical processions, the *Dream* insinuates that the current spate of foul weather and famine stems from the failure to properly celebrate the old fertility rituals. Hills, trees, hedgerows, streams, and shores, like the "hill," "forest," "rushy brook" and "beachèd margin" Titania mentions, often served as boundary-markers for parishes, and thus meeting spots along the routes traced during the communal perambulations.[42] A few lines later, she explicitly links the meteorological havoc to the failure to perform the ritual observances that mark the changing seasons: "mortals want their winter cheer. / No night is with hymn or carol blessed" (2.1.101–102). Such a theory undoubtedly would have appealed to English recusants. Under Catholicism it had been customary to organize processions during times of famine, but now the Anglican Church restricted them to the three days before Ascension Thursday, regardless of the weather. Though some laborers blamed the price hikes on wealthy landowners for hoarding and transporting grain, many who harbored nostalgia for the old ceremonies would have perceived the Little Ice Age as an act of God, announcing his displeasure that the old Rogation rituals had been curtailed or abolished. After all, the purpose of these ceremonies was to ensure a smooth and orderly transition from Winter to Spring and, consequently, a bountiful harvest. Richard Taverner—a member of Thomas Cromwell's circle—believed reciting the gospels in the fields was necessary so that "the wicked spirits which keep in the air may be laid down, and the air made pure and clean, to the intent the corn may remain unharmed . . . for our use and bodily sustenance."[43] If Shakespeare whitewashes the sinister faeries encountered in native folklore, he does, like Taverner, assert a magical correlation between disorderly spirits and unwholesome air that harms the crops. Titania's complaint that the seasons now "change their wonted liveries" reflects a concern that nature is no longer serviceable to mankind; her image of Hiem, the spirit of Winter, as a May Queen mocked with a crown of flowers also seems to anticipate the mad Lear on the heath, who confronts even more disturbing proof that the earth does not exist merely to provide sustenance for human beings.

The famine may also explain Shakespeare's fascination in this period with dreams as potential revelations. To a culture steeped in the Bible, the dearth would have made many people feel they were re-living an episode out of the Old Testament. In Genesis 41 the Pharaoh has two dreams in which he sees seven lean cows devour seven plump ones and seven diseased ears of corn infect seven healthy ones. Joseph interprets this to mean that Egypt will experience seven years of plenty followed by seven years of severe famine. Shakespeare certainly knew the story. In *1 Henry IV*, Falstaff cracks a joke about "pharaoh's lean kine." Hamlet's image of a "mildewed ear / Blasting his wholesome brother" (3.4.64) and Titania's description, in a play we are encouraged to perceive as a dream, of the corn that "hath rotted ere his youth attained a beard" (2.1.95) would remind some audience members of Pharaoh's second oracular vision. Thanks to Joseph's skills as

an interpreter, Pharaoh's dream had allowed Egypt to survive the dearth. If Shakespeare's comedy did not magically fill the granaries in Midland villages, at least it fostered a sense of solidarity across classes and enabled people to endure the hardship with a lighter heart.

At a time of social tension, religious conflict, dearth, and anxiety about climate change, *A Midsummer Night's Dream* provides a sort of secular substitute for the forbidden rituals. In Act 5 Titania and Oberon are reconciled and their peace is sealed with a collective dance that, like the perambulations, enacts communal identity.[44] For audience members who could still remember the old customs, like Roger Martyn and Richard Corbett, the circular dance would evoke memories of the old processions as surely as the "field-dew consecrate" would savor of holy water. But the sacramental quality of the scene is not limited to dancing. The lyricism and hypnotic rhythm of Shakespeare's verse (particularly the trochaic tetrameter favored by the fairies) captures the incantatory quality of the old liturgy. Regrettably, the ritualistic tenor of the scene has been muted by the tendency of editors to follow the 1600 Quarto by assigning the penultimate speech to Oberon. The Folio, however, prints it in italics and identifies it as "The Song," suggesting that during some performances at least parts of it were initially sung by all the faeries, a reading supported by the use of the first person plural in line 32. Further evidence can be gleaned from Oberon's instructions: "And this ditty after me, / Sing and dance it trippingly" (5.2.25–26). Having the faeries sing together as they traipsed about the stage would draw further parallels with the old perambulations.

Not only was Rogation, like the dance, a symbol of social concord, but it was also a time during which the community solicited and dispensed alms for public charity. In the 1630s George Herbert explains that many parsons clung to the tradition because it encouraged "releeving the poor by a liberall distrubition and largesse."[45] Following the Reformation crackdown on processions, there was a general sense that the wealthy were no longer as openhanded as they had been in years past. Due to harvest failures and drastic inflation, there would have been many people in desperate need of charity in the mid-1590s. The Great Dearth would have made many acutely conscious—in their stomachs, their wallets, and their spirits—of the loss of the old fertility ceremonies and the breakdown of communal solidarity. As town alderman, Shakespeare's father would likely have played a leading role in the beating of the bounds during the playwright's childhood. If he harbored Catholic sympathies, as some scholars suspect, he may have tutored his son to look favorably upon the old lustrations. Regardless of whether he shared his father's religious convictions, Shakespeare would likely have grasped that theatre offered a means of preserving or revitalizing a Catholic ritual that had been stripped of its magical efficacy by the Reformation.

Significantly, immediately before the dance at the conclusion of the play, Puck appears and reports now "the heavy ploughman snores, / All with weary task fordone" (5.2.3–4). Whereas previously Titania fretted that the

ploughman had "lost his sweat" (2.1.94) with fruitless labors, he is now "weary" from tilling his fields. Though Puck's speech is mostly an ominous nocturne, this particular image would be consoling to the play's early audiences as it bespeaks a return to normal agricultural activity. More than an escape from the harsh climate and social tensions of Elizabethan England in 1595, the *Dream* attempts an imaginative intervention in a perceived ecological crisis, as Shakespeare playfully invests theatre with powers of sympathetic magic formerly discharged in Rogation and the remnants of pagan fertility rituals. The continuity is further underlined by the fact that a large oak, often a site of communal revelry during Rogation, now serves as a meeting place for Bottom and his company to rehearse their play.

In the past few decades many parishes throughout England have begun reviving the old Rogation-tide processions (see Figure 3.2). Cultural historian Ronald Hutton estimates that they are more popular now than at any time since the Reformation.[46] The resurgence of this ritual is perhaps due in part to the gradual withering away of the old puritanical attitudes, but it may also stem from the rise of the environmental movement. In Northern Kent, environmentalists have organized a "beating of the downs" to generate public support for protecting a commons. In 2001, farmers and ministers in Warwickshire organized a Rogation protest against the government's failure to quash the outbreak of "mad cow" disease. If Anglican clergy can repurpose an ancient religious ceremony in response to a renewed environmental awareness among their congregations, literary critics should be capable of reading sixteenth-century texts in such a way as to help us reflect upon and recalibrate our relationship with the natural world. English professors might even consider organizing similar processions around the boundaries of their colleges on Earth Day. By substituting environmentalist banners for images of saints and poetry readings for psalms, the event could raise awareness about the green movement and encourage students to take an active role in the ecological health of the campus community.

Unfortunately, ritual theory, fallen from its heyday in the mid-sixties, enjoys little currency today among literary critics, who have become uncomfortable discussing its seemingly trans-historical concerns. Yet, as Linda Woodbridge reminds us (in an essay a full decade ahead of its time), we ignore this aspect of the early modern world at our own peril. Shakespeare's plays are "steeped in the discourse of fertility, counting on the mentality of a populace accustomed for centuries to shaping experience in terms of battles between seasons, divine impregnations of Mother Earth, ritual rebirths, processions with greenery."[47] Comedy in particular proved hospitable to the "old magical thinking" of the traditional fertility rituals, and Rogation left its form and pressure on more plays than just *A Midsummer Night's Dream*.

Thomas Nashe's comic interlude, *Summer's Last Will and Testament*, features a procession of the seasons and their attendants that registers and seeks to contain the climactic havoc of the 1590s. Insofar as it has a plot, the

play hinges on Winter's attempt to seize the agricultural inheritance which Summer intends to bequeath to Fall. With its "gallimaufry" of songs and dances culled from agrarian festivals, its actors voice, as did the participants in Rogation, both overwhelming gratitude for the bounty of nature as well as frustration with unruly weather that interferes with that bounty. In one especially heated, as it were, rant, Summer complains to the Sun:

> The Thames is witnesse of thy tyranny
> Whose waves thou hast exhaust for winter showres
> The naked channell playnes her of thy spite
> That laid'st her intrailes unto open sight.
> ....
> Some few yeares since thou let'st o'er flow these walks
> And in the horse-race headlong ran at race
> While in a cloude thou hid'st thy burning face.[48]

Besides its allusions to summer droughts and overly wet winters, the play is, on a thematic level, deeply influenced by the meteorological vicissitudes of its era. When Summer claims "I am not as I was" (124) and "I am sick, I must die" (1593), it may have a more literal meaning beyond the approach of

Figure 3.2 The Blessing of the Livestock. Parish of Alvechurch, Worcestershire. Many parishes throughout England have begun to revive Rogation processions, often timing them to coincide with Earth Day. Reproduced courtesy of Alvechurch Village Society, www.alvechurch-village-society.org.uk.

autumn. Surely it is no coincidence that Nashe portrays the seasons as disorderly, riotous, impinging on each other's rights or scanting their duties. The most cantankerous character is named Backwinter. With apocalyptic fury to rival Lear, he threatens to "barke the sunne out of the sky," as Nashe translates the experience of tempestuous weather into bombastic pentameter:

> I hate the ayre, the fire, the Spring, the yeare,
> And what so e're brings mankind any good.
> ....
> Earth, if I cannot injure thee enough
> Ile bite thee with my teeth, Ile scratch thee thus
> Ile beate down the partition with my heels
> Which as a mud-vault, severs hell and thee.
> (1768–1769, 1773–1776)

C.L. Barber's comment that Backwinter personifies "a type of envy" fails to recognize the topicality of this harangue.[49] He would be better described as a personification of climate change. Though archaic today, the word refers to "the return of winter after its regular time," and may been on many on many people's lips in the 1590s. In fact "Backwinter" was probably coined in response to the Little Ice Age. Interestingly, the first recorded use of the term in the OED appears in Nashe's *Lenten Stuff* from 1599, which *Summer's Last Will* likely precedes. On the basis of a few topical allusions, scholars have assigned the play a date of 1592. The Quarto, however, was not published until 1600, the same year as the First Quarto of *A Midsummer Night's Dream*. Its precise date, then, remains a matter of conjecture. Its most knowledgeable editor, R.B. McKerrow, has suggested the text was later revised for a court performance (4:418–419). If the dying of summer refers not simply to fall's approach, but also the uncommonly wet and frigid Mays and Junes of the mid-1590s, then portions of it may be chronologically closer to *A Midsummer Night's Dream*. Or perhaps Summer's 1592 Lease was already a short one. Either way, *Summer's Last Will* reminds us that climate and culture must be seen in a continuum; deathless meditations on the human condition in works of art, even Will Shakespeare's contemporaneous Sonnet 18, are in fact shaped by geo-climatic contingency.[50]

In Nashe's fiction, Backwinter is not allowed to fulfill his curse against the earth. "And banished be thou from my fertile *bounds*" (1792), proclaims the Summer, imitating the function of a cleric presiding over the beating of the parish bounds. Fittingly, the spectacle concludes with Backwinter's exile and the singing of a "litany" with the refrain: "From winter, plague, and pestilence, good Lord, deliver us" (1878). These lines are likely modeled on the prayers recited during Procession Week. It is significant that the play's original performance took place at the country estate of the Archbishop Whitgift, a High Church Anglican who had replaced Grindal. Nashe's interlude expresses an affectionate regard for the festival which

Whitgift himself would have shared. So, too, it seems, did Queen Elizabeth. In a famous passage, Nashe makes a magical plea that the Queen enjoy favorable weather on her progress: "A charmed circle draw about her court / Wherein warme dayes may daunce, & no cold come" (1853–1854). Such "charmed circles" are precisely what the perambulations sought to create. In its processional structure and its keen sense of human vulnerability to the elements, *Summer's Last Will* resurrects the spirit of the old Rogation rituals at a time of climatic uncertainty.

Merry Wives of Windsor, probably written around a year or two after *The Dream*, also makes a number of overtures to the processions. Like Backwinter, the spirit of Herne the Hunter, who

> Doth all the winter time at still midnight
> Walk round about an oak with great ragg'd horns
> And there he blasts the trees and takes the cattle
> (4.4.28–30)

is precisely the sort of malevolent winter-spirit the processions were believed to expel. In tracing the tale back to "the superstitious idle-headed eld" (4.4.34), Mistress Page displays a skeptical Protestant attitude toward such traditions. Yet the disguising of Falstaff as this spirit nicely illustrates the persistence of pre-Reformation folklore in theatre. The same could also be said of Falstaff's thrashing. Although this is one part of the ceremony I suspect will not be revived, the beating of the bounds often involved child-beating as well. An Essex man recalled being "pinch[ed] by the ear so that he felt it sharply" in order to engrain the location of the parish boundary on his memory (a method that apparently worked as his testimony dates sixty years after the event). Such tactics were not uncommon. As one historian observes, "the recollections of old men about the precise location of mere-stones, boundaries, or *decisive trees* are replete with references to being bumped, *ducked, or beaten* at the appropriate point" (italics added). The ducking of Falstaff in the Thames and the faeries' pinching of him at Herne's oak evoke the physical abuse meted out to children during Rogation, although in this instance it is the unruly adult who suffers and the young who inflict the pain. With his gluttonous appetite and his poaching of the deer, Falstaff violates the collective land ethic instilled by the perambulations. His gulling and beating reenacts the expulsion of a rapacious individualism that threatens this ethic. It is the knight's humiliation which signals a restoration of the fertility of the land and its people, as the thrashing of the would-be adulterer coincides with the elopement of the young lovers Fenton and Anne Page. Rather than being expelled by crosses and psalm-singing, Falstaff is exposed by the wit of women, whose involvement in the processions had been restricted by the Anglican Church. But he is, in all his girth, perambulated. In encircling Falstaff, the community of Windsor re-enact "Our dance of custom, round about the oak" (5.5.72). The

play's conclusion thus recuperates a magical practice viewed with disdain by hard-line Reformers.[51]

The turbulent weather persisted well into the early seventeenth century. In Samuel Daniel's pastoral comedy, *The Queenes Arcadia* (c. 1606), two shepherds comment on fears of climate change provoked by the Little Ice Age:

> And me thinkes too our very aire is changed
> Our wholesome climate grown more maladive
> The fogges and syrene offend us more
> (Or we made think so) than they did before.[52]

Around the time Daniel's play premiered, Shakespeare would write a similar though considerably more vociferous lament about the English weather: *King Lear.* The pastoral tragedy, set in the pre-Christian past, revives an understanding of the universe where human deeds impact the climate, and climate, in turn, conditions culture. When the mad Edgar grumbles about Flibbertigibbet, who "mildews the white wheat" (F 3.4.106), he evokes the pre-Reformation belief in demons which must be expelled through communal ritual. To some early modern audience members, Lear's harangue imploring the winds to rage and the rains to deluge the earth may have sounded like an inversion of the Rogation liturgy. Rather than ask God to bless nature's bounty and express thankfulness for its use, Lear seeks to enkindle divine wrath against "nature's moulds" and "ingrateful man" (F 3.2.8–9). The moment in which Lear bemoans his lack of largesse, "O, I have ta'en / Too little care of this" (F 3.4.32–33), takes on added significance given that Rogation was specifically devoted to acts of public charity. Cordelia's plea that the "unpublished virtues of the earth, / Spring with [her] tears" (F 4.3.16–17), however, restores a sense of the efficacy of petitionary prayers to aid "our sustaining corn" (F 4.3.6). If the possessive pronoun conveys a proprietary attitude toward the land, the adjective bespeaks a sense of human dependence upon it. It thus reflects the same sustainability-promoting gratitude found in the Rogation homilies. Read with an eye to contemporary climatology, *King Lear* depicts macrocosm and microcosm as mutually fashioning each other. Critics who complain that in *King Lear,* "the elements of nature are merely used . . . to represent the inner struggles within the character of the hero" betray an insufficient awareness of both the animistic worldview and the environmental conditions in Shakespeare's England.[53] Unwittingly, they perpetuate the same skeptical attitudes as the play's villains. The Little Ice Age may have been triggered by sunspot cycles rather than inflated carbon emissions.[54] Yet *King Lear* still insists on human culpability for the crisis. It is the elder daughters' ingratitude for Lear's "bounty" (F 1.1.50)—his gift of land, mirroring the divine gift of the earth—that shatters the equilibrium between nature and human beings. Edmund's tirades against astrology are part of the same cultural shift as the Protestant assault on Rogation. Prophetically, the play links the disenchantment of nature with ecological havoc. Just as *Hamlet* dramatizes the

Reformation's widening of the ontological chasm between the living and the dead, *King Lear* bemoans Protestant alienation from the biophysical world, as humans, like Lear on the heath, can no longer intercede with or confidently address non-human nature as "thou."

In its journey from the city to its wild peripheries and back again, the conventional narrative pattern of Shakespearean drama, too, follows the itinerary of the processions. If Rogation served as a reminder of mankind's co-evolutionary dependence on the natural world, the journey into the wild often compels human characters to confront their own primal, animalistic qualities and question the complacent assumptions of civilized society. Given the ecological moral that can be gleaned from such an experience, Frye's decision to label this alternate space the "green world" seems extraordinarily prescient.[55]

"NATURE IN AWE TO HIM": MILTON'S *NATIVITY ODE* AND THE PURITAN ASSAULT ON ANIMISM

In 1629, not long after Corbett composed *The Faeries' Farewell*, an aspiring young poet wrote a piece on a very similar subject but with a celebratory rather than elegiac tone. John Milton's *Ode on the Morning of Christ's Nativity* is a variation on a theme beloved by Christian humanists: the triumph of Christianity over paganism and the expulsion of the heathen gods from the earth. The ode takes its impetus from an episode in Plutarch's essay *On the Cessation of the Oracles*. The historian reports interviewing an Egyptian sailor named Thamus, who claimed a voice in a dream had commanded him to proclaim to the people of the island of Palodes, "Great Pan is Dead." Believing the dream to be a divine vision, Thamus obeys, shouting the phrase from the deck of the ship as they drift alongside the island. His shout in turn provokes an ear-splitting din of lamentation from the inhabitants. Later Christian commentators reading this story were quick to observe that it occurred in the nineteenth year of Tiberius's reign, in the early Spring, and soon deduced that it had happened on Good Friday in the year 33 CE, the very night on which Christ was crucified. While Milton was a student at Cambridge, a don named Joseph Mead delivered a lecture on Plutarch's text in which he expounded that the "false lights of the Heathen" were extinguished "when the Sun of righteousness, Christ Jesus, arose in the world."[56] Similarly, Reginald Scot calls on Plutarch in his *Discoverie of Witchcraft* (along with Justinus, Augustine, Eusebius, Rupertus, Pliny, and Athanasius) to testify that once upon a time oracles did speak but "ever since Christs coming their mouthes have been stopped" (93). Whether Milton personally attended Mead's lecture is unknown, but a reading of the *Nativity Ode* (with its ubiquitous pun on sun and son) would suggest that he was at least acquainted with the theory. The poem follows Mead in interpreting the tale as evidence that Christ banished the pagan gods and shifting the expulsion forward to the incarnation rather than the passion.

In a foundational essay of ecocriticism, Lynn White blames Christianity and its assault upon the animistic worldview as the real original sin against nature, the decisive event that set Western civilization stumbling down the primrose path toward the ecocidal bonfire. Prima facie, Milton's *Nativity Ode* presents a startlingly explicit confirmation of White's thesis. The arrival of Christianity evicts the Genius Loci from nature to inaugurate "man's effective monopoly on spirit."[57]

> From haunted spring and dale
> Edg'd with poplar pale,
> The parting Genius is with sighing sent;
> With flow'r-inwov'n tresses torn
> The nymphs in twilight shade of tangled tickets mourn.
> (184–188)

The spirits vacate the sacred groves and springs where pagan cults expressed veneration for the earth upon whose fruits they subsisted. Under Christianity, however, the "consecrated Earth" is no longer holy ground, as "each peculiar power forgoes his wonted seat" (196). The poem thus eloquently documents the withering of the sense of place under a strict monotheism. The earth's various landscapes and the diverse organisms that inhabit them are flattened out and unified under the jurisdiction of a single sky-God. The idea of reciprocity between humanity and the non-human environment is shattered; we are no longer *of* Nature, but a separate species that stands over and against it. This piece of Milton's juvenilia should intrigue ecocritics in that it identifies Christianity as the pivotal cultural development in Western civilization that fundamentally altered this understanding. Without the protection of its guardian spirits, the earth is reduced to real estate, and humanity is free to manipulate and exploit its natural resources with impunity. Nature, once sentient and articulate, is now lifeless and mute. It can no longer speak to, much less instruct, human beings:

> The Oracles are dumb,
> No voice or hideous hum
> Runs through the arched roof in words deceiving.
> Apollo from his shrine
> Can no more divine
> With hollow shriek the steep of Delphos leaving.
> No nightly trance, or breathed spell,
> Inspires the pale-ey'd Priest from the prophetic cell.
> (173–180)

Milton's poem toys with the paradox that a mere infant (the word literally means "without speech") is nevertheless able to silence these mighty gods from the sheer force of his presence. Today it is difficult not to read the

gagging of the oracles as an expression of Christianity's willful deafness to the biophysical world. White's point is not that the cryptic pronouncements of intoxicated priests or augury with animal intestines are the ideal type of intelligence on which a government should base policy decisions. Rather he implies that this epistemologically naive faith in oracles bespeaks a deeper, more ecologically sound awareness of the way humanity is imbricated in non-human nature. These oracles, sometimes derived from studying the migratory patterns of birds or the diet of animals, acknowledge the contingency of human knowing and allow for adaptation to shifting environmental conditions.

Scrutiny of Milton's poem supports White's critique, though it also suggests that it needs to be refined. The "psychic revolution" inaugurated by Christianity and documented by White in his essay was greatly accelerated by the Reformation. In paraphrasing White, critics often tend to simplify his argument or portray the Christian faith as a monolithic system of beliefs and practices. As the preceding pages have illustrated, the persistence of the Rogation rituals up through the sixteenth century indicates that it did co-exist with animistic habits of mind. While White, to his credit, mollifies his assault by nominating Francis of Assisi as the spokesperson of an alternative ecofriendly Christianity, he nevertheless fails to reflect on the saint's Catholicism as a factor. Nor does he make any hay from the coincidence that Protestant England was the epicenter of the Industrial Revolution.

To fully grasp the significance of *The Nativity Ode*, one must realize that, although it is ostensibly set in the year zero and celebrates Christianity's triumph over paganism, it is also commemorating the theological coup of Puritan iconoclasm over Catholic idolatry.[58] This agenda even dictates the very title of the poem, as Milton makes a deliberate bid to replace "Christmas" (with its suffix redolent of the Catholic mass) with the more innocuous word "Nativity." So, too, the image of the "pale-ey'd Priest" in his "cell" is something of a give-away; like Reginald Scot, Milton incriminates the clergy with the superstitious hocus-pocus of the pagans. Hostility toward Catholicism's reliance on magic also contributes to the poem's ambivalence toward the "Star-led Wizards," better known as the Magi. In the prefatory stanzas, Milton depicts the Magi on their journey and announces his intention to "prevent them with thy humble ode" (24); that is, he wants to beat them to Bethlehem and be the first to honor the Christ child. As Stephen Buhler has observed, the word "wizard" would have a distinctly negative connotation for most seventeenth-century readers, while Milton's compound adjective "Star-led" unmistakably associates the Magi with the suspect art of astrology.[59] The Magi's offerings of incense and myrrh, moreover, recall Catholic forms of worship that the Puritans decried as superstitious. Like the faeries in *A Midsummer Night's Dream*, the Magi are ambassadors of the old profession, whom Milton aims to supplant with his offering of verse.

A proper reading of *The Nativity Ode* requires this kind of bi-focal vision in order to perceive the implications of continuity between pagan ceremonies, English folk customs, and Catholic rituals. The image of nymphs with their “flow’r-inwov’n tresses” recalls not just forest spirits but also English maidens who traditionally wore floral crowns during the May Day celebrations. Interestingly, Milton also names “yellow-skirted Fays” (234) in his blacklist of ancient idols and hobgoblins banished by Christ. The divergence from Shakespeare here could hardly be more pronounced. While Shakespeare takes pains to present Oberon and Puck as benign “spirits of a different sort,” Milton reverts to the traditional conception of fairies as sinister, demonic beings. Their appearance in this context plays up their association with Catholicism and Catholicism’s alliance with pagan animism.

For the purposes of this chapter, however, the most intriguing critique of Church-sanctioned nature worship occurs in Milton’s vision of “the sable-stoled Sorcerers” who carry Osiris’s “worshipt ark” through sacred “grove or green” (220). The description is, I believe, another veiled swipe at the Rogation processions. The “stole” is not an Egyptian garment. Nor is it synonymous with the surplice, though some critics have carelessly made this connection. Rather, as Barry Spar has pointed out, the stole was a sacerdotal vestment consisting of a long thin strip of cloth dangled around the neck and worn only by ordained clergymen during ritual observances.[60] Because of the stole’s associations with the Catholic sacraments, the Puritans had called for their removal. Henry Machyn and Roger Martyn report that during perambulations the clerics donned “copes,” long ecclesiastical gowns often draped with a stole. So it is very likely Catholic priests would have worn the exact vestment named by Milton while leading the congregation around the parish bounds.

A quick survey of the history of the cult of Osiris further reveals why Milton would have chosen to use it as a stand-in for the Catholic processions. According to Plutarch, the holiday’s observance coincided with the receding of the Nile in spring. Like Plough Monday, it commenced with a blessing of the first “earth-ploughing” of the year. The holiday was also marked by five days of mourning reminiscent of the period of penance during Rogation Week. The culmination of the festival, known as Sokari, bears a distinct resemblance to the Catholic perambulations: “The solemn procession of priests which on this day wound round the temples with all the pomp of banners, images, and sacred emblems, were among the most stately pageants that ancient Egypt could show.”[61] Large banners were commonly carried during the perambulations in England as well, and played such a prominent role that the holiday was sometimes referred to as “bannering.” Milton’s allusion to the “timbrel’d anthems” that accompany the sorcerer’s march can be taken as a jab at the bell-ringing, drum-beating, and singing that went on during Rogation.

Today it is common knowledge that the early Church established Christmas as a substitute for Saturnalia and Sol Invictus, pagan festivals that

fell in late December. Milton wisely avoids conducting an inquest into the historical origins of the holiday, fabricating a more acceptable explanation for why Christ was born in Winter.

> Nature in awe to him
> Had doff't her gaudy trim
> With her great Master so to sympathize:
> It was no season then for her
> To wanton with the Sun, her lusty Paramour.
> (32–36)

Milton here imagines the bleak December landscape as subscribing to Puritan iconoclasm surrounding holiday. From Theocritus to Spenser, writers working in the genre had toyed with rhetorical tropes to evoke the sympathetic relationship between man and the natural world. Milton, on the other hand, appropriates poetic devices like personification to emphasize Nature's submission to God in an attempt to divest the pastoral of its pagan trappings.[62] The poem's refurbishing of classical tradition becomes further apparent upon comparing it with Virgil's famed fourth eclogue, which predicts the birth of a child who will inaugurate a Golden Age of peace and prosperity. Christian exegetes trained in typology had long since seized on the poem as a prophecy of Christ, and Milton confirms its accuracy by, in essence, penning a sequel to Virgil's poem. However, Milton's' account of the Golden Age ushered in by Christ primarily fixates on the subjugation of nature. Virgil, in contrast, envisions peace as a by-product of agricultural abundance. Nations no longer need send merchants to trade abroad or armies invade their neighbors since "each land will produce all it needs:"

> The earth will lavish creeping ivy and foxglove,
> Everywhere, and Egyptian lilies with smiling acanthus.
> Goats will come home by themselves with udders full
> Of milk, nor will the oxen fear the lion's might.
> Your very cradle will flower with buds to caress you.[63]

While Virgil decks the child's cradle with flowers, Milton emphasizes the barren winter world as a fitting backdrop for the savior's birth. The austerity of the season appeals to the poet's Puritan sensibility. *The Nativity Ode* even equates the fecundity of the earth in springtime with sexual licentiousness so that Nature, gendered female, must sheepishly cover herself with veil of snow to hide her "naked shame" and "foul deformities."

Milton's mission to write an aggressively Christian pastoral is not without a certain amount of risk, however. When he weaves in the incident from Luke that local shepherds visited the infant in the manger, he identifies the newborn god as Pan. This allusion suggests a bid to establish continuity with the pagan past that clashes with the poem's Puritan agenda.[64] Milton's

handling of the source material in Plutarch also diverges from other Protestant interpretations. With his usual blend of acumen and cynicism, Reginald Scot exposes the legend as a practical joke, speculating that Thamus fabricated the dream and that the shrieking the sailors heard was nothing but the jumbled echo of Thamus's own voice caused by the odd acoustics of a certain sea-cove that he had chosen for that very purpose. In comparison to this stark rationalism, *The Nativity Ode* at least entertains the possibility of an animate universe. In fact, the poem lavishes more attention on the exiled gods than it does to Christ. Arguably, at times the poem's tone verges on the elegiac. At one point Milton marvels that the feeble child "can in his swaddling bands control the damned crew" (49, l.227). The line, ironically depicting a bound infant whose powers in turn bind the pagan priests, points to a troubling paradox at the heart of the ode. For the bulk of the text, the infant Jesus is either absent or disconcertingly inert. Given that his mastery of the classical tradition more or less animates the entire poem as he allows the spirits a very long leave-taking, one might feasibly read it as Blake read *Paradise Lost* and claim Milton is of the pagans' party and didn't know it. In its roving exorcism of the pagan spirits, the poem can be seen as appropriating a taboo liturgical practice to exorcise Milton's own sympathies with the literary culture of antiquity.

But to read *The Nativity Ode* as green would be to read too abrasively against the grain of the text. If a note of grudging nostalgia is occasionally audible, the poem is nonetheless primarily a record of the death-blow the Reformation dealt to the animistic universe. In recent years Diane McColley and Ken Hiltner have pioneered some astute ecological interpretations of *Paradise Lost*, celebrating Adam and Eve's benevolent stewardship of Eden, pegging Satan as a Cartesian dualist, and portraying the Fall as a parable of the Cogito's alienation from nature.[65] While I agree that Milton's epic presents a more complicated take on human dominion than Genesis 1:26, a consideration of this earlier lyric must check the exuberance of these readings. *The Nativity Ode* presents a sobering reminder of the danger of assuming that all early modern pastoral texts invariably revere a sentience in, or express a spiritual affinity with, the natural world.

4 “Hast any Philosophy in Thee, Shepherd?”

Environmental Ethics and the Good Life in Renaissance Pastoral

> One of the tasks of criticism is that of the recovery of function, not of course the restoration of an original function, which is out of the question, but the recreation of function in a new context.
>
> –Northrop Frye[1]

As one of the most popular literary modes of the English Renaissance, the pastoral has been fodder for much critical rumination over the last half century. Harry Berger and Paul Alpers have documented how its Elizabethan practitioners adapted or transcended classical precedents. Following the lead of Raymond Williams, Louis Montrose, and Annabel Patterson, more recent studies have tended to view it as the ideological musings of Tudor apologists in shepherd’s clothing.[2] Their unmasking of the mode as a celebration of aristocratic power over the nation’s biomass resources should continue to energize green readings of the pastoral. Yet much of this criticism has routinely underestimated one of the chief reasons for its appeal: Elizabethans admired it not only as a vehicle for political allegory but also as a continuation of moral philosophy by literary means.

For scholars who study the pastoral, it will hardly seem a shocking proposition that a philosophic undercurrent eddies beneath the placid surface of the texts. Yet until very recently, the only serious attempt to chart the mode’s philosophic contours was Richard Cody’s incisive yet underappreciated *The Landscape of the Mind*. Cody connects pastoral with the aesthetic Platonism of Ficino, which was passed onto the Elizabethans, he contends, via Tasso. Identifying the dominant theme of pastoral as the belief that “this-worldliness and anti-worldliness can be reconciled,” Cody dubs the mode “an enactment of the Socratic compromise between artifice and naturalness, transcendence and immanence.”[3] No longer a hazardous distraction from spiritual concerns, the pastoral landscape becomes in theory the site of an epistemologically valid encounter with the divine. As this chapter will illustrate, however, Renaissance pastoral increasingly comes to exalt nature without reference to a Creator, as the fulcrum gradually inches away from transcendence toward immanence. Informed by natural and moral philosophy, the pastoral often questions

anthropocentrism and fosters an ethos of respect and stewardship that does not rely on religious absolutes.

In one of the first sustained attempts to shine an ecocritical spotlight on early modern literature, Robert Watson illuminates another philosophic dimension of pastoral. Premising his critique on the analogy that "civilization is to nature as perception is to reality," Watson ingeniously links the popularity of the mode to the epistemological crisis of the Renaissance, gleaning some credible evidence from *As You Like It* and Marvell's Mower poems.[4] According to Watson, pastoral represents a doomed attempt to return to an epistemological Eden, before any dissociation of sensibility imbued thought with a fragrance to rival a rose, before any Julia popped in between the Mower and the grass. The "complex" pastoral renditions of Shakespeare and Marvell, then, meditate on the impossibility of attaining a pristine encounter with natural landscape. As compelling as this Back-to-Sensation theory is in some respects, it places Shakespeare and Marvell too firmly on the side of the constructivist skeptics, and Watson himself, in his own words, as something of a "Trojan horse" in the green camp.[5]

Any attempt to unfurl the philosophical intricacies of early modern pastoral needs to keep its essentially dual focus in view, along with its resultant emphasis on dialectic—a feature depicted with such memorable concision in Raphael's *School of Athens*. At the heart of this tableau of frenzied intellectual activity, Plato points upward to the heavens and the ethereal realm of pure form, while Aristotle thrusts his hand outward, gesticulating toward the here and now—a divergence of foci mirrored in the respective vertical and horizontal positions at which two philosophers cradle their books: the *Timaeus* and the *Ethics* (see Figure 4.1). Whereas Cody and Watson, following Plato, direct our attention to lofty epistemological quandaries that dog the pastoral, this chapter will mimic Aristotle, grounding its inquiry in the pragmatic ethical issues that confront earthbound beings. If this comparison seems a bit grandiose, recall the finale of Spenser's "July" eclogue, which pits these two heavyweights of Greek philosophy against one another through opposing mottos: *In medio virtus* and *In summo foelicitas*—the former the famous golden mean from Aristotle's *Ethics* and the latter a Platonic catch-phrase.[6] This moment produces an unresolved tension in *The Shepheardes Calender*, a moral conflict that Spenser revisits in Book 6 of *The Faerie Queene*. Many critics, like Berger, see Spenser as condemning Calidore for abandoning his quest and regard the pastoral as a hazardous diversion. But it would be more accurate, I think, to read the episode as an additional tutorial in the value of courtesy. Despite the word's derivation from court, courtesy proves to be a virtue best learned in the wild.

During his stay among the shepherds, Calidore graciously receives their hospitality and afterward experiences a revelation of courtesy's essence: "to each degree and kynde / We should our selues demeane, to low, to hie" (6.10.23). In urging respect for low and high alike, Spenser endorses a reciprocating humility that cuts not only across class—reminding his

urban readers of the inter-dependence of the court and countryside—but also across species.[7] Spenser's characters exhibit the virtue when the Wild Man rescues Calepine; Serena, in turn, intervenes to spare the Wild Man. Courtesy can be an innate disposition, implanted by "dame Nature selfe . . . / For some so goodly gratious are by kind" (6.2.2). But nature can be cruel, too. Bears, cannibals, and thieves also haunt the wilderness. The vicissitudes of surviving in the wild, however, make the need for courtesy

Figure 4.1 Plato discourses with Aristotle, a detail from Raphael, *School of Athens*. Erich Lessing / Art Resource, NY.

all the more pressing. The primitivism in Book 6 thus celebrates the "uses of adversity" derived from a journey into an untamed landscape. The contrast between hard and soft pastoral indicates how the civility of the Renaissance gentleman must be "invigorated, strengthened, and defended by contact with the rigors of nature."[8] The emphasis here is on self-abasement rather than self-fashioning, ethics rather than epistemology. With this philosophical dialectic in mind, this chapter seeks to complement, rather than substitute for, Cody and Watson by documenting the ways early modern authors employ pastoral as a rhetorical stage for ethical debate and social critique, utilizing it as a tool to gauge both the individual's place in society and, correlatively, mankind's niche in the natural world. Specifically, this reading will investigate the ways pastoral participates in Renaissance exegesis of Aristotle's *Ethics*, and its understanding of the good life. In its attempts to situate the rational human subject in its biological context, and to cultivate the virtues of temperance and stewardship advocated by Greek and Roman philosophy, the pastoral shares some vital concerns with modern ecocriticism, a theoretical approach that itself represents, to borrow Empson's formula, a twenty-first-century "version of the pastoral."

BACK TO ETHICS

Over fifty years ago Hallet Smith distilled the central message of Elizabethan pastoral as "the rejection of the aspiring mind."[9] The appeal of this broad pronouncement is hard to deny; Tamburlaine, after all, dramatically casts off his shepherd's garb when he embarks on his career as a conqueror. But in rejecting worldly ambition, what alternative does pastoral then embrace? The answer is not simply Petrarch's Lara masquerading as a shepherdess. In the same essay Smith makes a passing remark that pastoral exhibits "an ideal of the good life." This aspect of the mode has perhaps struck readers as too obvious—and during the past few decades too unfashionable—to merit much critical attention. Given post-modernist and New Historicist discomfort with the didacticism of early modern literature, recent studies of pastoral have largely ignored the ethical dimension of the genre.[10] Previous influential readings of Renaissance pastoral by critics like Empson, Berger, and Alpers often implied that the poems attained literary merit only insofar as they critiqued or reinvented pastoral conventions. These studies insinuate that Renaissance pastoralists were more preoccupied with mediating their relationship to their literary predecessors than humanity's relationship to nature.[11] While Alpers offers a useful reminder not to pin anachronistic labels on pastoral as a form of nature writing, his study overlooks the moral significance it possessed in the Renaissance. As the ubiquity of the Horatian dictum to delight and instruct in Elizabethan prefaces and treatises attests, the didactic impact

of the literary text was paramount for many sixteenth-century writers and readers. Sidney's *Defence* trumpets the ethical import of literature most loudly, asserting that it actually surpasses philosophy in its capacity to spur the reader to virtuous action. Spenser, in his "Letter to Ralegh," famously advertises the pedagogical aim of his epic "to fashion a gentleman . . . perfected in the twelve private moral virtues, as Aristotle hath devised" (714–715). His attempt met with acclaim, at least from Milton, who dubbed Spenser a "better teacher than Scotus or Aquinas, describing true temperance under the person of Guyon" (728). Finally Jonson, in his literary treatise *Timber*, insists that a good poet must also be a piece of a moral philosopher:

> We do not require in him mere elocution, or an excellent faculty in verse, but the exact knowledge of all virtues, and their contraries, with ability to render the one lov'd, the other hated, by his proper embattling them.[12]

Paul O. Kristeller, T.W. Baldwin, and David Beauregard have amply demonstrated the prevalence of moral philosophy—couched in the works of Aristotle, Cicero, and Seneca—in early modern academic curricula.[13] Fourth year students at Oxford and Cambridge attended a session of lectures on Aristotle's *Ethics*, a work whose popularity is attested by the sixteen different editions in print during the sixteenth century. The Aristotelian doctrine of the mean forms the backbone of many Renaissance conduct books, such as Thomas Elyot's *The Governour* (1531) and *The Discourse of Civil Life* (published 1606, written c. 1582), by Spenser's friend Lodowick Bryskett.[14]

Despite the widespread recognition of the ethical agenda of Renaissance authors, literary critics have become rather squeamish about peeling away the zesty husk to chew on the insipid moral kernel, preferring instead to deconstruct such attempts as inevitably colluding with the political ideology of the power structures in which the almost exclusively male authors and critics were implicated. In the twentieth century, even philosophers have by and large retreated from the question of what constitutes a fulfilling, meaningful life, leaving the field instead to psychology.[15] In the absence of psychotherapy and the modern pharmacopeia, Renaissance readers turned, I believe, to the pastoral poem as a means of meditating on the good life and what we today refer to as the pursuit of happiness. In the increasingly robust market economy of Elizabethan England, the pastoral offered writers a strategic retreat from a rigid understanding of prosperity defined in material terms to postulate some of the psychological and metaphysical criteria of a fulfilling existence. Renato Poggioli, one of the most perceptive critics of pastoral and one of the few to comment on its ethical underpinnings, has caught this tenor of it in his study *The Oaten Flute*:

> The shepherd is the opposite of *homo oeconomicus* on both ethical and practical grounds. Yet even the pastoral presupposes an economy of its own, which is home economics in the literal sense of the term. Pastoral economy seems to realize the contained self-sufficiency that is the ideal of the tribe, the clan, of the family. The pastoral community produces all it needs, but nothing more, except for a small margin of security. . . . By a strange and yet natural miracle, the system seems to avoid any disproportion between production and consumption, despite its lack of planning and foresight. The pastoral family head is never a provider in the bourgeois sense. Thrift is in him an almost mystical trait.[16]

Keith Thomas vouches for the truth of these comments, observing that most early moderns "were more concerned to avoid poverty than to become rich. What small husbandmen, cottagers, and day-labourers [i.e. the dramatis personae of Renaissance pastoral] in Tudor England sought was a reliable supply of the resources necessary to sustain life."[17]

Abstemious but not ascetic, economical but never stingy, pleasure-seeking but wary of decadence, the pastoral scorns civilization's luxuries to enhance the relish one takes in enjoying certain basic delights afforded by nature and art (not least of all, the delights of language). Attuned to the pastoral's moral balancing act, Poggioli concludes his magisterial introduction by defining the ethos of the genre as "enlightened hedonism."[18] Spinning out the ecocritical implications from this ball of insights gathered by Poggioli will be the primary task of the ensuing pages.

Any study of the pastoral needs to come to grips with the notorious elasticity of the term. Can a word that encompasses Theocritus's *Idylls*, Beethoven's Sixth Symphony, and a novel by Philip Roth still claim to be intelligible? Would it be more properly classified as a genre or a mode? Empson's unmasking of the proletariat hero and the child savant as latter-day swains has only further muddied the puddle. Rather than corral the pastoral into a narrow formula, this chapter will strive to keep pace with the wide semantic range the term enjoyed during the Renaissance, finding the pastoral brand on any text where human subjects roam through a non-human landscape. As a result, this chapter examines texts not typically considered pastoral in that they lack some of the generic trappings (sheep and lovelorn shepherds) but which are nevertheless influenced by what we might call pastoral ethics. Specifically, I will be approaching the pastoral as both a vehicle for satirizing on an overly acquisitive society and a bid to link human well-being to stewardship of the natural surroundings which make that well-being possible. Examining the pastoral as a program for the good life will, I believe, uncover its role in cultivating a nascent environmental ethic in early modern England.

***

In the duel of wits between Touchstone and the overmatched Corin in *As You Like It*, which falls at the mid-point of the play, Shakespeare acknowledges

the role of the shepherd in pastoral as a mouthpiece for moral philosophy. At the conclusion of his inconclusive meditation on the respective merits of urban and rural life, Touchstone poses the blunt question, "Hast any philosophy in thee, shepherd?" Declaring that fire burns, water wets, and the lack of sunlight has something to do with the phenomenon known as night, Corin's reply seems to vindicate Touchstone's earlier use of the term "clown" as a synonym for country bumpkin. Touchstone retorts by dubbing Corin a "natural philosopher," a pun that betrays the early modern belief that people with developmental problems ("naturals") were like intractable children, or rather like Caliban, creatures on "whose nature nurture can never stick." Yet, while Corin cuts a poor figure as a natural philosopher, his later remarks qualify him as a respectable moral one, exemplifying several of the criteria of Aristotle's notion of *eudaemonia*:

> Sir I am a true laborer. I earn that I eat, get that I wear; owe no man hate, envy no man's happiness; glad of other men's good, content with my harm; and the greatest of my pride is to see my ewes graze and my lambs suck.
>
> (3.2.63–66)

Eudaemonia is often translated as "happiness." But as several commentators have argued, this term might be more accurately rendered as "fulfillment."[19] According to Aristotle, some of the indispensable ingredients of fulfillment are self-sufficiency, mental fortitude, a stoic indifference to the vagaries of worldly fortune, and the leisure for contemplation. To be sure, the real Corins of Elizabethan England did not lounge about in the shade peeking up at their flocks over a Latin translation of the *Nicomachean Ethics*. But the writers and readers of Renaissance pastoral knew these precepts intimately and brought them to bear on their understanding of the mode.

To justify their methodology, New Historicist critics of pastoral such as Louis Montrose and Annabel Patterson never fail to cite George Puttenham's assertion in *The Art of English Poesy* (1589) that its practitioners don "the veil of homely persons . . . to insinuate and glance at greater matters." Almost invariably these accounts, however, neglect to provide the remainder of the passage in which Puttenham elaborates that pastoral's real objective is "to contain and inform moral discipline, for the amendment of man's behavior" (128). Sidney, too, bases his defense of the mode on didactic grounds, averring that pastoral can expose the "misery of people under hard lords or ravening soldiers," and provoke "whole considerations of wrong-doing and patience" (94–95). The value of pastoral, according to Puttenham and Sidney, rests in its capacity to spark ethical reflection. Today most people probably think of pastoral ethics as a code of conduct governing ministers' interactions with their congregations, as indeed it often implies in Spenser and Milton. But the Renaissance pastoral is ethical in a much broader sense in that it also invites lay readers to question lifestyles driven by the acquisition of wealth and status, considers issues of environmental justice and land management, and

idealizes pre-capitalist economic relations, all the while presenting implicit or explicit critiques of environmental degradation through nostalgic appeals to a (perhaps chimerical) golden age of ecological stability.

Sidney's remarks about "ravening soldiers" offer a convenient starting-point for the discussion. The phrase alludes to Virgil's first and ninth eclogues in which the Roman state evicts Meliboeus and Moeris from their family farms as part of a government policy awarding land to veterans, a fate that actually befell the poet himself. Through Meliboeus's lament, Virgil voices an attachment to the land that extends beyond its commercial value. He extols the pleasures of tending to the crops, gathering fruit from the orchard, pasturing and watching after the flock. The eclogue presents stewardship as a moral duty and aesthetic delight, while blaming political turmoil as a catalyst for ecological havoc (*turbatur agris*), here figured by the stillborn kids and the rotting apples weighing down the boughs. Burgundy's speech at the conclusion of *Henry V* is a prime example of this Virgilian pastoral. This tradition espouses a kind of land ethic in which human good and ecological good are not, as in so much modern environmental discourse, mutually exclusive.

As far back as Schiller, the *Eclogues* have been celebrated for their vision of idyllic co-existence with nature, and they continue to be read as an antidote to "the psychological chaos and spiritual impoverishment that Virgil sees as the city's legacy."[20] In the context of this critique, the retelling of the Deucalion and Pyrrha myth of the genesis of human beings from stones in the sixth eclogue, in contrast to Judeo-Christian cosmogony, underscores the "continuity between man and his natural environment, the interpenetration of man and nature," which represents one of the underlying themes of pastoral literature.[21] In the opening eclogue, when Meliboeus declares he will cease singing after his departure, Virgil treats the land itself as a source of the poet's creative fecundity. Through the refrain addressing Tityrus (who has been allowed to keep his farm) as "happy old man" (*fortunate senex*), the eclogues predicate human flourishing on dwelling in proximity to the natural world, "amid familiar streams and sacred springs" (1.51–52), and managing it so as to ensure its sustainability for future generations: "Graft thy pears, Daphnis; thy children's children shall gather fruits of thine" (9.49).

To speak of environmental ethics in the sixteenth century, much less in Augustan Rome, may strike some readers as anachronistic. But mankind's relationship to and responsibility for its natural surroundings did fall within the purview of classical ethics, as numerous Greek and Roman philosophers defined the goal of the discipline as "living in accordance with nature" (*homologou-menos te physei zen*). The Stoic Cleanthes (c. 250 BCE) first propounded this formula, adapting a phrase of his mentor Zeno.[22] The doctrine also found favor among Roman philosophers such as Seneca and Cicero. In *Tusculan Disputations*, Cicero affirms, "the chief end of all good is to agree unto nature, and to live according unto her precepts."[23] This same Stoic adage is the ethical cornerstone of More's *Utopia*, where it serves to curtail excessive consumption—including consumption spurred by entrepreneurial pastoralists.

The most influential articulation of this theory in early modern England was Aristotle's *Nicomachean Ethics*. Whereas Plato envisions the human subject as a hapless charioteer at the mercy of two horses, the obedient reason and the unruly appetite, Aristotle defines man as a "rational animal." For Aristotle this phrase is not an oxymoron, since "moral goodness is intimately connected with the feelings" that arise from our carnal nature. Recoiling from Plato, Aristotle insists "we are not pure disembodied spirits located in a noumenal world of timeless forms; we are biological creatures whose lives are immersed in a complex soup of physiological, emotional, and cultural ingredients."[24] In her acclaimed study, *Beast and Man*, Mary Midgley champions this view of the Stagyrite as "the biologist among philosophers—indeed as *the* inventor of the biological attitude, which takes the world as a continuous organic whole to be studied and accepted on its own terms."[25]

Before crowning Aristotle the grandfather of deep ecology, however, there are some serious caveats to keep in mind. First, since nature kills, starves, freezes, burns, and tortures, ethicists since John Stuart Mill have recognized the folly of setting up *Natura sequi* as a moral fingerpost.[26] Secondly, this formula "living in harmony with nature" is not quite the environmentalist slogan that it may appear at first glance. The precept entails the exercise of the uniquely human faculties—reason, logic, contemplation—that distinguish *homo sapiens* from the rest of "brute creation." To Mill's objection, I would reply that Elizabethan pastoral mainly adopts the phrase as a way of gauging the rightness of an act (whether it exhibits moderation or excess) by the basic physiological requirements of survival. This is not the same as Leopold's land ethic, but neither does it violate it. Lear's outcry, "Allow not nature more than nature needs / Man's life is cheap as beast's" (2.2.432–433), insists that human dignity is predicated upon some degree of luxury. But his ordeal on the heath serves as a salubrious reminder that moderation and renunciation may also ennoble or enlighten. This points to a possible rebuttal to the second caveat: the aforementioned philosophers do not insist that reason grants humans the prerogatives of the gods. Rather the exercise of reason ultimately instills a profound sense of humility and connectedness to nature that stands in stark opposition to the problematic dualism later advanced by Descartes. For example, the Stoics claim that the rational investigation of the universe nourishes the conviction that "our own natures are part of the nature of the whole," which leads the philosopher to seek "a way of life in harmony with nature."[27] Cicero, likewise, vaunts the capacity of the human intellect to perceive how "all things in the universe are linked one with another by a chain of inter-locked destined causes."[28] Since the Stoics believed that "God, as the reason that imbues and governs all things, is immanent in the natural world," excessive consumption was in effect an act of sacrilege.[29] Since this reason is especially manifest in humans, respect for the mind's rational powers must bridle the appetite. A similar idea spurs Timon's rant that man, by gorging on "morsels unctuous [such as oily meats] greases his pure mind, / That from it all consideration slips" (4.3.221–222). To the extent "Following Nature" thus

entails regulating one's own desires for the benefit of the whole, it nourished a mindset we would now call ecological.

While Aristotle's philosophy is patently ratiocentric, he qualifies this stance by acknowledging that the definition of wisdom and "the good" can vary across species:

> What is wholesome or good is different for human beings and for fish. . . . For if people are to give the name of wisdom to the knowledge of what is beneficial to themselves, there will be more than one wisdom; because there is no one wisdom that is concerned with the good of all animals, but a different kind for each species—unless there is also a single science of medicine for all creatures. To object that man is the highest animal makes no difference; because there are other beings far more divine in nature than man, the most evident examples being those bodies of which the heaven is composed.[30]

This passage encapsulates the limitations and the merits of conjuring with Aristotle in current debates over environmental ethics. On the one hand, the Greek philosopher denies there is a single "wisdom that is concerned with the good of all animals," a wisdom which is now the province of ecology. Yet Aristotle also undercuts anthropocentric assumptions, as the Chain of Being extends above and beyond the link formed by human beings. He also recognizes non-human life can comprehend a good independent of, and perhaps even inimical to, human good. Man's claim to be the telos of the universe, proposed for instance by Balbus in Cicero's *On the Nature of the Gods*, does not mean that human flourishing is the only kind that signifies; other species possess their own sense of the good and even strive to attain it.[31] Secondly, Aristotle also acknowledges that virtue for humans does not consist exclusively in the "right use of reason" but in the systematic conditioning of ostensibly irrational impulses and emotions to respond in a way amenable to reason. That is, we restrain our desires by recalling how little the body requires to subsist. For Aristotle, then, happiness is neither a mental state nor a feeling but a "disposition" in one's character to seek after a balance between excess and deficiency, a golden mean between the intellectual and carnal nature, or—pressing Poggioli's phrase into service once more—an "enlightened hedonism." This facet of Aristotle's thought has been neglected because his ground-breaking work in biology was not considered pertinent to his moral philosophy. With the growing consensus that the human impact on the planet is a moral issue, however, several compelling attempts have been made to conscript the Peripatetic as a proto-ecologist.

Among the most persuasive efforts to date is Ronald Sanders's "virtue-oriented approach" to environmental ethics.[32] Updating Aristotle, Sanders identifies three types of virtue conducive to environmental well-being: (1) "environmentally responsive virtue"—a recognition of agency in nature, which in turn encourages us to view non-human life forms as subjects eligible for moral consideration; (2) "environmentally justified virtue"—in

which the human subject gauges the moral goodness of an action by its potential impact on the biosphere; and (3) "environmentally productive virtue"—associating the good with behavior that actively promotes or maintains the flourishing of a larger ecological community. Renaissance pastoral frequently, though not inevitably, exemplifies these virtues. It is "environmentally responsive" through its use of Orphic tropes, Ovidian metamorphoses, and prosopopeia (as documented in Chapter 2). It is "environmentally justified" when, taking a cue from the Greeks, it associates human good with moderation and denounces greed, ostentation, and the conspicuous consumption of natural resources. It can be "environmentally productive" when it portrays the shepherd-poet as emotionally and psychologically invested in the land, and seeking to honor and protect that bond. This can be seen in, for example, Drayton's pleas for forestry conservation and Virgil's demands that the state protect the stable management of family farms.

Considering that so many English authors dabbled in the pastoral during the early modern era, any interpretation of the mode must be in some ways selective. Given the sheer number of texts, it would be surprising if there were not substantial variations in their outlook toward the human relationship with the natural world. Just as the shepherd's concern for the lamb is in part a concern for the commodity of wool it wears upon its back, pastoral can also encourage a cavalier outlook toward nature as an inexhaustible depository of resources that exist purely for human benefit. Instead of supporting conservation, pastoral can at times encourage what Sanders calls a "consumptive disposition."[33] In lieu of the conventional distinctions between hard and soft, or complex and simple pastoral, this chapter will divide the mode into the *contemplative* and the *consumptive* pastoral. This division, admittedly somewhat crude, will serve to clarify which qualities of the pastoral deserve to be carried forward in ecocriticism and which features paved the way for our current ecological predicament.

Elizabethan pastoral is not nature writing, nor does it consistently endorse what we would today call a biocentric outlook. It often is, however, a meditation on the good life and a culture's understanding of that concept is very much an environmental issue, as Aldo Leopold recognized:

> But what is the good life? Is all this glut of power to be used for only bread-and-butter ends? Man cannot live by bread, or Fords, alone. Are we too poor in purse or spirit to apply some of it to keep the land pleasant to see, and good to live in?[34]

To Leopold's last two rhetorical questions, the pastoral answers with an emphatic no. Although it presents myriad definitions of the good life, they all predicate human flourishing on an aesthetic relationship to the land and directly or indirectly ponder the question of how to dwell ethically within it.

THE PASSIONATE SHEPHERD AND THE NYMPH: CONSUMPTIVE VERSUS CONTEMPLATIVE PASTORAL

Any study of the pastoral would do well to remember that Arcadia shares a border with Sparta.[35] Its ethos is not exactly spartan, but it does frequently equate simplicity with virtue, while condemning an obsession with luxury as inimical to the good life. Sidney introduces the Stoic formula in the opening sentence of *The Old Arcadia*, praising the people's "moderate and well tempered minds" and their intuitive understanding of "how true a contentation is gotten by following the course of nature" (4). *The New Arcadia* plucks this same note, dubbing the shepherds "a happy people, wanting little because they desire not much" (11).[36] During the pastoral interlude in Book 6 of *The Faerie Queene*, meanwhile, Spenser's Meliboeus describes himself in similar terms:

> With that I have content
> So taught of nature, which doth little need
> Of forreine helpes to lifes due norishment.
>
> (6.9.20)

Here the shepherd subscribes to the Stoic axiom of living in accordance with nature, while eschewing a need for "forreine helpes." Rather than a hackneyed pastoral cliché, Meliboeus's comment represents a pointed social critique at a time when early modern English people were consuming ever-larger quantities of imported luxury goods. *England's Helicon*, the first anthology of pastoral poetry in English, teems with examples of this less-is-more philosophy: Thomas Lodge proclaims, "perfect peace with Swaines abideth" whereas "golden cups do harbor poison" (24); Bartholomew Young imagines an inferno consuming "haughtie courts" where the rich "swim in treasure" while championing the simple pleasures of rural life:

> Let Country plaineness live in joyes not ended
> In quiet of the desert Meades and mountains,
> And in the pleasure of a Country dwelling. (72)

In *The Heard-mans Happie Life*, William Byrd compares the anxiety that gnaws at venture capitalists importing exotic goods from the Levant with the carefree calm of the shepherd's existence. The pun on "herd" and "heard" in Byrd's title makes a sly nod to the correlation between the contented poverty of the shepherd and the poet-musician.

The most famous poem in the collection, Christopher Marlowe's *Passionate Shepherd to His Love,* sounds a few discordant notes in the pastoral's madrigal to frugality. The poet pledges to indulge in all the pleasures that nature, equated with the demure, passive shepherdess, "yields." Despite its status as a prime exemplar of English pastoral lyric, the poem cannot really be considered as an ideal specimen of the genre. First of all, the title

is misleading. Since the poem was first published two years earlier without a title, the editor of *England's Helicon* probably inserted it to give the lyric more of a pastoral veneer.[37] Moreover, the passionate shepherd is likely not a shepherd at all. He clearly states he and his love will sit idly "on the rocks / Seeing the shepherds feede theyr flocks," and in the penultimate stanza promises that the swains will perform a dance for their entertainment. While he does speak of a gown spun from the wool of "our lambs," Marlowe's tone resembles that of a wealthy landowner, or a monarch on a progress through the realm rather than a humble Kentish farmer. The text, then, would be better categorized as the "royal pastoral" described by Louis Montrose as trafficking in "illusions which sanctify political power," and "sublimate the expanding market economy of an age into the maternal plentitude of a Golden age."[38] Even if the speaker were fortunate enough to unearth a hoard of gold in his meadow, it would require a goldsmith to work it into buckles; coral of course is not found in the English countryside at all but must be imported from the sea by the sort of merchant Byrd cites as the foil of the shepherd. Rather than reject the aspiring mind, the speaker shares the acquisitive temperament of Marlowe's dramatic protagonists; the persona is that of the ex-shepherd Tamburlaine inviting Zenocrate to accompany him to ride in triumph through Arcadia.

To the extent that Marlowe's speaker dwells in an eternal present, the poem sanctions the uninhibited exploitation of nature for human purposes. But Walter Ralegh's reply, spoken appropriately by a "Nymph," checks this consumptive outlook by weighing "cares to come" in determining the proper course of action. Ralegh's title fits the text much better than the one prefixed to Marlowe's since a nymph is not simply a synonym for country lass, but also evokes the classical figure of the genius loci, a female spirit of place that inhabits and protects fields, groves, springs, and grottoes. Many nymphs, like Daphne and Syrinx, had been transformed into the landscape to evade a lust-crazed god or satyr similar to Marlowe's speaker, and Ralegh gestures at the Ovidian topos with his allusion to the nightingale as Philomel. Ralegh's nymph, then, speaks in defense not only of her chastity but also of the natural world. A disciple of Aristotle, she posits that the good life does not consist in the immediate gratification of the senses, and dismisses the "shepherd's" offering of a lavish wardrobe of gowns, shoes, and caps as "in follie ripe, in reason rotten." The curious line, "All these in mee no meanes can move," may contain wordplay signifying her decision to steadfastly abide by the Aristotelian golden "mean" in shunning the proffered luxuries. While recognizing the temptation of these delights, the nymph asserts they cannot override the "mind," since reason dictates that one live in accordance with nature, the cycle of the seasons, the process of growth and decay in which human beings are amalgamated.

Time plays a major role in this poem, as it does in Ralegh's sonnet "Nature, that washt her hands in milke." Here, however, Time's nemesis is not Nature, but the passionate shepherd's fantasy of dwelling in a perpetual spring. Ralegh's lyric transforms Marlowe's bucolic paradise by imagining

how it will look when it "to wayward winter reckoning yields," driving the flocks indoors and the nightingales south. In a pre-industrial society, the inevitable return of winter had something of the effect that the threat of ecological apocalypse has for us today; it was a looming reminder of, in the words of Ralegh's nymph, "cares to come," of the need to live with some frugality and to conserve resources for the harsh times ahead. Read alongside one another, these two poems again showcase the philosophic component of pastoral in an age when university students received a thorough training in dialectic. The debate between these two poems nicely encapsulates the conflict between consumptive and contemplative pastoral, one that continues to play out in subsequent contributions to the mode.

Elizabethan schoolchildren would have all known a variation of this debate in Aesop's fable of the grasshopper and the ant. Curiously, Robert Greene re-tells this fable in *A Groatsworth of Wit*, contrasting his grasshopper-like recklessness with another tight-fisted playwright, which E.A.J. Honigmann has read as a subsequent ad hominem attack on Shakespeare.[39] Whether or not the parable is admissible as biographical evidence, Shakespearean drama does contain a number of memorable satires on lassitude and extravagance. It is true that in the world of the comedies, the grasshopper triumphs. Even so, the plays often recognize the victory as temporary. A Falstaffian yen for consumption must be acknowledged and then contained by holiday. In the tragedies, however, the ant laughs last. In particular, the pastoral tragedies *Timon of Athens* and *King Lear* both present caustic indictments of a consumptive-driven society blithely oblivious of the future. The cynic Apemantus and the senators condemn Timon's ceaseless "motion / Of raging waste" (2.1.3–4). When confronted with the news that he has defaulted on all his mortgages, Timon grumbles in disbelief that his estate once stretched to "Lacedaemon." It is a pity his land did not extend just a little farther into Sparta, so he might have gleaned some lessons in frugality that he later implements to their utmost extreme. Order is restored at the end of the play with an appropriately pastoral image, when Alcibiades "like a shepherd" vows to "approach the fold and cull th'infected forth" (5.5.42-43). In *Lear*, the mad Edgar likewise beseeches an absent "jolly shepherd" to rescue the stray "sheep . . . in the corn" (Q 13.35-6), a line that signals the collapse of pastoral values in play. The conflict in *Lear* results from the breakdown of the feudal land ethic that regarded land as an inter-generational possession of the family. Lear expresses this mentality in the division of the kingdom: "To thine and Albany's issue / Be this perpetual" (1.1.64–65). Lear does consider the future, but fatally assumes the land is still his, jointly owned and managed for the entire family, including generations yet unborn. The elder daughters and Edmund, however, view the land as the domain of a single individual. The tragedy documents a transformation in attitudes toward property rights by which individuals come to view themselves as owners rather than stewards of the land. Initially, Lear insists that his majesty and humanity depend upon opulence:

"Allow not nature more than nature needs / Man's life is cheap as beast's" (2.2.432–433). But the play forces him to eat these words. Lear's journey into the wilderness confronts him with a sense of human animality and enables him to see his former wealth as luxurious "superflux" (3.4.35). Poignantly, the play's critique of improvidence is tempered by an understanding of need for generosity to the poor. Like Lear's Fool, though, the tragedy sets us "to school to an ant" (F 2.2.235) to learn the values of temperance and thrift: "He that keeps nor crust nor crumb / Weary of all, shall want some" (F 1.4.162–163). In the twenty-first-century variations on this debate, early modern ecocriticism can add Shakespeare's voice to the cause of the "parsimonious emmet."

TEMPERANCE AS ATTUNEMENT IN BOOK 2 OF *THE FAERIE QUEENE*

The contemplative pastoral's embrace of frugality and moderation represents, I have argued, a stylized vision of the Aristotelian virtue of *sophrosune*, or temperance, as outlined in Book 3 of the *Ethics*. Essentially, Aristotle argues that the truly fulfilled person must avoid overindulgence because it debases and impairs the human ability to reason. While some ecocritics assert that human beings must stop preening themselves on the faculties that separate us from animals, any account of the human condition that simply ignores or discounts human difference is going to strike most readers as inadequate. We cannot simply wish away or shut down our higher brain functions. But we can employ them more discriminately and considerately to soften our impact on the planet. Reason can promote environmentally productive virtues. In offering a bridle for egotism, it encourages humans to live for something beyond the incessant and immediate gratification of the senses. For those philosophers who believe living in harmony with nature to be the royal road to the good life, restraining the appetite becomes a moral duty, since "daily experience sets before our eyes how few things, how small, how base those are, which the Nature [of] Man requireth." Accordingly, Temperance earns a place among Cicero's famous list of the four cardinal virtues in his treatises *Tusculan Disputations* and *On Duties* (215v-r, 58). As a check on the desiderative part of our nature that spurs consumption, temperance is a virtue that has an obvious application for modern environmental ethics. As it so happens, it is also a recurring ethical guideline in pastoral poetry.

Of all Elizabethan writers, Spenser engages with Aristotle and moral philosophy most explicitly. Over the past century English scholars have compiled exhaustive accounts of the points at which *The Faerie Queene* taps into a philosophic pipeline originating in the *Nicomachean Ethics* and flowing through its Christian commentators.[40] My reading expands upon this exegetical tradition by revealing that Spenser's glorified portrait

of temperance possesses some surprising ramifications for ecocriticism. In another provocative reconciliation of Aristotle and environmental ethics, Louke van Wensveen has argued for an "ecological spin on the virtue of temperance." Re-packaging this old virtue as "attunement," van Wensveen defines it as a continuous monitoring of and adapting to the changing circumstances that contribute to the well-being of other creatures and their natural habitats.[41] Crucially, like Spenserian virtue, attunement is not something that can be taught or learned in the abstract, but requires felt experience to sharpen one's responsiveness. In celebrating temperance in Book 2, Spenser evokes pastoral backdrops and motifs to critique behavior that diverges from van Wensveen's notion of attunement. In Canto 6, for example, the siren-esque Phaedria sings an aria in the same key as Marlowe's pastoral idyll:

> Why, then doest thou, O man, that of them all
> Art Lord, and eke of nature Soueraine,
> Willfully make they selfe a wretch thrall,
> And waste thy ioyous howres in needless paine.
> (2.6.17)

In spurning the offer, Guyon stands in the same position as Ralegh's anonymous nymph, rejecting the easy, reckless consumption of resources in blissful ignorance of the modes of production involved in the transformation of raw materials into marketable commodities. By putting the orthodox Christian defense of human dominion in the mouth of an enchantress, Spenser implicitly condemns the view as immoral.

In the following canto, after wandering through a "desert wilderness," Guyon encounters Mammon, who is described as a kind of blacksmith:

> His head and beard with sout were ill bedight
> His cole-blacke hands did sem to haue ben seard
> In smythes fire-spitting forge.
> (2.7.3)

The opposite extreme from Phaedria, Mammon embodies the strenuous and ruthless exploitation of the earth for the sake of personal wealth. By deploying his poetic gifts to make the vast fortune that can be amassed by such labor as tantalizing as possible, and then having Guyon reject the offer, Spenser has created, in the words of Paul Alpers, "the most important secular myth in support of a heroic scorn of riches."[42] Although the episode is indebted to Christ's temptation in the wilderness, Guyon primarily draws rhetorical support from Aristotle and the Stoic philosophers:

> Through fowle intermperaunce,
> Frayle men are oft captiu'd to couetise:
> But would they thinke, with how small allowaunce

> Untroubled Nature doth her selfe suffise,
> Such superfluities they would despise,
> Which with sad cares empeach our natiue ioyes.
> (2.7.15)

This passage, along with Guyon's subsequent appeals to the pastoral vision of "the antique world in its first flowring youth," reads like a sanitized version of Phaedria's earlier hymn to indolence. Whereas Phaedria claims humans are "of nature soueraine," Guyon assigns sovereignty to nature, which bestows food on humans with a monarch's munificence. Although the cave appears only rarely as a pastoral topos, the scene does share the mode's infatuation with the Golden Age to evoke harmonious co-existence with the natural world as an ideal of the good life.

Spenser again gestures at the ambivalence of pastoral in his account of the Garden of Proserpina and, most notoriously, in the Bower of Bliss. The former is home to the Golden Apple of Discord. While the garden resembles a pastoral *locus amoenus*, the fact that the young Paris was often represented as a shepherd indicates that the Golden Apple, itself an unholy GMO in which art attempts to outperform nature, is a symbol of the ambition antithetical to pastoral virtues. The next mythological character Guyon encounters also presents an object lesson in the dangers of veering from pastoral principles. Of all the damned in the classical underworld, it is appropriate that Spenser chose Tantalus for a cameo in Book 2. Depicting his punishment in the aftermath of Guyon's temptation by Mammon, Spenser, following Horace, has transformed Tantalus from an archetypal warning against gluttony or sacrilege into a scathing portrait of the consumptive disposition, a premonition of Deleuze and Guattari's "desiring machine."[43] *The Faerie Queene's* most famous depiction of this state of sordid, insatiable desire is the Bower of Bliss, where instead of Tantalus in a river Guyon stumbles upon two "naked Damzelles" bathing in a fountain. Here again Spenser invokes and discountenances certain pastoral conventions to defuse the threat that this poetic mode promotes erotic dalliance. The notion that Spenser is ruminating on the danger that his sensual allegory could sabotage the poem's moral project has long been a critical commonplace.[44] For Spenser, art becomes decadent when it deludes us with a false reality, Tasso's fantasy of a *primavera eterna* in which the earth pours forth its seemingly inexhaustible resources for the purposes of human delight.[45] If the contemplative pastoral envisions a symbiotic relationship between art and nature, Spenser ensures his readers see the Bower of Bliss as a realm where art has run amok, a pleasure garden

> Goodly beautified
> With all the ornaments of Floraes pride,
> Wherewith her mother Art, as halfe in scorne
> Of niggard Nature, like a pompous bride,
> Did decke her, and too lauishly adorne.
> (2.12.50)

Perhaps Spenser, like Polonius, considered "beautified" a vile phrase, as the rhyme with pride and the comparison of the garden to a gaudy bride all register the poet's disapproval of the Bower as a problematic space where art falsifies nature. In Sidney's *Arcadia*, art's power to fabricate golden worlds stimulates admiration for (besides the poet's wit) the beauty of an unspoiled sylvan wilderness and the fitness of our planet for human habitation. Spenser, in contrast, reminds us of the dangers of poetic distortion and that life on earth is not one unending Tuscan May.

Guyon's destruction of the Bower of Bliss troubles many critics today, who see it as implicated in Puritan iconoclasm, European attacks on pagan cultures of the New World, and Spenser's brutal colonial policies. Christopher Burlinson, for instance, has linked Guyon's destruction of the Bower's groves to Spenser's calls for clearing certain forests in Ireland that served as bases for the rebels' guerilla war against the English occupation.[46] Without sanctioning the violence, I would also posit that in destroying this artificial pleasure garden Spenser inveighs against the power of images, particularly eroticized images, to generate false wants or desires in a fashion reminiscent of visual advertising. In an often overlooked moment in Canto 12, Guyon approaches a porch, canopied with a mixture of real and artificial grapes and decorated with a "rare device . . . that seemd to entice / All passersby to taste" (2.12.54). There is a distinct possibility that Spenser modeled this "rare device" on actual pub signs in Elizabethan London. Grape vines have been hung outside tavern doors as far back as Roman times, but because of the local climate English tavern keepers were forced to lure customers with painted images of grapes instead. The "Grapes" remained a popular name for taverns in Spenser's day, and tavern signs were one of the most ubiquitous forms of advertising in the early modern period.[47] In gazing upon the tantalizing image of grapes and then immediately knocking over the cup of wine that Excess—personified as a tipsy bar-maid—thrusts in his hand, Guyon resists the power of visual media to stimulate the appetite to consume. After passing the first test, Guyon then stumbles upon Acrasia "greedily depasturing delight" (2.12.73) as she ogles the sleeping knight. The unusual verb, with its obvious pastoral overtone, again conflates sight with consumption. Spenser lifted the name Acrasia from Aristotle's *Ethics*, where it connotes a weakness of the will. This Circe-esque enchantress reduces her lovers to a bestial state of "wastful luxuree" (2.12.80). While luxury here is usually glossed as licentiousness, it could also signify an "inordinate consumption of worldly things."[48] These two meanings are not quite as entirely discrete as one might think. Spenser's apparent prudery about sex tends to alienate modern readers. But in an era without reliable birth control, sexual abandon was risky because its eventual consequence, children, placed greater demands on one's limited resources, economic and environmental. The Bower's artificial fecundity invites its victims to indulge in an unrestrained sensuality and consumption that the earth—especially in northern latitudes like England vulnerable to harvest failures—cannot, in reality, support. The warning is a timely one for a nation in the midst of a Little Ice Age and an unprecedented population

boom. Spenser's celebration of temperance offers a rebuff to Tasso's articulation of the pleasure principle: *S'ei piace, ei lice* [If it pleases, it is permitted] (52). The canto provides a pointed commentary on the moral hazard of adapting Italian pastoral for readers in the English climate. Guyon's motives for destroying the Bower are not environmental per se, but his action does appear to benefit the natural world in that he frees Verdant—whose name, incidentally, means spring-giving, or green with vegetation—from being enervated by Acrasia and the forces of an incipient consumer culture. In leveling the banqueting house and its ornate display of artificial grapes, Guyon and Palmer, like Edward Abbey's Hayduke felling a billboard, are a kind of two-man monkey wrench gang.

In resisting the temptations of the Bower, Guyon exhibits the ego-defying "acceptance of limits" and "willingness to sacrifice" that van Wensveen sees as hallmarks of attunement. But rather than display receptivity to his surroundings, another aspect of attunement, Guyon's behavior during this scene stands out for its single-mindedness. The birds "attune" (2.12.76) their song to the troubadour's seductive lay; Guyon tunes out the invitations to indulge in earthly delights. When art presents false impressions of nature, be it in a Renaissance pleasure garden or a twenty-first-century mall or theme park, being impressionable is not a virtue. For Spenser, poetry serves to steer readers toward "another happiness, another end" (2.7.33), one not based on material gain and sensual extravagance. *The Faerie Queene* finds an objective correlative for an internal act of will power in the heroic deeds of chivalric epic. In spurning Mammon and destroying the artificial Bower, Guyon reaffirms the Stoic maxim that happiness stems from "living in accordance with nature."

BREAKING COMUS'S SPELL: THE GREEN ETHICS OF *THE MASK PRESENTED AT LUDLOW CASTLE*

For readers familiar with Milton's prose, the idea that his poetry carries a moral impetus will scarcely require much defense. Not only was he emboldened by his Puritan convictions, but Milton could also by the seventeenth century appeal to a vigorous, homegrown tradition of didactic literature. As the *Areopagitica* informs us, he was especially keen to emulate the example of

> our sage and serious poet Spenser, whom I dare be known to think a better teacher than Scotus or Aquinas, describing true temperance under the person of Guyon, [and] brings him in with his palmer through the cave of Mammon and the bower of earthly bliss, that he might see and know, and yet abstain. (728–729)

Nowhere is Milton more Spenserian than in his *Mask Presented at Ludlow Castle*, in which he imitates his mentor by turning to pastoral romance as a testing-ground for the virtue of temperance. While much critical discussion

of the *Mask* latches onto its apotheosis of chastity as an indirect praise of the Earl's prosecuting sexual offenses, it is worth recalling that in his own treatise of moral philosophy, *The Christian Doctrine*, Milton categorizes chastity as a sub-species of temperance.[49] For Milton, temperance entails a reverence and humility before nature that we would now recognize as an ecological virtue. Even more pointedly than *The Faerie Queene*, the *Mask* showcases how mankind's failure to bridle the desiderative appetite has severe repercussions for the well-being of both humans and their planetary habitat.

Commentators have often remarked on Milton's vexed relationship with the pastoral, and the *Mask* is no exception.[50] Both the benevolent Attendant Spirit and the nefarious conjuror Comus disguise themselves as humble shepherds, a move that enables Milton to draw attention to a moral tension within the pastoral mode. Specifically, these two figures represent the divergence between what I have called the contemplative and consumptive pastoral. The anxieties this study previously traced in Ralegh and Spenser had, by the 1630s, been exacerbated by the opulent pastoral masques at the Stuart court, involving conspicuous expenditures on lavish costumes and feasts, which (despite Jonson's efforts to reconcile Pleasure and Virtue) Milton likely saw as enshrining the very values that pastoral traditionally critiqued.[51] Although Comus in the guise of a villager offers lip-service to the pastoral ideal of thrift to further cloak his deception, he and his band of revelers embody a conception of the good life as the immediate gratification of sensual pleasures, which sanctions the voracious exploitation of the land for human purposes. The Attendant Spirit/Shepherd, in contrast, sits contentedly and "meditate(s) [his] rural minstrelsy, / Till fancy had her fill" (548). His intellectual and spiritual satiety opposes the insatiable physical appetite of the Dionysian god of belly-cheer. While Comus's troupe wail in "barbarous dissonance" (550), the Attendant Spirit/Shepherd, with "his soft Pipe and smooth-dittied Song" (86), possesses an Orphic power often invested in pastoral poets: an ability to calm the winds, waves, and swaying trees, and evoke a tranquility in non-human nature to which, so we are charmed to think, human society should aspire.

Torn between these two philosophies is the anonymous Lady, who once again assumes the part of the Ovidian nymph-in-distress. When imprisoned by the enchanter, she is explicitly compared to Daphne "root-bound, that fled Apollo" (662). The allusion signifies her affinity with a natural world imperiled by the consumptive disposition of Comus. Unlike Ovid's Daphne, however, Milton's Lady still retains the power of speech, which she wields to explode her captor's definition of human fulfillment. In contrast to Comus, her vision of the good life tempers pleasure with a vigilance as to the ethical and environmental consequences of uninhibited indulgence. When Comus offers her the intoxicating aphrodisiac, she declines on the grounds "that which is not good, is not delicious / To a well-govern'd and wise appetite" (704–705). The Lady's refusal prompts Comus's exasperated outburst:

> O the foolishness of men! That lend their ears
> To those budge doctors of the Stoic Fur,

> And fetch their precepts from the Cynic Tub,
> Praising the lean and sallow Abstinence.
> (706–709)

While the text certainly meshes with Christian ideals, and Milton cites several "holy dictates" in support of the virtue in *Christian Doctrine* (1014), the *Mask* here manages an impassioned defense of temperance without any allusions to scripture, instead associating the doctrine with Stoic and Cynic philosophy. In this psychomachia, the Cambridge dons who initiated Milton in the teachings of Cicero and Diogenes Laertius play the part of the good angels, reminding the Lady of the precept to live in accordance with nature. A quick-witted sophist, Comus perversely interprets the maxim as an invitation to extravagance:

> Wherefore did Nature pour her bounties forth
> With such a full and unwithdrawing hand,
> Covering the earth with odors, fruits, and flocks,
> Thronging the sea with spawn innumerable,
> But all to please and sate the curious taste?
> (710–714)

If Nature prepares us such a sumptuous feast, why should we refuse to eat all that is offered? In his striking image of Nature's "unwithdrawing hand," Comus conceives of the earth's resources as inexhaustible, a bottomless cornucopia that exists to satisfy human appetite and desire for novelty. Shortly afterward, he advances the problematic suggestion that if humans neglected to exploit the earth, Nature would be "strangl'd with her waste fertility" (729). Comus's logic betrays an anthropocentric outlook that views all organic processes as "waste" unless diverted for human ends. In a line that blends classical philosophy with the "pious heroism of pastoral ideals,"[52] the Lady states her indignant rebuttal:

> Impostor, do not charge most innocent nature,
> As if she would her children should be riotous
> With her abundance; she, good cateress,
> Means her provision only to the good
> That live according to her sober laws
> And holy dictate of spare Temperance.
> (762–767)

Setting this passage beside Milton's redaction of Genesis in *Paradise Lost* presents a glaring caveat to God's infamous commandment in verse 1:28. Condemning the excessive consumption of natural resources as a type of economic and ecological injustice, Milton's temperance is a prime example of what Sanders calls an "environmentally justified virtue." In the context of seventeenth-century England, Comus appears as the spokesperson for

the market economy where high impact land-use and ever-increasing rates of consumption became seen as vital to national prosperity. By the 1630s this mentality was beginning to be embraced by the Stuart aristocracy, who were requesting and receiving patents for various "improvement" projects, such as extracting salt from seawater, mining for copper and coal, converting marshy fens into farmland, and manufacturing turf from the fallow moors.[53] In contrast, Milton's Lady subscribes to the tenets of a traditional agricultural-based economy with its concern for scarcity, as Nature, personified as a "good cateress," inevitably withholds her goods when certain people devour too large a share of her finite supply.

In a visionary essay on poetry and place, Wendell Berry calls the Lady's speech "a prototype of the ecological argument of our time—or it is the traditional morality that we now begin to perceive as ecological."[54] Berry's remark, which distills much of this chapter's message, speaks to the need to bring early modern texts to bear on the ecocritical project. This as yet fledging discipline can orient and energize itself not through a radical rupture with the past but by uncovering the continuities with certain aspects of traditional morality, then modifying and absorbing them into its own ethos. Milton's text emerges as a resounding demonstration of the environmental applicability of virtue ethics. Note, as in Ralegh, the Aristotelian resonance of the verb "means" in the Lady's speech, which has the sense of allocates, while also reinforcing the idea that the supply should be moderate. The *Mask* bears several other telltale marks of influence by the *Nicomachean Ethics*, most notably in its conception of virtue as a disposition fostered through habit. Although the temptations proffered by Comus are not to be taken lightly, Milton, like Aristotle, believes that consistent exposure to positive moral influences can offset human frailty:

> 'Til oft converse with heavenly habitants
> Begins to cast a beam on th'outward shape,
> The unpolluted temple of the mind,
> And turns it by degrees to the soul's essence.
> (459–463)

Rather than picture these "heavenly habitants" as an angelic legion, we may also take them as the dead poets and moral philosophers whose writings equip the Lady to withstand Comus's enchantment. In this regard the brothers' pedagogical theory closely resembles that of the poet himself. In his tract *Of Education*, Milton instructs his ideal pupil to plunge into the works of Aristotle and the ethical treatises of "Plato, Xenophon, Cicero, Plutarch, Laertius, and those Locrian remnants" (635).

Few readers today are acquainted with the final text on the list; it refers to a work titled *On the Nature of the World and the Soul*, which was attributed to Plato's interlocutor, the Pythagorean guru, Timaeus of Locri.[55] Why, one might reasonably demand, does Milton list this text as required reading for moral philosophy? The answer further confirms the place of Pythagoras in

the pantheon of green philosophers. As mentioned in Chapter 1, the Pythagoreans also advocated temperance as the hallmark of an ethical lifestyle. As Cicero reminds us in *On the Nature of the Gods*, many Stoic philosophers who endorsed temperance also subscribed to the Pythagorean theory of the *anima mundi*. Calls to restrict the urge to consume are therefore closely tied with a respect for the earth's sentience and organic unity. Anticipating the Stoic and Aristotelian notion of *sophrosune*, Pythagoras, according to his early biographer Diogenes Laertius, encapsulated his ethical philosophy in the phrase "Virtue is Harmony." This maxim chimes perfectly with the concept of attunement outlined by van Wensveen.

In addition to applauding the Pythagorean salute to temperance as a kind of harmony, Milton may have been attracted to Timaeus's claim that music (including poetry) can be used to "accustom, persuade and sometimes even coerce the non-rational parts to obey reason" (69). Milton also appears to have been taken with the Pythagorean *anima mundi*, which imagines the earth as a holistic, sentient being that regulates itself to preserve a balanced state among its elements. The natural philosophy of Timaeus could thus be seen (as previously outlined in Chapter 1) to offer a classical precedent for Lovelock's Gaia theory, since the planet's health is envisioned as a kind of ecological temperance. The "Locrian remnants" may have inspired Milton's celebrated image of nature's groan in Book 9 of *Paradise Lost*, as well as the sobering moment in the *Mask* when Lady claims the outraged "Earth would lend her nerves and shake / Till all thy magic structures rear'd so high," in Comus's consumption-driven society, "Were shattered into heaps" (797–799). The unsettling image of a vindictive nature destroying an ecologically irresponsible civilization recalls some of apocalyptic rhetoric in modern environmental writing. It therefore seems entirely fitting that John Brunner's chilling 1972 science-fiction novel about a society in the throes of eco-cide borrows its title, *The Sheep Look Up*, from Milton's pastoral elegy *Lycidas*.

But the *Mask* manages to avert an environmental Armageddon, thanks in part to the earth producing an antidote to Comus's magic in the form of the herb Haemony. The Attendant Spirit reports he learned of this plant from "a certain shepherd lad . . . well skill'd / In every virtuous plant . . . [he] gave it me, / And bade me keep it" (619–621, 638–639). Given the stakes of the debate between the Lady and Comus outlined earlier, it is worth pointing out that the Lady's salvation depends on an ability to preserve and safeguard a plant, to recognize its intrinsic value despite the fact "the small unsightly root" does not bear a beautiful flower. A cross between an early modern herbalist and a pastoral poet, the "shepherd lad" advocates a reverential and temperate use of the natural world for human benefit. While the herb protects the Brothers, the Lady is only finally freed through the intervention of the guardian spirit of the river Severn. Significantly in his invocation, the Attendant Spirit addresses the river spirit with the second person singular "Thou," demonstrating reverence for a spirit of place. While his phrase "Listen and save" is spoken to Sabrina, these words may be directed just as much at the reader. For

at the poem's end, the Attendant Spirit suggests how we might return the favor. After Sabrina rescues the Lady, the Spirit thanks her by hailing the dawn of a new golden age, transforming the pastoral from a fanciful idyll into reality. Blessing the river from extremes of drought and flood, the song imagines the virtue of temperance seeping into and protecting the non-human landscape.

As Sidney so unforgettably articulated in his *Defence*, poetry can inculcate moral ideas with far greater impact than non-fiction, which often traffics in arid, heavy-handed abstractions. Most undergraduates today would agree that reading the *Mask* makes for a much more enjoyable experience than reading the *Christian Doctrine*. Against the evident charms of a life of uninhibited indulgence, Milton's contemplative pastoral casts a counter-spell that inspires its readers to moderate their desires with a regard for the well-being of others. Of course, the impact of pastoral ethics can only do so much in the face of titanic socio-economic forces. The Lady's millenarian fantasy testifies to the limited efficacy of literature as a vehicle of change. In a predominantly urban and industrial-based society, where many people have never seen a sheep or worried about dearth, most readers tend to dismiss the morality of Renaissance pastoral as quaint, spartan, or hopelessly utopian. Perhaps it would be more accurate to say that pastoral operates, as Keith Thomas observes of the national park system, as a repository of "fantasies which enshrine the values by which society as a whole can no longer afford to live."[56] Thomas's point is well taken. Yet if certain trends in modern civilization continue unchecked, pastoral literature might come to be seen as enshrining values by which society can no longer afford *not* to live.

MAMMON'S "COLE-BLACKE HANDS": INTEMPERANCE AND THE RISE OF THE FOSSIL FUEL ECONOMY

So far the discussion of the ecological thrust of temperance may seem rather abstract; what were the actual stakes for abiding by or neglecting this virtue in early modern England? What kind of contemporary forms of environmental exploitation might Spenser and Milton have found so disconcerting? To answer these questions I would now like to loop back to Guyon's dispute with Mammon in Canto 6 of *The Faerie Queene*. Following Ovid, Spenser sees the Golden Age as irrevocably tarnished when humans began mining the earth for wealth, a practice that is imagined as a kind of perverse oedipal rape:

> Then gan a cursed hand the quiet wombe
> Of his great Grandmother with steele to wound
> And the hid treasures in her sacred tombe,
> With Sacriledge to dig.
>
> (2.7.17)

This passage should direct us back to the start of the canto where Guyon first encounters Mammon standing in a "gloomy glade," dressed as a blacksmith, with "cole-blacke hands." Spenser, I believe, expected attentive readers to zoom in on this seemingly nondescript compound adjective. More than a piece of poetic flair, the image is bracketed by the stories of two other characters, Ruddymaine and Pontius Pilate, both of whom have indelible stains upon their soiled hands, which thus constitute something of a motif in Book 2. Coal is another recurring image in *The Faerie Queene*, as by my count, there are no less than thirteen references to it in the poem, seven clustered in Book 1 (which is apt since Spenser associates holiness with cleanliness and sin with pollution),[57] three in Book 2, and one in each of Books 3 through 5; appropriately Spenser never mentions the word at all in Book 6 when he returns to a pastoral landscape. Surely it is not by chance that eleven of the thirteen uses of the word "coal" assign it an unequivocally sinister connotation. Three times Spenser compares the kindling of a coal to the onrush of lust and twice uses the same metaphor to evoke the onset of anger. The corpse of the dragon Error gushes "cole black blood" (1.1.24), Duessa emerges to seduce the Redcrosse Knight as night draws a "coleblacke curtein ouer the brightest skye" (1.4.44), and the dragon in Canto 11 spews from "his infernall fournace"

> Huge flames, that *dimmed all the heuens light*,
> Enrold in *duskish smoke* and brimstone blew;
> As burning Aetna from his boyling stew
> Doth belch out flames, and rockes in peeces broke
> And ragged ribs of mountaines molten new
> Enwrapt in *coleblacke clowds and filthy smoke*
> *That all the land with stench, and heuen with horror choke.*
> (1.11.44)

On two separate occasions Spenser refers to coal-black skies to describe natural phenomena: nightfall and a volcanic eruption. But a green reading of *The Faerie Queene* will reveal that Spenser's poetic alchemy has transmuted an environmental hazard into the stuff of chivalric romance, as the skies in Elizabethan London were often coal black in a very literal sense.

As environmental historians have established, late sixteenth-century England experienced a serious timber shortage (see Chapter 2) that led to a huge spike in coal consumption as a cheap form of—strange as this sounds—alternative energy. "Wood being grown to dearth and the severity of it felt more every day, causes many of the said coals to be used for fuel in London and in other places in this realm by those who in time past used nothing but wood for fuel," wrote one observer of the booming Newcastle coal trade in 1575. The shift to coal even among the aristocracy is confirmed by John Stow in his *Annals* (1610): "Sea coal and pit coal is become the general fuel of this Britain Island, used in the houses of the nobility, clergy and gentry, in London and in all other cities and shires of this kingdom."[58] The jump in demand, aided by the new discipline

of scientific mineralogy inaugurated by Georgius Agricola's *De natura fossilium* (1546), led to more intense and extensive mining throughout the country. Agricola's follow-up work, *De re metallica* (1556), features engravings (see Figures 4.2 and 4.3), which illustrate the devastating ecological impact of early modern mining and metallurgy. Sixteenth-century English coal barons, such as Sir Francis Willoughby, studied Agricola closely, and put his lessons to use.[59] Combing the records of annual shipments from the leading coal regions of Northumberland and Durham, John Hatcher has compiled a reliable estimate that, from a total of around 45,000 metric tons in 1510, output grew gradually to 60,000 by 1570, then jumped to 220,000 by century's end, reaching over 500,000 tons in 1660.[60] In other words, over the course of Spenser's lifetime, coal consumption in England appears to have quadrupled, an increase that did not go unnoticed.

Figure 4.2 Mine-digging, from Georgius Agricola, *De re metallica* (Basel:1556). The engraving illustrates the havoc miners wreaked on the landscape as they explored for deposits. The figures in the back-left and middle-left of the picture are wielding divining rods. Reproduced with permission of the University of Delaware, Special Collections, Newark, Delaware.

The English had been burning large amounts of coal at least as far back as 1285 when London set up the first commission to monitor air pollution and fine offenders with "grievous ransoms"—a few records indicate that egregious polluters may even have been hanged. But in the Elizabethan era the complaints swelled to a chorus as coal burning for both domestic and commercial purposes emitted torrents of dense, sulfur-laden smoke over the capital. Queen Elizabeth professed herself "greatly grieved and annoyed with the taste and smoke of sea-coals," and in 1603 a man named Hugh Platt published a pamphlet avouching that coal smoke had damaged plants and buildings in and around London.[61] It is no accident that the first use of the word "pollution" to refer to a contamination in the atmosphere occurs in 1605, in Francis Bacon's *Advancement of Learning*. Inevitably, the pollution also seeped into the English waterways. Drayton conjures an image of the river Froome's face begrimed "with Colesleck" (3.279) from the nearby pits. By mid-century, the situation reached dire proportions, prompting John Evelyn's

Figure 4.3 Smelting bismuth ore using pulverized charcoal, from Georgius Agricola, *De re metallica* (Basel: 1556). Reproduced with permission of the University of Delaware, Special Collections, Newark, Delaware.

jeremiad that "London was enveloped in such a cloud of sea-coal, as if there be a resemblance of hell upon earth, it is in this volcano in a foggy day."[62]

With this context in mind, Spenser's imagery of a dragon spewing "cole-blacke clowds" like a furnace and Mammon with "cole-blacke hands" clad in golden armor "darkned with filthy dust," bespeaks the poet's moral qualms about the booming coal industry. It is fitting that he portrays Mammon as a blacksmith, since the craft was reviled as the worst polluters in early modern England. Famously, the poet also includes an "inharmonious blacksmith" in the House of Care, where again the profession symbolizes an intemperate soul disordered by passion.[63] Spenser's evident disgust with the widespread use of this new fossil fuel may have been inspired in part by the former Protestant Archbishop Edmund Grindal, whom Spenser admired and defended in the "July" eclogue. Grindal was an outspoken critic of coal, and once fined a collier (with the apt name of Grimes) for erecting a noxious kiln near his home, citing a concern that the smoke would harm his woodlands. This incident seems to have become legendary and may have inspired a lost Elizabethan play titled *The Historie of the Colyer,* which was performed by the Earl of Leicester's men in 1576.[64] Another motive for Spenser to associate coal with Mammon is that digging and maintaining a mine required considerable capital upfront and was therefore financed by enterprising merchants and aristocrats in hopes of reaping windfall profits. Although few courtiers had the patience or expertise to actually oversee the mining process, they did lease coal-rich lands from the Crown, often lobbying for a discounted rate (not unlike the contemporary mining industry in the United States). Those who speculated in the coal boom could, therefore, understandably be accused of the kind of avarice epitomized by Mammon.[65]

Noting the allusion to the "Ingot" (a corruption of Incan) and the reference to Peru in Book 2's proem, David Read has conjectured that Spenser modeled Mammon's cave on contemporary accounts of Spanish goldmines in the New World. But as coal became thought of as black gold—"Newcastle is Peru" as one coal enthusiast boasted—it is equally likely that the descent into Mammon's cave and "Plutoes grisly rayne . . . enwrapped in fowle smoke and clouds more black then Iett" is inspired by early modern colleries.[66] Moreover, Spenser need not have journeyed across the Atlantic to furnish his imagination since coal was mined and used in Munster and to reach Dublin he would have traveled through County Kilkenny—which happens to be home to Ireland's largest anthracite mine, the Leinster coalfield.[67]

Producing soot stains and foul smells when burned, coal offered Spenser a better symbol than gold of the moral (and secondarily, environmental) hazard posed by the lust for wealth. In hindsight, Mammon's coal-black hands are an extraordinarily apt image considering that abundant supplies of cheap coal played a decisive role in catapulting England to a position of economic supremacy in Western Europe, galvanizing the manufacturing sector and laying the foundation for the Industrial Revolution:

> The substantial benefits which accrued to the swelling ranks of manufacturers and processors who could abandon expensive wood or charcoal stimulated innovation and improved competitiveness, thereby encouraging the emergence of Britain as a "mineral fuel economy" in advance of any other nation.[68]

As John Richards has demonstrated in his staggering comparative study of early modern environmental management, other countries such as Japan also faced a population boom and energy crunch in the sixteenth century. But while the Tokugawa government regulated industries and improved efficiency, Britain "was a society that did not recognize limits to growth."[69] The British economy, in other words, proved unable to show Guyon's restraint.

Milton appears to have shared Spenser's moral qualms about mining, as Mammon also has a cameo in Book 1 of *Paradise Lost.* The sight of Mammon's hellish hill "whose grisly top / Belch'd fire and rolling smoke" (1.670–671) appears like a premonition of what Blake would later call the "dark Satanic mills" of industrial England. In a famous moment in Book 6, the rebel angels burrow beneath the firmament of heaven to extract "sulphurous and nitrous foam" (6.511), which they use to arm their diabolic engines. But it is not only mining of gunpowder that troubles Milton. In the opening lines of the *Mask,* the Attendant Spirit descends from "regions mild of calm and serene Air" down through "the smoke and stir of this dim spot." In his otherwise astute green reading of the text, Ken Hiltner, noting that the Attendant Spirit refers to the earth as dirty and dim, accuses him of a metaphysical disdain for the earth.[70] But the Spirit's fear that "rank vapors" will stain his ethereal robes seems less the gripe of an otherworldly neat-freak when one recalls the mounting complaints about air pollution in seventeenth-century England. Scrutinizing the text with ecocritical concerns in mind, it immediately becomes apparent that air pollution constitutes a heated issue in the moral debate of *The Mask Presented at Ludlow Castle.*

In a conspicuously Spenserian image, Milton envisions how "the Dragon womb / Of Stygian darkness spits her thickest gloom / And makes one blot of all the air" (131–133). Shortly afterward, the poem imagines a sylvan goddess intoning a spell that forbids "every bleak unkindly fog to touch / The prosperous growth of this tall wood" (269–270). In seventeenth-century English the word "unkindly" has the force of unnatural and insinuates that these are not just ordinary mists but a troubling, man-made aberration in the climate. Meanwhile, in lines 733 through 737, Comus concludes his seductive oratory with a defense of mining.[71] These two passages are not, I believe, unrelated. Although the enchanter speaks explicitly of diamonds, another carbon-based substance was being extracted from Milton's England in increasingly prodigious quantities, a substance which may explain the Spirit's dismay at the "smoke" and "rank vapors" he encounters in his descent into Shropshire.

Ludlow Castle sits in the West Midlands, a major coal-producing region among "the most productive in Britain in the early modern era," second only to Lincolnshire.[72] Records of coal-mining in the nearby Clee Hills and on the Ludlow outcrop, a stone's throw from the Castle where the *Mask* was first performed, date back to the late thirteenth century. Most of the mining activity was centered around the Severn river, a prominent character in the *Mask* which Milton associates with purity. Expanding rapidly in the late Elizabethan period, the Shropshire coal trade experienced a lucrative boom in the 1630s, right around the time Milton composed *Comus*, when the Avon became navigable to coal barges as far as Stratford. Finally, the vast supplies meant coal sold for cheap prices and stoked the fires of "a wide-range of coal-burning industries" in and around the Severn gorge.[73] Along with these industries, of course, came air pollution on an unprecedented scale.

Small wonder then that a seventeenth-century tree spirit would be anxious to ward off "bleak unkindly fogs" from infecting the Shropshire woods. Other references to coal and manufacturing are scattered throughout the text: the Elder Brother fears his sister may be threatened by a "swart Faery of the mine" (436), the bestial members of Comus's entourage wave "the sooty flag of Acheron" (604), and "like the sons of Vulcan vomit smoke" (655). As President of the Council of the Marches, the Earl of Bridgewater actually presided over litigations among mine owners and had the authority to regulate the burgeoning coal industry. As Blair Hoxby shrewdly notes, "Milton may have thought the Earl would be as interested in the exploitation of natural resources and the distribution of wealth as he was in sexual transgression."[74] In positing a just relationship between the region and its ruler as one of "temper'd awe" (32), Milton advises the Earl to adopt an ethic of temperance in the management of the land. Long hailed as a dazzling piece of imaginative fiction, *The Mask* formerly known as *Comus* also deserves our admiration in that it stands as one of the first works of English literature which seeks to directly impact environmental policy.

Though they lived and wrote long before the onset of the Industrial Revolution, Spenser and Milton were both aware of economic developments in the early modern period that ushered in this sea change in social and environmental history. In tuning their lyrics to the time-honored pastoral mode, they are not simply asserting their continuity with a static, classical tradition, but wielding pastoral motifs to critique developments in contemporary England that clashed with that tradition's aesthetic and ethical ideals. Accepting the poets' invitations to read their texts as works of moral philosophy, I have argued that Spenser and Milton outline a theory of the good life that is not dependent on the affluence of a carbon-based economy. Seeing that they call for the moderate and reasonable management of the nation's natural resources, one could, with only mild exaggeration, dub Spenser and Milton the original poet laureates of an Inconvenient Truth.

5 Rethinking Dominion
Pastoral and the Republic of Nature

In a memorable episode in Laurence Sterne's *A Sentimental Journey* (1768), the quixotic Parson Yorick, in a fit of naive bonhomie, travels to France without bothering to apply for a passport despite the fact the country is currently at war with England. Fearing he may be thrown in jail, he tries to reassure himself he could easily endure imprisonment in the Bastille. Operating under the assumption made by Satan in *Paradise Lost* that "The mind is its own place and in itself / Can make a heav'n of hell, a hell of heav'n" (1.254–255), Yorick has just about persuaded himself that a protracted confinement at the Bastille would really be no different from convalescing at a luxurious hotel when his reverie is abruptly punctured by the cry, "I can't get out—I can't get out!" The voice belongs to a caged starling. The bird repeats its plea again and again, as Yorick struggles in vain to unclasp the cage door:

> I vow, I never had my affections more tenderly awakened; nor do I remember an incident in my life, where the dissipated spirits, to which my reason had been a bubble, were so suddenly call'd home. Mechanical as the notes were, yet so true in tune to nature were they chanted, that in one moment they overthrew all my systematic reasonings upon the Bastille; and I heavily walk'd up stairs, unsaying ever word I had said in going down them.[1]

Although the starling does not understand the words, the mere illusion of its ability to speak startles Yorick into perceiving its imprisonment as an act of oppression, as he immediately breaks into an impassioned paean to liberty; that Yorick had imagined himself incarcerated in the Bastille is not accidental, as the prison was already an emblem of autocratic tyranny twenty years before the French Revolution. Comparing this sentiment with William Blake's *Auguries of Innocence*, in which "A robin redbreast in a cage / Puts all of heaven in a rage" offers a convenient demonstration that the "man of feeling" was a harbinger of the Romantic sensibility. Of course Parson Yorick did not spring fully formed from Sterne's brain. In an incisive essay, R.S. Crane traced the genealogy of the man of feeling back

to the Puritan divines of the early seventeenth century.[2] Crane's thesis has been buttressed by the historian Keith Thomas, who has unearthed abundant evidence that, while species-ism remained the orthodox view in early modern England, many people had begun to question mankind's allegedly God-given right to exploit animals. Citing a passage from the medieval homily *Dives and Pauper* (c. 1410), which condemns hunting for sport as immoral, Thomas deems it "embarrassing to anyone trying to trace some development in English thinking about animal cruelty" since the basic arguments advanced by supporters of animal welfare in the eighteenth century are already articulated here at the dawn of the fifteenth. While the logic and the focus of the attack changed over time, as far as the fundamental conviction that animals are sentient creatures deserving ethical treatment is concerned, there was, Thomas concludes, "a notable lack of historical development."[3]

The Elizabethans are not generally thought of as champions of animal welfare, given their zeal for hunting, as well as gruesome blood-sports such as cock, bear, and bull-baiting. But these pastimes were, even in Shakespeare's day, not without their critics. Much of the initial opposition came from Puritan dissenters, as Shakespeare reminds us in *Twelfth Night*, when Fabian complains that Malvolio tattled on him "about a bear-baiting" (2.5.7). While there is no doubt some truth to the historian Macaulay's snide remark that the Puritans objected not to the gratuitous suffering inflicted on the bear, but to the pleasure it gave the spectators, some critics, such as the oft-maligned Phillip Stubbes, did express genuine empathy for the animals:

> What Christian heart can take pleasure to see one poor beast to rent, tear and kill another? Although they be bloody beasts to mankind and seek his destruction, yet we are not to abuse them for his sake who made them and whose creatures they are. For notwithstanding that they be evil to us and thirst after our blood, yet are they good creatures in their own nature and kind, and made to set forth the glory and magnificence of the great God . . . and therefore for his sake not to be abused.[4]

Whatever his reactionary attitude toward the theatre, Stubbes was by no means an eccentric crank in his outrage at animal cruelty. Similar sentiments were voiced by William Hinde, Henry Bedel, John Dod, Robert Cleaver, Thomas Beard, and Edward Elton. Even the playwright Thomas Dekker fumed at a mob for torturing a famous bear, affectionately christened Harry Hunks:

> At length a blind bear was tied to the stake, and instead of baiting him with dogs, a company of creatures, that had the shapes of men and faces of Christians (being either colliers, carters or watermen) took the

> office of beadles upon them, and whipped Monsieur Hunkes till the blood ran down his old shoulders.[5]

As the professions of the culprits indicate, Dekker associates a propensity for animal cruelty with the lower rungs of society. Against the infamous edict in Genesis, early moderns could allege numerous biblical injunctions to treat animals with compassion, such as Proverbs 12:10: "a righteous man regardeth the life of his beast." Previously such verses had been brushed aside with fanciful allegorical readings; by the start of the seventeenth century, however, they began to receive literal interpretations.[6]

A similar uneasiness about animal cruelty also began to dog, as it were, the hunt. While Chaucer's Monk "loved venerie" (166), Protestant Archbishops Warham, Parker, Jewel, and Hutton all spoke of the chase as a distasteful pastime unfit for the clergy. Recalling the Puritans' critique of the hunt helps illuminate a pivotal scene in Milton's *Paradise Regained*. Dressed in the garb of a shepherd, Satan tempts the fasting Christ with

> A Table richly spread, in regal mode,
> With dishes pil'd, and meats of noblest sort
> And savor, Beasts of chase, or Fowl of game,
> In pastry built, or from the spit, or boil'd
> Grisamber steam'd.
>
> (2.340–345)

Since Book 2 of the poem elucidates the temptation of political power, the words "regal mode" are something of a giveaway. Dekker's mob of colliers, carters, and watermen were not the only segment of English society with a known passion for blood-sport.

Indeed, the most notorious practitioner of animal cruelty in early modern England was the monarch. The carnivorous banquet Christ encounters in the wilderness bears an unmistakable resemblance to the spoils of a royal hunt at the court of Charles II, who often retreated to his enormous hunting palace at Newmarket, designed by Christopher Wren. The Puritans were not alone in their opposition to the hunt. In the Tudor period, humanists and occultists, as we shall see, also denounced the custom as a symptom of barbarism. The common denominator uniting these seemingly disparate groups is a desire to curtail the power of the monarchy. Throughout the early modern era the monarch's hunt was, as Edward Berry has argued, a highly ritualized manifestation of "royal power over wild nature."[7] Henry VIII was especially fond of the sport, and Elizabeth and her Stuart successors all upheld the tradition. A century later, the Whig polemicist Thomas Paine quipped, "to read the history of kings a man would be almost inclined to suppose that government consisted of stag-hunting, and that every nation paid a million a year to a huntsman."[8] Rather than perceive the rising opposition to hunting and absolute monarchy as discrete phenomena, they are,

I believe, intimately intertwined. Behind Sterne's comparison of a caged bird to a prisoner in the Bastille lies a long tradition linking autocratic with anthropocratic tyranny. Although it sounds counter-intuitive, a new-found appreciation for The Rights of Man would bolster a corresponding appreciation of The Rights of Animals. In the writings of More, Sidney, Bruno, Agrippa, Gascoigne, Shakespeare, and Milton, republican convictions often raise questions as to the ethics of hunting, and even meat-eating. In previous chapters I have shown that advocates of environmental ethics, so far as we can use the term without anachronism, came primarily from the aristocracy and gentry. But pressure for more humane treatment of animals also simmered up from below. Exploring the nexus between the political and the environmental will reveal that republican discourse profoundly altered the understanding of mankind's obligations toward the rest of the natural world, and encouraged poets to imagine themselves as citizens of an ecological republic.

ECOLOGICAL REPUBLICANISM AND ANTI-HUNTING DISCOURSE

In 55 BCE, Pompey orchestrated a spectacular gladiatorial competition. Like the royal hunt, the games were part public relations event, part religious ritual, demonstrating Rome's imperial authority over nature. Pompey's celebration backfired, however, when the gladiators began to slaughter a herd of twenty elephants. According to Pliny, the elephants, once

> they had lost all hope of escape, tried to gain the compassion of the crowd by indescribable gestures of entreaty, deploring their fate with a sort of wailing, so much to the distress of the public that they forgot the general and his munificence carefully devised for their honour, and bursting into tears rose in a body and invoked curses on the head of Pompey for which he soon afterwards paid the penalty.[9]

Among those weeping and cursing in the stands was Cicero. Reflecting on this incident in one of his epistles, Cicero comments, "the result was a certain compassion and a kind of feeling that that huge beast has a fellowship with the human race."[10] Cicero's willingness to perceive a "fellowship" (*societatem*) between humans and animals both stems from and reinforces his devotion to republican ideals. His revulsion at the games is in part a veiled critique of Pompey's political failures, which as Pliny suggests, brought about the downfall of the Republic.

If the caged starling in *A Sentimental Journey* inspires Yorick to pen a hymn to liberty and denounce the Bastille as a monument to tyranny, the political repercussions of such sentiments could easily ricochet in the other direction. That is, enthusiasm for republican ideals could prompt believers to

reconsider human dominion over the rest of the creation and attack it as a problematic justification, as an analogy from nature, for autocratic rule. This certainly holds true for the late eighteenth and early nineteenth century when many radicals such as Joseph Ritson, Percy Bysshe Shelley, Richard Philips, John Oswald, and even Benjamin Franklin were also militant vegetarians. In this respect, the 1590s were not so different from the 1790s.[11] As the work of Andrew Hadfield has vividly demonstrated, the late Tudor period witnessed an explosion of interest in republican government. A deluge of reprints and English translations of Roman historians who sympathized with the Republic poured from the London presses, including works by Cicero, Polybius, Suetonius, Lucan (translated by Marlowe), and, most importantly, Tacitus, who emerged as "the key historian that everyone had to read in the 1590s."[12] During the sixteenth century, English statesmen and humanists such as Thomas Starkey, Thomas Smith, Nicholas Udall, and George Buchanan wrote pro-republican bromides. On the continent, François Hotman and Gaspar Contarini composed glowing overviews of the Venetian Republic, which were eagerly consulted by Sidney, Spenser, Shakespeare, and Jonson.

During the Middle Ages, when monarchy did not arouse much open opposition, the aristocratic practice of hunting went more or less unquestioned. In the sixteenth century, however, republican and ecological sympathies emerge side by side in the writings of Renaissance humanists. Not coincidentally, these humanists idolized Cicero and the Roman Republic. The citizens in Thomas More's imaginary commonwealth despise butchers as pariahs, believing that habitual killing has irredeemably blunted their moral sensitivity.[13] Rather than revere hunting as a virile, noble pastime, the Utopians delegate the task to slaves, arguing that the sight of "a weak, fugitive, and innocent little hare torn to pieces by a strong, fierce, and cruel dog . . . ought rather to inspire pity" (4:171) than morbid delight. In one of his epigrams, More seeks to provoke this precise reaction by putting the reader inside the mind of a hunted rabbit, as he narrates his own death (in Latin!) in the first person: "now while the hounds tear my flesh to pieces with their wicked teeth, a man looks on and smiles at the bloodshed. Insensate brute, more savage than any beast, to find cruel amusement in bitter slaughter" (3:123). More's friend Erasmus echoes this opinion in *The Praise of Folly*, where he characterizes hunting and butchery as incompatible with true nobility, which entails a capacity to show clemency and eschew violence.[14] If More's Utopians do not inhabit a pastoral golden age—since slavery and predation still exist—their view of hunting as "unworthy of free men" (4:171) suggests that it poses a threat to republican principles. Recognizing that non-human animals have a capacity to suffer, and possess a foreknowledge of their own death, More's Utopians grant them an honorary membership in the commonwealth of nature.

The occultists Giordano Bruno and Cornelius Agrippa also exhibit a marked tendency to imagine nature as a vast republic, leading them to question the propriety of the hunt. In Bruno's *Expulsion of the Triumphant*

Beast (dedicated to Philip Sidney), the allegorical figure of Wisdom (Sophia) refers to hunting as a "magisterial insanity, a royal madness, and an imperial fury" (261). While Jove eventually rules to allow the chase as a noble exercise, the text places the very concept of nobility itself under assault. Bruno, like More, associates hunters with butchers who

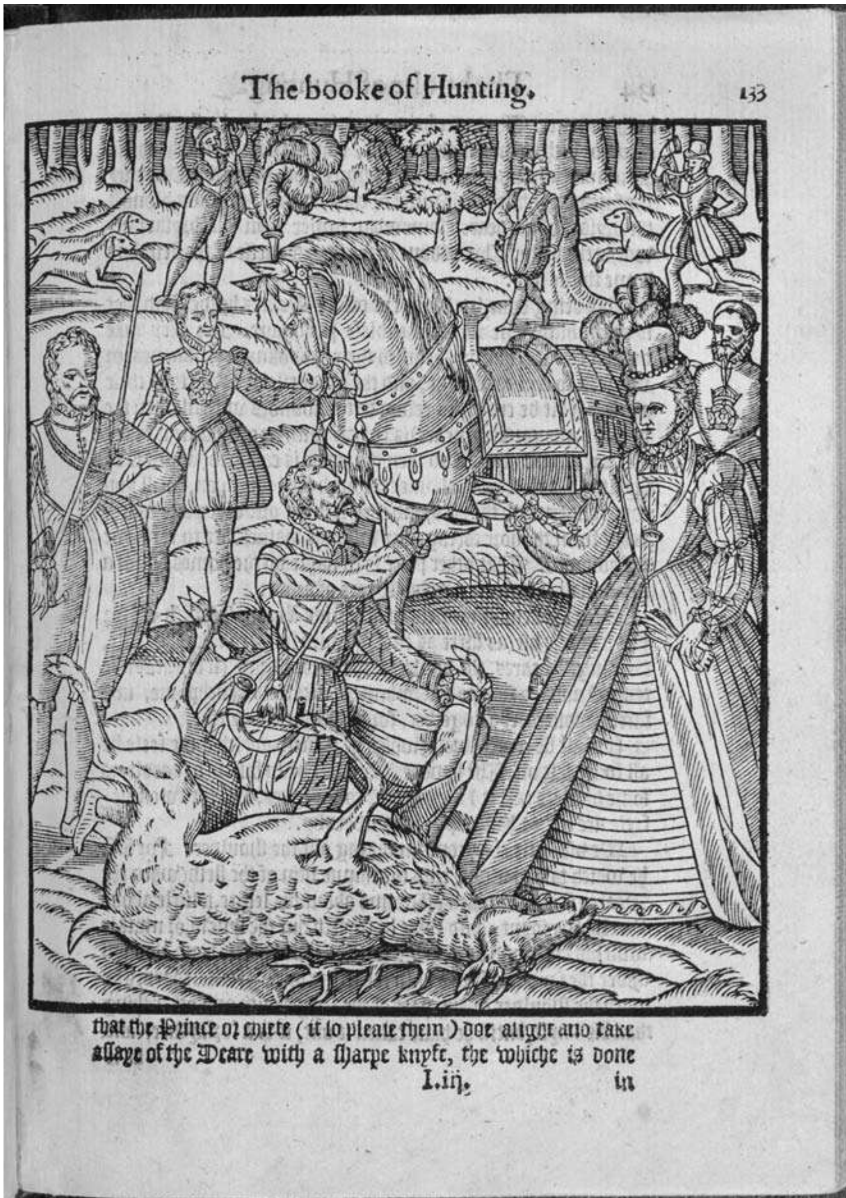
> administer to our inordinate gluttony to which the food ordained by Nature, more fitting to the complexion and life of man, is not enough. . . . So the art of the hunter is an exercise and an art no less ignoble and vile than that of the butcher, since the savage brute has no less the quality of the beast than the domestic and rustic animal. (261)

As with many of the humanist authors examined in this chapter, Bruno's denunciation of hunting occurs alongside ecstatic hymns to republican government. In the *Triumphant Beast* Jove proclaims that Libra (justice) will reside in republics, while advocating the assassination of tyrants and the military support of democratic regimes (232). The text also evinces an ardent admiration for both Venice and the Ancient Roman Republic. According to Bruno, the remarkable ascendancy of Roman civilization was the result not of a divine favoritism but of a political structure that corresponded to his own revolutionary view of Nature as a holistic entity in which the various, seemingly discrete parts cooperate for the mutual benefit of the whole (149–150). In the words of his recent translator, "the Roman Republic was for Bruno the symbol of justice, law, and order that . . . he observed in operation in the world of nature"(39–40). His heretical ecological beliefs of a divinity immanent in the earth (see Chapter 1) enflamed, and were reinforced by, his radical politics.

In *De incertitudine et vanitate scientiarum et artium* Agrippa brands hunting as not only a vain but also "a cruell Arte" that debases mankind's naturally compassionate impulses. Agrippa also champions republican government, which he believes represents a more "natural" form of political organization. Early humans and animals, he claims, co-existed in an egalitarian state until the invention of hunting, which brought about "the beginnge of Tyranny" in human society.[15] Observing that animals are created "free by nature" to roam over the earth, he complains "the tyrannies of the Nobles have usurped them with dreadfull manacinges." In other words, by enacting draconian game laws the upper class has imposed an unjust ownership over the land, the animals, and plants that properly belong to the greater commonwealth.

A similar awareness of class antagonism contributes to the ambiguous status of the hunt in the writings of George Gascoigne. As an ambitious young courtier on the make, Gascoigne participated in several hunts with aristocrat patrons, and even translated a French hunting manual, *The Noble Art of Venerie,* in 1575. In a dedicatory poem in the preface Gascoigne hails hunting as "a sport for Noble peeres, a sport for gentle bloods."

Yet, as Edward Berry observes, Gascoigne himself was not an aristocrat and his apparent overtures to the "noble art" are "fraught with ironic tension."[17] For instance, in the French original by Jacques du Fouilloux,


The booke of Hunting. 133

that the Prince or chiefe (if so please them) doe alight and take assaye of the Deare with a sharpe knyfe, the whiche is done

I.iij. in

Figure 5.1 Queen Elizabeth offered the knife, from George Gascoigne, *The Noble Art of Venerie* (London: 1575). Reproduced by permission of the Folger Shakespeare Library.

Gascoigne came across a poem titled the "Complainte du Cerf," in which a stag denounces his pursuers as ruthless butchers. Gascoigne not only translated the text but also composed four more original poems by other animals making similar laments. One poignant plea for mercy by a hare concludes with this sobering moral: "*Grievous is the glee / Which ends in blood.*"[17] A modern reader has to wonder how Lord Grey, to whom the book is dedicated (or perhaps the man who commissioned the translation?), responded to these poems. If this is not exactly an act of editorial sabotage, it is a bit like sticking recipes for vegetarian lasagna in a barbeque cookbook.

A failed hunting expedition also provides the backdrop for one of Gascoigne's best-known lyrics, in which the speaker's inability (mixed with an evident reluctance) to shoot a deer becomes a sustained metaphor for Gascoigne's failure to net a successful career. Historicist commentators have primarily read the piece as a critique of the patronage system while disregarding the poet's ambivalence about the ethics of killing animals for sport, despite the fact that Gascoigne informs the reader that "often times he let the heard [sic] passe by as though he had not seene them."[18] That Gascoigne sees his social failures as a sign of moral integrity and chooses hunting to signify the unscrupulous opportunism required to claw one's way up the social ladder suggests at least he harbored some profound misgivings about the sport.

LETTING DOMINION SLIDE: SIDNEY'S "ISTER BANK"

> Some anthropologists believe that it was the management of herds of domestic animals which first gave rise to an interventionist and manipulative conception of political life. Inhabitants of societies, which like those of Polynesia, lived by vegetable-gardening and growing crops which require relatively little human intervention seem to have taken a relatively unambitious view of the ruler's function. . . . But the domestication of animals generated a more authoritarian attitude. In early modern England human rule over the lower creatures provided the mental analogue on which many political and social arrangements were based.
>
> Keith Thomas[19]

By far the most striking example of the collision between the political and the ecological in early modern English literature is Sidney's pastoral fable in the *Old Arcadia,* known by its opening line: "As I my little flock on Ister bank." The poem offers a provocative re-imagining of Genesis that is overtly apologetic about human dominion, advising mankind to act as humble, compassionate stewards rather than tyrannical despots with unlimited authority to subjugate nature. At first "Ister bank" transports

its readers to a prelapsarian world where all the animals live together with peace, liberty, and fruits and vegetables for all. Reminiscent of Eden at the dawn of the sixth day, or the prophecies of Isaiah, primordial Arcadia is a bucolic paradise where the lion and the lamb snuggle side by side. Predation is unknown. Mankind does not yet exist. Consequently, the animals are not imprisoned, domesticated, or slaughtered, but "might freely roam, or rest, as seemed them; / Man was not man their dwellings in to hem" (256). The poet conceives of this halcyon state of affairs in terms of a republic, where "the beasts with courage clad / Like senators a harmless empire had." But an apple of discord poisons this serene idyll when the animals, partly out of timidity, partly for a love of novelty, petition Jove for a king. Although the all-knowing Jove, along with the clairvoyant owl, advises against this rash policy, the animals remain obstinate. Grudgingly, he presents them with a "naked sprite," which "the earth yclothed in his clay," and the animals stuff with their various attributes: the lion heart, elephant memory, horse "good shape," sheep "mild-seeming face," the nightingale voice, parrot "ready tongue," and so on. Although the animal senate decides against equipping Man with wings, they consent to what is perhaps a more ominous proposition: "That from thenceforth to all eternity / No beast should freely speak, but only he." At first Nature's new democratic monarchy runs smoothly, as man equates his interests with those of his subjects, "and fellow-like let his dominion slide." All too soon, however, this Golden Age degenerates into an Age of Iron:

> But when his seat so rooted he had found
> That they now skilled not how from him to wend,
> Then gan in guiltless earth full many a wound
> Iron to seek, which gainst itself should bend
> To tear the bowels that good corn should send.
> But yet the common dam none did bemoan
> Because (though hurt) they never heard her groan. (258)

This shift to an agricultural based society in turn facilitates the domestication of animals, some of which are harnessed for labor, others butchered for meat. Applying a divide and conquer strategy, Man "gan . . . factions in the beasts to breed," introducing predation into the animal republic by training dogs, horses, and hawks to hunt and kill each other for food, and later for the hunter's amusement. After this strange eventful history, the eclogue concludes with a poignant appeal to mankind not to "swell in tyranny" over the animals.

From clues scattered within the text, it is evident Sidney intends the reader to interpret "Ister Bank" as an etiological fable on the origins of kingship. More specifically, it can be decoded as a lament for the weakening of the English nobility in the early Tudor period as the government became increasingly centralized under Henry VII and VIII.[20] The poem invites such

a topical approach when Philisides claims in stanza 4, "the song I sang Old Languet had me taught." Languet is Hubert Languet, a Huguenot intellectual who became Sidney's mentor and close friend during his travels in Europe. Languet is also the leading candidate for the authorship of the *Vindiciae Contra Tyrannos* (c. 1579)—one of the most incendiary political treatises to rock Renaissance Europe since Machiavelli's *Prince*.[21] Literary scholars have long recognized the political sub-text of "Ister Bank," situating it alongside the *Vindiciae* to debate the extent to which Sidney actually subscribed to its republican principles, while more or less ignoring the environmental message in which it is ensconced.[22] In a typical New Historicist reading, Annabel Patterson has argued that Sidney resorted to cloaking his critique of absolutism in an animal fable as a kind of self-imposed censorship that re-inscribes the authority of the absolutist state, as if the poet had zero interest in the ethics of man's treatment of the natural world.[23] A more nuanced interpretation will, I think, perceive the ecological and the political as inextricably entangled; that is, readers will be stirred by the poem's clarion call to restrain the monarch's authority in proportion to the extent they also recognize a need for limitations on human dominion.

The fact that the "shepherd Philisides—(an obvious contraction of Philip Sidney)—sings "Ister Bank" implies that poem may reflect some of the poet's own personal convictions. Thanks to Sidney's biographers, we know he espoused political beliefs that would be considered radical by sixteenth-century standards; but there is also evidence he held ethical beliefs that would register as green on a modern spectrum.[24] First, an exception to most men of his social class, Sidney detested hunting. Sir John Harington (who himself sought to restrict hunting on his estate and wrote verses in praise of fruits and nuts), records that the "noble Sidney was wont to say, that next hunting, he liked hawking worst."[25] In a letter to Hubert Languet, Sidney makes a sarcastic crack about Hubert de Liège, the patron saint of hunters. Sidney also reportedly regaled some dinner guests with an old legend that wolves had been exterminated from England by overhunting when King Edgar agreed to commute the sentences of criminals in exchange for a tribute of wolf pelts.[26] A voracious reader, Sidney was familiar with the anti-hunting polemics in More, Erasmus, and Agrippa (all of whom he mentions by name in the *Defence*). He likely knew Gascoigne through his uncle Dudley, and Bruno's *Expulsion of the Triumphant Beast* is dedicated to him. But more direct proof of his empathy for animals comes from a tilt in 1581 where Sidney—living up to his first name Philip (which means "horse lover")—announced to the other jousters, "that whoso hurteth horse with spear or sword shall lose the honour and his pledge."[27] If Sidney's fondness for animals was not congenital, it may have been aggravated by his knowledge of the French King Charles IX, who had a reputation as a connoisseur of animal cruelty. Charles, even by the inhumane standards of the age, took a sadistic delight in baiting lions and leopards from the royal menagerie and decapitating captive deer for his amusement. While Sidney was visiting

Paris in 1572, the French King had a fox stuffed in a bag of live cats, which was then dangled above a raging bonfire. Whether or not Sidney may have witnessed this gruesome spectacle, as Katherine Duncan-Jones believes, he certainly would not have failed to make the connection that Charles IX was also one of the architects of the St. Bartholomew Day Massacre. Following a line of reasoning that stretches from Ovid's *Metamorphosis* to Hogarth's *Four Stages of Cruelty*, Sidney would likely have diagnosed his fondness for torturing animals as a symptom of a propensity to commit violence against humans.

A similar sense of the overlap between the political and ecological can be gleaned from the *Vindiciae* itself, where the Huguenot minority is implicitly compared to domesticated animals. Along with a reference to a primordial golden age, the author at one point cites Aesop's fable of how the horse came to accept the bridle to explain the people's resignation of their sovereignty to the king, an analogy that crops up in Sidney's eclogue where man dupes the horse into accepting the bit. Even more striking, Languet borrows a metaphor from pastoral poetry (one which also surfaces in the political works of Plato, Aristotle, More, and Calvin) to illustrate his theory that a king exists to serve the interests of the people, not to exploit them for his personal benefit: "Just because someone has made you a shepherd for the sake of the flock, did he hand over that flock to be skinned, sold off piecemeal, driven, and plundered at your pleasure?" (92, 113). This is essentially the exact same plea voiced in the final stanza of "Ister Bank" and may very well have been the primary inspiration for the poem. However, "Ister Bank" is not the *Vindiciae*, and it would be perverse to read it purely as treatise in political science. From a few scattered metaphors in Languet's text, Sidney has spun a 161-line poem wielding an early manifestation of social contract theory to stipulate that mankind's apparent supremacy derives from and entails responsibilities toward the natural world. The upshot is clear: just as monarchs must place the good of the commonwealth before their own self-interest, human beings must learn to consider the interests of non-human nature when exercising their authority. Although the poem acknowledges human dominion, that power—in contrast to Genesis—is not the result of a divine mandate but of human vanity and cunning. "Ister Bank" also diverges from the Judeo-Christian creation myth in that humans are not categorically different from other species. "Man was not man": Sidney's odd declaration erases any self-imposed distinction between humans and other animals. Man is not made in God's image but is the beast's "own work." Sidney here propounds an almost evolutionary view of *homo sapiens* as composed of mental and physiological attributes of other animals, even crediting the ape for bequeathing man the opposable thumb. For scholars acquainted with natural philosophy among the ancients, Darwin is not quite the iconoclast he is sometimes thought to be. As Keith Thomas reminds us, "Protagoras, Diodorus, Siculus, Lucretius, Horace, Cicero, and Vitruvius had all suggested that man had made only a gradual ascent from a bestial condition."[28]

In addition to borrowing material from the Eden myth and I Samuel 8, Sidney may have drawn inspiration for his fable on the affinity between hunting and tyranny from a third biblical source: Genesis 10. After the Flood, God renews his covenant with Noah, establishing mankind's authority over nature. Yet the Bible makes no mention of any bloodshed or predation for the next two generations. A period of relative harmony prevails until the reign of Noah's great grandson, Nimrod, who—according to the author of Genesis—"was a mighty hunter before the Lord" (10:8–9). The verse earned Nimrod a reputation as the founder of the first empire and associated the rise of despotic government with a love of hunting.

> [Nimrod] rose to such a pitch of pride that he feared not to scorn the laws of nature in that he reduced to servitude those of his own status and race whom she had created free and equal. Therefore, tyranny, initiated by a huntsman to insult the Creator, finds its sole source in one who, amid the slaughter of beasts, wallowing in blood, learned to feel contempt for the Lord.[29]

Here John of Salisbury, the twelfth-century scholar and critic of the hunter-king Henry II, traces the origin of human inequality to an impious passion for the chase.

Protestant thinkers such as Calvin popularized the notion that the animals dwelled together peacefully in Eden and argued that predation was the result of original sin. Rather than regard it as a source of amusement, the spectacle of animal violence engenders in many early modern Protestants, including Sidney's Philisides, a sense of guilt and spiritual melancholy. Another curious connection between Nimrod and the *Arcadia* is the apocryphal legend (circulated by Josephus, John of Salisbury, and picked up by Milton), that this same tyrant was the mastermind behind the Tower of Babel, which brought about the loss of a common language among humans. Genesis claims Nimrod "began to be a mighty one in the earth," which suggests that the tyrant was the first to mine. Milton has Nimrod extract "a black bituminous gurge" (12:41) from which he builds the tower. The collapse of the natural republic thus inaugurates metallurgy as well as hunting. What fired Sidney's imagination, however, was the penalty that resulted from Nimrod's hubris. Recognizing the Man-King in "Ister Bank" as a literary descendent of Nimrod underscores the eclogue's attempt to craft an etiological fable about the origins of the linguistic divide between humans and other animals. Once upon a time, according to Philisides, the animals all spoke a cacophonic Esperanto. Then the animal senate passed a motion that precipitates its own demise:

> The multitude to Jove a suit imparts,
> With neighing, bleating, braying, and barking,
> Roaring and howling, for to have a king.

Read with an eye to the prosody (of which Sidney was an acknowledged maestro), the eruption of trochees in the animal calls grates against the iambic rhythm, foreshadowing the discord that will result from this decision. The ensuing lines are equally foreboding:

> A king in language theirs they said they would
> (For then their language was a perfect speech). (256)

The jumbled syntax of the first line, followed by the fluidity of the parenthetical comment spoken by the human narrator, re-creates the sense of a communication breakdown, or linguistic disparity, between animals and humans. Although Sidney laments this divide, he somewhat paradoxically voices this lament in stunningly articulate verse that showcases his own verbal prowess. In the poem's musings on the origins of inequality across species, however, man only learns to speak thanks to the animals' generosity. The animals still retain the power of speech, but have taken a vow of silence in deference to man. Yet the peculiar comment that Philisides recites his verses to sheep, "whom love, not knowledge, made to hear," implies that animals' emotional intelligence, not their capacity to reason, is what ultimately qualifies them for moral concern. Here Sidney, like St. Francis, still yearns—while recognizing the absurdity of the attempt—to transcend the language barrier. It is precisely this capacity of fiction to craft "another Nature" which can expose or overcome the limitations of our own, to discover an epistemological limbo in between a truth and a lie, which Sidney singles out for praise in his *Defence*.[31]

Sidney's pastoral eclogue could be accused of postulating, to paraphrase Empson, a "beautiful relation" between the governing and the governed.[32] Yet it also, just as emphatically, envisions this ideal as a beautiful and just relation between human beings and the natural world. In stanza 16, mankind employs his higher faculties for the greater good, conflating his interests with those of the biosphere at large:

> He did to beasts' best use his cunning frame
> With water drink, herbs meat, and naked hide,
> And fellow-like let his dominion slide,
> Not in his sayings saying 'I' but 'we';
> As if he meant his lordship common be. (258)

In imagining a shift from a royal "I" to an ecological "we," and its invitation to "let . . . dominion slide," the poem offers a model of what we would now call biotic egalitarianism between human beings and the rest of the natural world.

When the Iron Age arrives, Sidney's eclogue not only associates it with environmental degradation, but also inveighs against human obliviousness to that degradation: "the common dam none did bemoan." While literary scholars have been quick to sift the *Arcadia* for topical allusions, no one has

taken these lines as a possible indictment of environmental exploitation, of which Sidney was keenly aware (as illustrated in Chapter 2). While the lines appear to echo Hesiod's grim view of the agricultural revolution, they may also be registering Sidney's discomfort with what Anthony Low refers to as the Georgic Revolution, the aggressive profit-driven nature of agrarian capitalism in late sixteenth-century England.

The Iron Age grows even rustier with the subjugation of animals:

> And when they were well used to be abused,
> For hungry throat their flesh with teeth he bruised;
> At length for glutton taste he did them kill;
> At last for sport their silly lives did spill. (259)

Here Sidney employs some mordant wordplay on "well used" (meaning both accustomed and humanely treated) and "abused," to further highlight the injustice. Following a long established tradition based on Genesis 1:29 that early man was a vegetarian,[33] the poem even likens the craving for meat to gluttony. This argument is not all that different from Peter Singer's in *Animal Liberation*, who asserts that we can lead long healthy lives without killing animals, and we choose not to out of a preference for a diet rich with the flavor of animal flesh.[34] This point resonates even more loudly in Elizabethan English, in which the word "spill" carries the force of "waste." Through wordplay and the repetition of grammatically symmetrical phrases, entrenched practices of meat-eating and hunting are de-familiarized and linked with gratuitous violence. But the poem's anti-hunting invective reaches its highest pitch in the penultimate stanza:

> But yet, O man, rage not beyond thy need;
> Deem it no gloire to swell in tyranny.
> Thou art of blood; joy not to make things bleed.
> Thou fearest death; think they are loath to die.
> A plaint of guiltless hurt doth pierce the sky.
> And you, poor beasts, in patience bide your hell.
> Or know your strengths, and then you shall do well. (259)

In accordance with the Stoic doctrine celebrated in *The Old Arcadia*'s opening sentence (see Chapter 4), Sidney posits "need" as the moral index that should regulate our use of nature. In emphasizing the verb "swell," typically associated with pride, Philisides seems a predecessor of Gulliver among the Houhnyms, repulsed by human hubris. Perhaps most astonishingly, the poem evinces a remarkable empathy for animal suffering that comes to a crescendo in the phrase: "A plaint of guiltless hurt doth pierce the sky." The line is nothing less than a collective howl of protest against the inhumane treatment of animals translated into an exquisite iambic pentameter, all the more piercing because of the shift to

the rhymed couplet and the fact it falls after two sentences in which the narrator addresses the reader in the second person familiar. Philisides, meanwhile, salutes the animals with the second person plural, "you." While this is grammatically appropriate, the pronoun switch also conveys respect for the addressee. In an age obsessed with "blood" as a symbol of class distinction, Sidney instead points to blood as the basis for recognizing the common biological kinship of human and non-human animals. In its eloquent denunciation of hunting, the poem anticipates Wordsworth's *Hart-Leap Well* by over two hundred years. As our secular, democratic culture seeks for greener alternatives to the Genesis myth, as we strive to learn how to say We, not I, we might do well to seize on Sidney's "Ister Bank."

HUNTING AND ENCLOSURE IN THE FOREST OF ARDEN

Despite apocryphal legends of the young Shakespeare's misadventure as a poacher, his literary works almost always portray the hunt as a disturbing, barbaric pastime. In *Titus Andronicus*, the slaughter of a doe becomes a metaphor for the rape of Lavinia. The same analogy appears in *The Rape of Lucrece*, an event that, as Shakespeare was well aware, triggered the formation of the Roman Republic. The fates of both Lear and Timon, meanwhile, commence their tragic tailspin when the protagonists return from a hunting expedition, signaling an ironic reversal from predator to prey. A similar reversal occurs in *Merry Wives of Windsor* when Falstaff, who had poached one of Slender's deer and attempts to seduce the citizens' wives, assumes the guise of Herne the Hunter, only to be hunted and tormented by the women he had pursued.[35] Jeffrey Theis has characterized poaching in the play as a subversive blow to the monarchy's efforts to control and limit access to the forest and its resources.[36] The point is well made, though it must be added that some chose to challenge royal dominion not by poaching but by denouncing hunting entirely.

A more explicit example in Shakespeare of mounting uneasiness about the hunt occurs in *Love's Labour's Lost*, when the Princess grudgingly participates in one from a sense of social obligation:

> Now mercy goes to the kill,
> And shooting well is then accounted ill.
> Thus will I save my credit in the shoot,
> Not wounding—pity would not let me do't.
> If wounding, then it was to show my skill,
> That more for praise than purpose meant to kill.
> And, out of question, so it is sometimes –
> Glory grows guilty of detested crimes
> When for fame's sake, for praise, an outward part,

> We bend to that the working of the heart
> As I for praise alone now seek to spill
> The poor deer's blood that my heart means no ill.
>
> (4.1. 23–34)

Similar to Gascoigne, who "let[s] the harmless deer (unhurt) go by . . . [and] wold faine hit the barren," the Princess imagines excusing her poor marksmanship by declaring herself a conscientious objector to the hunt. Pity for the hunted animal becomes recognized as a sign of a heightened moral sensibility. Although the Princess does eventually overcome her scruples and shoot a deer, *Love's Labour's Lost* nevertheless voices a concern that the sport needs to be "done in the testimony of a good conscience" (4.2.1).

Michel de Montaigne is another influential early modern thinker who treats sensitivity to animal suffering as a hallmark of a moral being. In his essay "Of Cruelty," Montaigne, after admitting he cannot bear to watch a farmer wring a chicken's neck, confesses to feeling equally squeamish about hunting: "I have not been able without distress to see pursued and killed an innocent animal which is defenseless and which does us no harm" (316). Recalling the piteous spectacle of a wounded stag sobbing as if for clemency, Montaigne announces that he abides by a policy of catch-and-release, and cites Pythagoras as a precedent for treating animals with respect. If he favored a strong monarchy to put an end to the French Wars of Religion, Montaigne also remained fiercely critical of aristocratic abuses, and had in fact been tutored as a youth by the strident Republican George Buchanan.[37] After contemplating "the ugly and horrible examples of cruelty that the Roman tyrants put into practice," the essay rebukes mankind's tyranny over the animals. Employing the same political vocabulary found in Sidney, Montaigne expresses a readiness to rethink man's relationship to animals as one of dominion: "I . . . willingly resign that imaginary kingship that people give us over the other creatures" (317). Although Montaigne declares himself suspicious of the notion of *cousinage* among humans and animals, it is no coincidence that "Of Cruelty" immediately precedes his "Apology for Raymond Sebond," perhaps the most withering assault on anthropocentrism ever penned.

As Shakespeare scholars have noted, Montaigne's empathy for a wounded, weeping stag bears a distinct resemblance to Shakespeare's most outspoken anti-hunting tirade: Jaques' "weeping and commenting / Upon the sobbing deer" (2.1.65–66) in *As You Like It*. Since the play is ostensibly set in the Ardennes and Jaques, more than any other character, is consistently identified as French, it is tempting to conclude that Shakespeare modeled him on the French essayist. However, as the weeping deer is rather ubiquitous in anti-hunting polemics, and Jaques also shares characteristics with Sidney's melancholy Philisides, Sannazaro's Sincero, Harington, Gascoigne, and even Jacques du Fouilloux, the hunt, as it were, for a single source seems somewhat futile.[38] Rather than seek to unmask Jaques as a particular individual, this chapter section will instead

examine the way the comedy constructs Arden as a Republic of Nature. To be sure, at times the play invites its audience to perceive such rhetoric as a projection of a utopian political system onto the natural world—Corin's churlish employer certainly does not manage his estate according to egalitarian principles. Yet *As You Like It* also conjures a pastoral vision of an ecological commonwealth, which problematizes the enclosure of the commons taking place in Shakespeare's England.

Act 2 opens with the banished Duke's pastoral rhapsody in which he addresses his companions as "co-mates and brothers." As the first line of the first scene set in the forest, these words foreground the status of Arden as a classless, republican society. Arguably the play nods to the egalitarian nature of the forest even earlier when Charles dubs the Duke a latter-day Robin Hood; the original audience would also have recognized Amiens' ballad "Under the greenwood tree," as an homage to the English outlaw. In a vintage illustration of microcosm recapitulating macrocosm, the harmony between the Duke's men corresponds to a harmony between man and nature symbolized by the pathetic fallacy. The idyll, however, is soon punctured by the reality of their need to eat in order to survive: [39]

> Come, shall we go and kill us venison?
> And yet it irks me the poor dappled fools,
> Being native burghers of this desert city,
> Should in their own confines with forked heads
> Have their round haunches gored.
>
> (2.1.21–24)

The Duke's queasiness about the hunt springs from the sense that it produces an ideological friction with the principles behind his pastoral commonwealth. After metonymically reducing the deer to the meat they will become, mere "venison," the Duke's next metaphor promotes them to "native burghers of this desert city," scrambling, as often happens in pastoral, the binaries of man versus animal, civilization versus wilderness. By calling them "burghers," the Duke grants the deer the same basic rights afforded to citizens in a republic. Jaques belabors the conceit further, accusing the Duke of inflicting on the animals the same injustice his younger brother committed in toppling and exiling him. As reported by the First Lord, Jaques brands them:

> mere usurpers, tyrants, and what's worse,
> To fright the animals and to kill them up
> In their assigned and native dwelling place.
>
> (2.1.61–63)

In what I hope has now been sufficiently established as a literary commonplace, Jaques frames his assault on hunting by appealing to republican principles. The speech inveighs against absolutism, explicitly comparing the

human subjugation of nature to an act of imperialism. In the first overtly green reading of the play, Robert Watson views similes and metaphors as driving a wedge between humanity and nature, cleverly decoding evidence from the title where "like" intervenes between "you" and "it."[40] Though Watson offers a legitimate warning about obliterating the real biological differences between humans and other species, the rhetorical comparisons and anthropomorphizing sentiments could arguably have a beneficial effect: instilling a sense of the profound rapport among all living creatures. Rather than exacerbate the differences between human and animal embodiment, similes were valued for their ability to illuminate what is human-like about, say, a deer and what is deer-like about a human. This wide range of metaphorical equivalences was deployed not just as figurative tinsel, but also as part of a targeted, conscious effort to situate man in an analogical universe where animal behavior could "moralize" human behavior just as often as the other way around. It is sometimes assumed that early modern republicans rejected the old natural history and its hierarchical system of correspondences, which might vivisect the beehive as a justification for monarchy.[41] But republican sympathizers also proved savvy at pressing nature into ideological service, and the success of their efforts signals a shift toward a more biocentric outlook, in which the non-human becomes eligible for moral concern. Specifically, the persistent comparisons of hunters to petty tyrants in early modern texts like *As You Like It* undermined the doctrine of human dominion over the animals.

Republican and anti-hunting sentiments resurface again in 4.2, when the foresters return to camp with a freshly killed deer. After inquiring who shot the deer, Jaques proposes they "present him to the Duke like a Roman conqueror." This odd, brief scene has often been either overlooked or misconstrued by scholars. In the recent Arden edition, for instance, Juliet Dusinberre detects hypocrisy in Jaques' willingness to act as "master of ceremonies" for the celebration despite his earlier censure of the hunt.[42] Part of the difficulty rests in the ambiguity of the line cited earlier: it is vital to grasp that Jaques wants them to pay sarcastic homage to the Duke, not the hunter, as a victorious Caesar tyrannizing over Nature's Republic. Instead of receiving a congratulatory slap on the back, the anonymous hunter will be dressed in the skin of the dead animal and mocked, as the other men sing a song riffing on the horn as the symbol of the cuckold. Consisting of a mere nineteen lines, the scene, on the page, appears to be among the shortest in Shakespeare's works. However, at the Globe it may have originally been performed as a boisterous, elaborate mumming. In his study of *Ritual Animal Disguise* in early modern England, E.C. Gawte describes a variation of the charivari in Devonshire that corresponds closely to Jaques' prank. The leader of the revels would don the hide and antlers of a stag, while the rest of the community (some clad as hawks and hounds) would pretend to hunt him through the streets, and "kill" him at the doorstep of a man whose wife was suspected of adultery.[43] Jaques hints at the charivari-like nature

of the scene in his instructions for the Lords' song: "'tis no matter how it be in tune, so it make noise enough" (4.2.9). On one level, the episode conveys Jaques' cynical outlook on Petrarchanism, continuing Rosalind's gentle mockery of male anxiety about marital infidelity. More importantly for my purposes, Jaques has appropriated the charivari as a ritual shaming of both the hunter, who is transformed into a beast by his savage act (a common trope in anti-hunting polemics), and the Duke, who becomes the butt of the ridicule usually directed at the deceived husband. The ceremony over which he presides is part charivari, part mock-triumph, rebuking the Duke's ecological imperialism.

When *As You Like It* premiered sometime around 1599, the London literary scene was abuzz with republican ideas. Savile's translation of Tacitus had been reprinted in 1598; the first edition of Marlowe's *Pharsalia* appeared shortly afterward. The Lord Chamberlain's Men would soon be staging, if they had not already, Shakespeare's *Julius Caesar*, a work with obvious republican overtones. At one point Rosalind actually mocks Caesar for his "thrasonical brag of 'I came, saw, and overcame'" (5.2.27). In adapting Thomas Lodge's prose romance *Rosalynde*, Shakespeare may also have recalled Lodge himself wrote a pro-republican history play titled *The Wounds of Civil War*.[44] The fascination with republican thought in the late 1590s engendered new attitudes toward nature which animate Shakespeare's pastoral comedy.

The notion of nature as a commonwealth was a topical one for Shakespeare's audience at this time because of the ongoing controversy surrounding enclosure. As social and environmental historians have documented, commons and un-afforested lands were increasingly being privatized in England throughout the sixteenth century. Acres of forests were grubbed up and converted to farmland or pasture to support the lucrative wool trade, including much of the real forest of Arden in Shakespeare's native Warwickshire (see chapter 2).[45]

As You Like It evokes nostalgia for a medieval (and no doubt somewhat mythical) landscape, underwriting the fantasies of set designers and painters who tend to depict Arden as an enchanted, old-growth forest. Yet as A. Stuart Daley has commented, the majority of the action unfolds in deforested land now home to grazing sheep. At one point Shakespeare actually uses the technical term for these spaces: "purlieus."[46] Outrage with such enclosures, present even in the early Tudor period in the writings of More and Agrippa, reached its flashpoint in the wake of the Great Dearth of 1594–1597. Popular uprisings rocked the English Midlands, as demonstrators threatened to "cast down hedges and ditches" by which wealthy entrepreneurs staked their claim to public land.

In an oft-cited essay, Richard Wilson revealed how *As You Like It*'s allusions to Robin Hood connect the play with these anti-enclosure riots.[47] With the benefit of historical hindsight, one might even argue that the Duke's band of "co-mates and brothers" squatting in the woods foreshadows the

"agrarian communism" of the Digger movement that emerged during the Commonwealth era.[48] The Diggers appealed to Genesis to wage an assault on property laws and primogeniture in terms very similar to Shakespeare's play. According to Digger polemicist, Gerrard Winstanley, God created the earth as a primordial commons:

> But since the fall of man there from, which came in by the rising up of covetousness in the heart of mankind . . . one branch of mankind began to lift up himself above another, as Cain lifted up himself and killed his brother Abel: so one branch did kill and steal away the comfortable use of the earth from another, as it is now: the elder brother lives in a continual thievery, stealing the Land from the younger brother.[49]

The opening line of *As You Like It*, "As I remember Adam," not only carries an unmistakable biblical resonance by evoking a former egalitarian age in Eden, but also expresses a younger brother's grievances with his older sibling dispossessing him of his inheritance.[50] The play also features some glimmers of contemporary attitudes regarding the land as a commonwealth. In a debate on satire, Jaques insists that unless someone guilty of the fault he derides is present, then his "taxing like a wild goose flies, / Unclaimed of any man" (2.7.86–87). The simile turns on an early modern game law; unlike deer, a wild goose was not considered part and parcel of a particular park or estate; it belonged, as some thought the wild itself should, to everyone. The debate is then interrupted by the arrival of the famished Orlando. Previously, after his servant Adam informed Orlando of his brother's plan to murder him, the two men flee together into the woods. Like Rosalind and Celia before them, they find themselves overcome with fatigue and hunger. In a society reeling from three successive years of failed harvests, the hardship and starvation they experience would be all too familiar to the rural poor in Shakespeare's day. Orlando's attempt to wrest food from the Duke at sword-point recalls the threats of protesters to reclaim the enclosed land that they felt exacerbated the dearth. With a generosity that must have seemed especially poignant to early audiences, the Duke offers to share his food: "Your gentleness shall force / More than your force move us to gentleness" (2.7.101–102). Through the rhetorical scheme antimetabole, his inverted syntax verbally disarms Orlando and defuses the threat of social inversion posed by the rioters. The play averts bloodshed and imagines a non-violent resolution to the enclosure conflict by recognizing the land as the common treasury of all, or, more accurately, all who can exhibit certain marks of civility:

> If ever you have looked on better days,
> If ever been where bells have knolled to church,
> If ever sat at any good man's feast,
> If ever from your eyelids wiped a tear,

> And know what 'tis to pity, and be pitied,
> Let gentleness my strong enforcement be.
> (2.7.112–116)

As animals do not display such "gentleness," the general understanding that their interests and well-being would not even be an issue for Elizabethans seems valid. But famously in *As You Like It*, an animal does perform one of these feats of humanity. The weeping stag fascinates Shakespeare and his contemporaries because its behavior seems so emotive, so quintessentially human, it undercuts the claims of absolute anthropocentrism. Similarly, Shakespeare's figurative language scrambles the key cultural markers by which humans distinguish themselves from beasts, outfitting the stag in "velvet" and a "leathern coat." Moralizing the spectacle, Jaques sees a herd of well-fed deer trot past and compares them to a crowd of "fat and greasy citizens" turning their back on a bankrupt. In contrast to this callous indifference (a scene perhaps all too common during the years of dearth), the Duke plays the Good Samaritan in inviting Orlando to sit and feed. The scene thus celebrates the mental and verbal faculties (including the power to craft similes) that enable us to empathize with the sufferings of other creatures, to imagine ourselves in their predicament. There is, as Touchstone later states and Orlando's repetitions here demonstrate, "much virtue in if" (5.4.93).

Interestingly, the Duke's munificence had a real life analogue in Elizabethan England. Sometime during the dearth of 1594–1597, a dyer from Shrewsbury named Richard Gardiner reportedly "fed many hundreds of people for three weeks on carrots and 700 close cabbages grown in his four acres of garden land." In 1599, the year in which *As You Like It* was written, the aptly named Gardiner published a book titled *Profitable Instructions for the Manuring, Sowing, and Planting of Kitchin Gardens*. A commendatory poem in the preface commemorates his act of generosity:

> The poor which late were like to pine
> And could not buie them bread
> In greatest time of pennurie
> Were by his labours fed
> And that in reasonable rate.
> When Corn and coine was scant
> With parsnep and carret rootes
> He did supply their want. [51]

Encouraging readers to repeat his agricultural experiment, Gardiner offers ecologically sound advice for increasing crop yields and advocates a vegetarian diet as permitting a more efficient use of land. Tracing a connection between conscientious agriculture and social justice, the gardening manual savors of a distinctly republican ethos. The title page proclaims

the book will be "*Very profitable for the commonwealth, and greatly for the comfort and helpe of poor people.*" The author urges landowners to weigh compassion and civic duty as much as profit in managing their estates.

The outcry against enclosure in Elizabethan England complicates my earlier discussion of Manwood's forestry laws in Chapter 2, exposing the social inequality that his restricted land-use policy underwrites. In this context, poaching the Lord's deer potentially becomes not a symptom of tyranny, but a rebellion against unjust usurpation of the land and its resources that properly belong to the larger, albeit exclusively human, community.[52] However, if the Republic of Nature fostered an abstract belief in a common good across the species, on a practical level such rhetoric could also be used to sanction expanding access to natural resources for the burgeoning middle-class economy. Theoretically, a Republic of Nature conceived of the state's domains as a vast commons managed, as in Richard Gardiner's experiment, for the benefit of the larger community. In reality, as Garrett Hardin's famous model predicts, treating nature as a commons is not exactly an efficient or sustainable environmental policy, as the benefits of self-interested behavior far outweigh the harm diffused among the collective.[53] Unfortunately, simply allowing private individuals and enterprises to manage the land for profit is no guarantee of conservation either. In a clear illustration of the continuity between pastoral and modern environmentalism, the ecological problems confronting industrial civilization can be taken as a "tragedy of the commons" writ large.

A glance at Shakespeare's biography reveals that he stood in the thick of contemporary debates over enclosure. In 1602, he purchased (perhaps with box office receipts from *As You Like It*) 107 acres of Stratford farmland along with "rights of common for livestock in the outlying fields." If Shakespeare was already contemplating purchasing rights of access for commons when he wrote *As You Like It*, it seems likely he would have sympathized with the rioters. Twelve years later, a consortium of affluent local landowners would attempt to enclose these same fields. Shakespeare's name appears first on a list of "Ancient freeholders in the fields of Oldstratford and Welcombe" who opposed the scheme. On October 28 of that year, however, Shakespeare signed a separate peace with Arthur Mainwaring, a leading mover-and-shaker behind the enclosure, who promised he would reimburse Shakespeare for any losses he sustained. From these scanty, somewhat ambiguous documents scholars have assumed that Shakespeare turned his back on the popular resistance to the privatization of public lands.[54] Whether this is a fair interpretation of the facts or not, the portrait of Shakspeare as a selfish, unscrupulous businessman, however valid it may be in some respects, does not mesh with the conclusion of his pastoral comedy composed fifteen years earlier. When the Duke's title and lands are restored, he promises his followers

> Shall share the good of our returned fortune
> According to the measure of their states.
> Meantime, forget this new-fallen dignity
> And fall into our rustic revelry.
>
> (5.4.162–166)

The new society forged in the final scene will still be stratified but not authoritarian, as the Duke pledges to "share the good." The "measure" of social rank is dissolved in the "dancing measures" the wedding guests trod together. In the confines of Shakespeare's Globe at least, the earth can be a commonwealth—even if the rest of the world turns out not to be a stage.

The evidence compiled in this chapter seems to point to a disappointing conclusion: sentiments that appear to be ecological critiques may in fact be veiled expressions of republican ideology. However, it would be misguided to treat these as discrete categories. "Ecology may be political," as Linda Woodbridge shrewdly observes, "but it is not only political."[55] That beliefs we now recognize as green are only imaginable in terms of political rhetoric does not preclude genuine empathy and concern for the interests and well-being of non-human life. As we move closer to the modern era, authors increasingly invoke the Republic of Nature for recognizably environmental purposes. Consider, for instance, a famous passage from one of the most acclaimed eighteenth-century poems, *The Seasons* (c. 1730), where James Thomson attacks the

> steady tyrant man
> Who, with the thoughtless insolence of power
> Inflamed beyond the most infuriate wrath
> Of the worst monster that e'er roamed the waste,
> For sport alone pursues the cruel chase.[56]

A more striking denunciation appears in William Cowper's *The Task* (c. 1785):

> He that hunts
> Or harms them there is guilty of a wrong,
> Disturbs *th'oeconomy of nature's realm*,
> Who, when she form'd, design'd them an abode.[57]

The concern that human self-aggrandizing can disturb the "economy of nature's realm" is a cornerstone of environmental consciousness today. Modern as it sounds, Cowper's observation is more or less a paraphrase of Jaques' lament in *As You Like It*. Humans, of course, are part of this natural economy, and some impact on the environment is unavoidable. But the pastoral, with its emphasis on the primacy and sentience of the natural

world and its uncanny resemblance to human society, can provide a potent reminder to factor in its interests as well: "this wide and universal theatre / Presents more . . . pageants than the scene / Wherein we play" (2.7.136–138). In contrast to the Darwinian narrative of "nature red in tooth and claw" that modern biology imposes on the natural world, the tendency among early modern humanists and pastoral authors to view nature as a fallen republic (like its Roman counterpart) underscored the potential cooperation among the various species, including cooperation between humans and other animals, urging readers to re-think dominion. To re-think dominion entails re-thinking everyday material practices reliant upon the exploitation of animals. For a few early moderns, such philosophic misgivings even began to trespass on a place where human beings had traditionally claimed an unimpeachable prerogative: the kitchen table.

"THE CHAMELEON'S DISH": SHAKESPEARE AND THE OMNIVORE'S DILEMMA

In her classic study, *Shakespeare's Imagery*, Caroline Spurgeon detected a conspicuous spike in unsavory allusions to food, drink, and cooking in *Hamlet* and *Troilus and Cressida*. The protagonists in these two texts are not the only ones afflicted with some kind of metaphysical dyspepsia. Indeed, numerous characters in the plays written between roughly 1599 and 1606 (a period that coincides with Shakespeare's mature tragedies) express revulsion at the thought of greasy food and "morsels unctuous," prompting Spurgeon to conjecture that the thirty-five-year-old playwright had begun to suffer from heartburn, or, more broadly, from some profound psychological disturbance "which translated itself into terms of physical appetite and its disgust."[58] While the word "meat" in early modern parlance can refer to food in general, Spurgeon fails to reflect on the fact that it is animal flesh in particular, usually greasy, rotten, or over-salted, that evokes the most potent feelings of nausea. This chapter will not attempt to unmask Hamlet, Timon, or their creator as crypto-vegetarians (at least not in the modern sense of the word—which did not yet exist), or to diagnose them with any specific medical conditions. However, it will endeavor to illustrate that many of Shakespeare's plays written in the early seventeenth century de-familiarize the custom of meat-eating, and often cite it as evidence in their indictment of human depravity. In ways surprisingly reminiscent of recent environmental writing about dietary ethics, the odd preponderance of meat imagery in *Hamlet* and *Timon of Athens* raises moral qualms about mankind's right to slaughter animals, undermining or repudiating the ethos of dominion promulgated by the Judeo-Christian tradition.

After surveying attitudes toward meat consumption in the early modern period, Joan Fitzpatrick asserts, "a vegetarian diet was generally considered unhealthy, and against divine ordination."[59] However, as Fitzpatrick herself acknowledges, ample evidence also exists indicating that this doctrine was

by no means unassailable. To undercut the supposition that early moderns considered meat essential to good health, one need only point to the celebrated case of Thomas Parr. In 1635, a man claiming to be 152 years old arrived in London in the company of the Earl of Arundel. Paraded around the city, Parr quickly became something of a national celebrity. He met with Charles I, sat for a portrait by Rubens, and was the subject of a verse encomium by the water poet John Taylor, titled (somewhat unimaginatively) *The Old, Old, Very Old Man*. When asked about the secret of his longevity, Parr credited his vegetarian diet and temperate living. Although largely forgotten by cultural historians today, Old Tom Parr was a household name for centuries—Thoreau, an occasional vegetarian, even mentions him in *Walden*. Whether or not Parr may have been mistaken about his actual age (perhaps confusing his birth records with those of his grandfather, as some suspect) his story debunks the notion that early moderns invariably thought of vegetarianism as unhealthy.[60]

Though his story is certainly unique, Parr was not alone in his opinion regarding the medical and spiritual benefits of abstaining from meat. In the sixteenth century, humanist scholars circulated texts by several classical authorities, such as Plutarch and Porphyry, advocating a vegetarian diet. An English translation of Plutarch's "Whether It Be Lawfull to Eat Flesh or No" appeared in 1603 (see Figure 5.2), not long before Shakespeare was presumably reading the historian's brief biography of Timon of Athens in his *Life of Anthony*. Two key incentives Plutarch cites for renouncing meat include an abhorrence of unnecessary suffering and the belief that vegetarianism conforms to the Aristotelian virtue of *sophrosune*, or temperance.

Abstaining from animal flesh is also championed in the *Asclepius*, a Hermetic text beloved by Renaissance humanists such as Ficino and Bruno. The dialogue concludes with the orators adjourning "to a pure meal that includes no living thing" (92). Egyptian priests practiced vegetarianism for centuries, and a knowledge of this custom transmitted via Hermetic texts or by historians such as Plutarch likely inspired Spenser's portrait of the priests at the Temple of Isis, who "mote not taste of fleshly food, / Ne feed on ought the which doth bloud containe" (5.7.10).[61]

Perhaps the most notorious plea on behalf of vegetarianism, familiar to all educated Elizabethans, is Pythagoras's oration in Book 15 of Ovid's *Metamorphosis*:

> And wee that of the world are part (considring how wee bee
> Not only flesh, but also sowles, which may with passage free
> Remove them into every kynd of beast both tame and wyld)
> Let live in saufty honestly with slaughter undefyld
> The bodyes which perchaunce may have the spirits of our brothers
> Our sisters, or our parents, or the spirits of sum others
> Alyed too us eyther by sum freendshippe or sum kin,
> Or at the least the soules of men abiding them within.
> And let us not, Thyesteslyke thus furnish up our boordes

With bloodye bowells. Oh how leawd example he afoordes.
How wickedly prepareth he himself to murther man
That with a cruell knyfe dooth cut the throte of Calf, and can
Unmovably give heering to the lowing of the dam
Or sticke the kid that wayleth lyke the little babe, or eate
The fowle that he himself before had often fed with meate.
What wants of utter wickednesse in working such a feate?
(15.507–523) [62]

The speech concludes with an injunction to "Forbear the flesh, and feede your mouthes with fitter foode therfore" (15.532). While metempsychosis (the transmigration of the soul from human to animal) was condemned as heresy and scoffed at onstage, it should be noted that Pythagoras's argument rests only partially on a belief in reincarnation. The passage begins with a reminder that all living things spring from a common kind, which Ovid's book implicitly endorses with its tales of human transformation into various animals and plants. As Arthur Golding, the Elizabethan translator, commented in his introductory verse epistle: "the oration of Pithagoras implyes / A sum of all the former woorke" (Epistle.288–289). Animals share a common flesh and susceptibility to pain, rendering them eligible for sympathy and moral concern. The radical implications of this doctrine for natural history are spelled out in John Donne's *Progress of the Soul* (see Chapter 1), which toys with the idea of transmigration to question "the sovereignty God supposedly conferred on human beings" over other animals.[63] Pythagoras's speech became a touchstone for early modern vegetarianism. Montaigne quotes from it no less than three times in "Of Cruelty" to voice his misgivings about the ethics of eating meat. Dryden includes a rousing adaptation of it in his *Fables Ancient and Modern* (1700). Its key points are reiterated with a vengeance by John Gay in his fable "Pythagoras and the Countryman" (1726), which links carnivorism and tyranny. And several other eighteenth-century advocates, including Lord Chesterfield (who in turn persuaded James Boswell to join him) traced their "conversion" to an undergraduate encounter with Ovid.[64] The influence of the passage can be gauged by the fact that, until the word "vegetarian" was coined in the 1840s, people who refrained from eating meat were known as Pythagoreans.

The Old Testament covenants with Adam and Noah appear to sanction meat-eating, yet an important and often overlooked fact in early modern environmental history is that the Church periodically required all early modern Christians to practice de facto vegetarianism. Although fasting practices differed widely among various regions and religious communities, a conservative estimate would be that the majority of people in pre-modern England ate only fish, or abstained entirely from meat (and sometimes even dairy products), for nearly seventy days each year: the forty days of Lent, the twelve Ember days, and the eves of the feasts of the twelve Apostles, as well as Ash Wednesday and Whit Sunday. More

Of eating fleſh. 571

WHETHER IT BE LAWFULL TO EAT FLESH OR NO.

The former Oration or Treatiſe.

The Summarie.

ELoquence was highly eſteemed in times paſt among Greeks and Romans, and therefore their children were trained and framed betimes in the ſchooles to diſcourſe well, in good tearmes, and proper phraſes, yea, and with pregnant and ſound reaſons of divers matters; to the end that when they were come to more yeeres, they might make proofe of their ſufficiencie in courts and publike aſſemblies of cities, in private conſultations and familiar conferences, as it appeereth very plainly by the hiſtories of all ages: Now after that yoong children had learned of their ſchoole-maſters the rules and precepts named Progymnaſmata, *or the firſt exerciſes, they were brought into the auditorie of ſome great profeſſor in Rhetoricke; where there were propoſed unto them certaine themes, gathered out of poets, hiſtorians, or philoſophers, upon which they exerciſed their ſtile to write* pro & contra, *in the defence or confutation of this or that opinion, according to the meaſure of their ſpirit and capacitie, more or leſſe: Thoſe who were more forward, and farther proceeded than the reſt, cond by heart that which they had penned, and pronounced the ſame afterward in the preſence of thoſe that came to heare them: Some of them who were growen to a greater meaſure of knowledge, and as it were in the higheſt forme of ſuch exerciſes, were woont to ſtand foorth and anſwer to all queſtions propounded, diſputing and diſcourſing in the praiſe or diſpraiſe of one and the ſame thing, as* Gorgias, Carneades, *and an infinit number of others, are able to make good and verifie. This maner of exerciſe, named Declamations, was practiſed in* Plutarchs *time, as may be collected out of divers places of his works: and as theſe two treatiſes immediatly following do ſufficiently declare, the which are maimed and imperfect at the very beginning, in the mids and toward the end, eſpecially the ſecond: for it may be eaſily ſeene that they are fragments of certeine declamations which he wrote for his owne exerciſe when he was a yoong man. Now albeit they be ſo corrupt and defective in maner all thorowout, yet the remnant which is left unto us, doth ſufficiently diſcover the honeſt occupation and emploiment of learned men in thoſe daies, and the carefull induſtrie that they had to examine & diſcuſſe all things thorowly, to the end that by a diligent conference thereof, the trueth might the better appeare and be knowen. And if otherwhiles they mainteined certeine paradoxes and ſtrange opinions, it was not upon any croſſe and litigious ſpirit to defend obſtinately all that came into their fantaſticall braine; but for to augment and encreaſe in themſelves an earneſt deſire to apprehend and underſtand things better: And howſoever our author ſeemeth to be of minde for to defend the opinion of* Pythagoras, *as touching the tranſmigration of ſoules, and the prohibition to eate fleſh; yet by other treatiſes written with more deliberate, mature and ſtaid judgement, he giveth us to underſtand that he is of a contrarie opinion; but his principall ſcope that he ſhooteth at, ſeemeth to be a cutting off and abridging of the great exceſſe and ſuperfluitie in purveying, buying, and ſpending of viands, which in his time began to grow out of all meaſure; a diſorder and inormitie which afterwards encreaſed much more. For to gaine and compaſſe this point, hee would ſeeme to perſwade men to the opinion of* Pythagoras, *which mightily cutteth the wings of all riot and waſtfull diſſolution. Moreover, this ought not to be taken ſo, as if it favoured and ſeconded the errour of certeine fantaſticall perſons, who have condemned the uſe of Gods good creatures: for in the ſchoole of* Chriſt *wee are taught good leſſons, which refute ſufficiently the dreames of the Pythagoreans, and reſolve aſſuredly the good conſcience of all thoſe that make uſe of all creatures (meet for the ſuſtentation of this life) ſoberly and with thankſgiving, as knowing them to be good, and their uſe cleane and pure unto thoſe*

whom

Figure 5.3 Title page, from Plutarch, "Whether It Be Lawful to Eat Flesh or No," *The Philosophie, commonlie called, The Morals*. By permission of the Folger Shakespeare Library.

fastidious observers (not to mention the legions of those too poor to afford it) may even have gone without red meat and poultry for nearly half their meals each year. Before 1550, Church policies enjoined the faithful to abstain from beef, chicken, or pork twice a week, on Wednesdays and Fridays, in addition to the aforementioned holy days; the number of "fish days" increased to three per week after 1563 (perhaps in part to subsidize the fishing industry).[65] Keeping this forgotten bit of culinary history in mind, the pastoral banquet scene in Milton's *Paradise Regained* takes on a new significance:

> A Table richly spread, in regal mode,
> With dishes pil'd, and meats of noblest sort
> And savor, Beasts of chase, or Fowl of game,
> In pastry built, or from the spit, or boil'd
> Grisamber steam'd.
>
> (2.340–345)

In a conscious reprisal of Eve's temptation, Satan reminds Christ that "these are not Fruits forbidden; no interdict / Defends the touching of these viands pure" (2.369–370).

Figure 5.3 Peter Paul Rubens, *Pythagoras Advocating Vegetarianism*. The models' corpulent bodies, for which Rubens is notorious, offer further proof that not all early moderns considered a vegetable diet to be unhealthy. The Royal Collection © 2008, Her Majesty Queen Elizabeth II.

Satan's logic here sounds strangely similar to that of Augustine, who defends meat-eating in the *Confessions* as sanctioned by God. In a bid to disarm the Manichee sect who thought the Christians should adopt vegetarianism, Augustine refers to the Book of Matthew where "Our King was tempted to eat not meat but bread" (206). Milton departs from Augustine and scripture by introducing this new scenario. In the standard account of the poem, Barbara Lewalski identifies the pastoral banquet simply as heightening the appeal of gluttony in the initial temptation, while ignoring the obvious difference: the food in the second temptation consists of the flesh of slaughtered animals.[66]

Although many Puritans condemned the "superstitious and Pharsaicall manner of fasting" prescribed by the Catholic Church, even Cromwell's Parliaments continued to institute days of public fasting.[67] It therefore seems a safe assumption that Milton's own personal experience of abstaining from meat likely informs this scene in *Paradise Regained*. The celebration of Lent dates back at least to the Nicene Council in the fourth century, when the Church mandated forty days of penance; the number forty was consciously chosen so that the experience would simulate the biblical story that is subject of Milton's brief epic: Christ's forty days in the wilderness. Today many Catholics still refrain from eating meat on Fridays during Lent. In the medieval and early modern eras however, Christians were expected to abstain from eating beef and poultry for the entire forty days. Elizabeth I and James I issued royal proclamations "For the Restraint of Killing and Eating of Flesh" on an almost annual basis, which regulated the meat industry in accordance with official Church policy. The Proclamation of 1589 restricts the number of butchers in the entire London metropolitan area to only four, who were "bound in the summe of one hundred pounds to her maiestie, to sell no flesh in the time of Lent" without a special dispensation.[68] Even considering the city's population was only around 200,000, this is an astonishingly low number, indicative of just how many Londoners took part in this religious observance. No doubt there was some corruption and a flourishing black market trade in meat, as described in Thomas Middleton's comedy *A Chaste Maid in Cheapside* (c. 1613). But rather than ridicule this religious custom, Middleton pokes fun at the corrupt "promoters" who confiscate the food only to sell and consume it themselves.

THE DIETARY REVOLUTION

Medical and religious beliefs were not the only factors shaping people's attitudes toward their culinary habits. In the sixteenth century, England experienced what agricultural historian Joan Thirsk has termed a "Dietary Revolution."[69] During the Middle Ages, aristocrats and merchants gorged themselves on beef and venison, while turning up their noses at vegetables as peasant food. However, following the reign of Henry VIII greenstuffs

and fruits gradually became more fashionable, and consumption rates for these foods rose sharply during Shakespeare's lifetime, while meat consumption witnessed a corresponding decline. Certainly, many early modern Englishmen took pride in their nation's reputation for hearty beef-eating, linking it with virility. Yet by the end of the sixteenth century, red meat was no longer considered quite so *à la mode*. Ever-vigilant for symptoms of cultural decline, the Puritan polemicist, Phillip Stubbes, noted that in his father's time "a good piece of beef was thought then good meat, and able for the best, but now it is thought too gross: for their tender stomachs are not able to digest such crude and harsh meats" (I1r). In contrast, Drayton praises the Dutch diet, "On Roots and Pulse that Feed, on Beefe and Mutton spare / So frugally they live, not gluttons as we are" (2.39). He follows these lines with an ode to England's edible vegetables. Poultry, pork, and fish replaced beef on many tables, but there also seems to have been a noticeable turn toward a Mediterranean-style diet high in greenstuffs and complex carbohydrates. In other words, while a vegetarian diet was involuntary or economically compulsory for the majority of the poor, it was also becoming, thanks to the larger variety of crops being cultivated and the rising reputation of vegetables, increasingly appetizing.[70]

Contrary to widespread assumptions, then, vegetarianism is by no means an exclusively modern, post-industrial sentiment, and Pythagoreans do appear in several works of Elizabethan literature. In addition to the priest at the Temple of Isis in Spenser's *Faerie Queene*, the Wild Man who rescues Serena in Book 6 "Ne fed on flesh, ne euer of wyld beast / Did taste the bloud, obaying natures first beheast" (6.6.14). Although the fact has not garnered much notice from critics, at least three of Shakespeare's plays depict vegetarian meals: *As You Like It*, *The Winter's Tale*, and *Timon of Athens*. After vetting the first two texts, Fitzpatrick concludes that they undermine the orthodox views sanctioning the consumption of meat.[71] Curiously, she fails to mention *Timon of Athens* in this context, although it is clear that the cynic Apemantus voluntarily subsists on a diet of root vegetables. The word "meat" is repeated eleven times in the play; sometimes it refers to any food in general, but often it specifically designates animal flesh. Repulsed by the conspicuous consumption occurring at Timon's feast, Apemantus tells his host "I scorn thy meat" and concludes his sardonic grace by announcing: "Rich men sin and I eat root" (1.2.37, 70). As an outspoken critic of aristocratic decadence, Apemantus's fondness for roots recalls that of Elizabethan horticulturalist Richard Gardiner, who argued that wealthy landowners should grow more "garden stuffe," such as carrots, since they use the land more efficiently and can feed the hungry during times of dearth.[72] After his meat-laden banquet in the opening act, Timon eventually apes Apemantus's vegetarian regimen during his exile in the forest. In Act 4, Timon urges a band of thieves to renounce their pilfering and convert to a vegetarian diet:

Why should you want? Behold, the earth hath roots.
Within this mile break forth a hundred springs.
The oaks bear mast, the briars scarlet hips.
The bounteous housewife nature on each bush
Lays her full mess before you. Want? Why want?
(4.3.410–414)

Unimpressed, the First Thief dismisses his rant: "We cannot live on grass, on berries, water, / As beasts and birds and fishes" (4.3.415–416). Hinting at an affinity between meat-eating and cannibalism (one that also crops up in Spenser and may have been exacerbated by Protestant parodies of the Eucharist), Timon retorts, "Nor on the beasts themselves, the birds and fishes; / You must eat men" (4.3.417–418).

Rather than consider vegetarianism unhealthy, characters in Shakespeare often repeat the popular contemporary belief that a diet high in beef could dull the intellect (a vestige of which survives in the insult "meathead"). In *Troilus and Cressida*, Thersites taunts the oafish Ajax by calling him "beef-witted" (2.1.12). In *Henry V*, the Duke of Orleans calls the English soldiers "fat-brained," presumably because they devour "great meals of beef" (3.7.121, 135). Sir Andrew Aguecheek in *Twelfth Night* offers a similar diagnosis for the cause of his idiocy: "Methinks sometimes I have no more wit than a Christian or ordinary man has; but I am a great eater of beef and I believe that does harm to my wit"(1.3.71–73). When Toby seconds this opinion, Andrew replies, "An' I thought that, I'd forswear it" (1.3.75).[73] Around the time he composed these three texts in which meat is associated with mental torpor, and shortly after he finished *As You Like It* (1599), Shakespeare wrote another play featuring a melancholy and undeniably cerebral character that has a strange obsession with livestock, butchery, and the flesh of dead animals.

HAMLET'S FAST

The very first line of Hamlet's first soliloquy contains a notorious textual crux: following the 1623 Folio, most editors print, "O that this too too solid flesh would melt" (1.2.129), in lieu of the reading found in both Q1 and Q2 (generally considered the most authoritative version): "too too *sallied* flesh." Some editions, such as the recent two-volume Arden text, retain "sallied" but gloss it as "assailed, or besieged." Regardless of what Shakespeare actually wrote (assuming he did not revise earlier drafts), the editorial preference for "solid" has tended to obscure the significance of "sallied," which by hinting that Hamlet's face has been wetted with salt tears, sets up a connection in the play between the human flesh and meat. The image of salted flesh also anticipates his reference a few lines later to the "funeral baked meats / [that] did coldly furnish forth the marriage tables" (1.2.179–180). In an age before

refrigeration, unconsumed meat left, like Hamlet, "too much i'the sun" would quickly spoil. Leftover meat was therefore smothered with salt as a preservative. Preservation was also aided by ensconcing the meat in piecrusts, or pasties, referred to as "coffins" (cf. *Titus Andronicus* 5.3.187). Since the meat inside was reconstituted (de-boned, mixed with seasonings, and placed back inside its skin), the bereaved Prince would have an even stronger motive for eschewing it. As Robert Appelbaum has brilliantly argued in his recent study of early modern gastronomy, to serve such a dish at a funeral would carry with it a disturbing "underimage of interment, disinterment, and embalmment."[74] The tone of the Prince's remark conveys disgust with these baked meats, and it seems reasonable to assume that he did not partake of them at the royal reception.

So what, then, did Hamlet eat? At first glance this question may seem a rather absurd instance of the Bradleian fallacy of treating fictional characters as living human beings, long ago relegated to the dust-bin of criticism by L.C. Knights in his overview of the vain attempts to number Lady Macbeth's progeny. While admitting there is no clear-cut answer to this query, posing it will nevertheless illuminate a dimension of *Hamlet* that has been overlooked in the groaning shelves of scholarship devoted to the tragedy. For many early moderns, as for the environmentally conscious today, food was very much a moral issue, and it should not be surprising that a play rife with uncertainty about humanity's niche in the cosmos would also subject human dominion over "brute creation" to intense scrutiny. Critics have long acknowledged the radical skepticism that pervades Shakespearean tragedy; Hamlet in particular interrogates and rails against all engrained habits and "that monster custom, who all sense doth eat" (3.4.152). While Hamlet literally means that custom often overrules common sense, this strange personification of custom as a ravenous monster that devours sense may also point to something monstrous about dietary habits, and the way that society can condition people to eat things they normally, as individuals, would not consider edible. Was meat-eating another custom Hamlet felt to be more honored in the breach?

Belleforest's prose narrative appears to confirm the suspicion:

> And as the messengers sate at the table with the King, subtile Hamlet was so far from being merry with them, that he would not taste one bit of meate, bread, nor cup of beare whatsoever . . . rejecting them as things filthy, evill of tast, and worse prepared.[75]

In most cultures throughout the world, sharing a meal is a way of affirming familial and communal bonds. Refusing to sit at the table beside Claudius, then, may simply be a way of renouncing kinship. Nevertheless, Belleforest's Hamlet shows a particular abhorrence of meat. When the King and courtiers take umbrage at the Prince's behavior, the text suddenly erupts into the first-person:

> What, think you, that I wil eat bread dipt in humane blood, and defile my throat with the rust of yron, and use that meat that stinketh and savoureth of mans flesh, already putrified and corrupted, and that senteth like the savour of dead carryon, long since cast into a vault?" (235–237)

In Belleforest's *Hystorie*, this remarkable outburst (one of the few moments in which we hear Hamlet's voice directly) possesses something of the rhetorical charge of Shakespeare's first soliloquy. Paid oblique homage in Hamlet's passing references to baked meats, sallied flesh, and carrion, the radical disgust with carnivorism in Belleforest is an under-recognized force propelling the tragedy's metaphysical flights.

Apart from wishing to boycott the wedding feast, Hamlet, like Jaques, may have avoided the baked meat for health reasons since it was, according to Burton, deemed "unfit for such as lead a resty life, anyways inclined to melancholy" (1:219). As a scholar who has "forgone all custom of exercise," Hamlet would certainly fit this description. A vegetarian diet was also thought to reduce aggression, as evident in *Taming of the Shrew* when Petruccio avers that burned, dried meat "engenders choler, planteth anger" (4.1.152). Hamlet's accusation that his liver "lacks gall," or the yellow bile, which a diet high in meat was thought to produce, may be another hint that a meatless diet has contributed to his failure to act.

Although in fierce fits of passion Hamlet contemplates drinking hot blood and dares Laertes to eat a crocodile, these lines are simply hyperbole. A more reliable clue to his diet might be inferred from his snarky banter before the Mousetrap when Claudius asks him: "How fares our cousin Hamlet?" Punning on the alternate sense of "fare" as in "to be entertained with food," Hamlet replies, "Excellent, i'faith, of the chameleon's dish. I eat the air, promise-crammed. You cannot feed capons so" (3.2.84–86). Hamlet's wisecrack hinges on the belief authorized by natural historians like Pliny that chameleons could draw nourishment from the air (cf. *Two Gentlemen of Verona*, 2.1.155). Reports of people who claimed to have survived for months, even years, without eating anything do appear in contemporary collections of natural marvels.[76] His claim to eat air, generally read a pun on "heir," or simply a symptom of the Prince's madness, is very likely a reminder that Hamlet has been fasting. Fasting, which could mean simply abstaining from meat, was also considered a sign of grieving in the early modern era, thereby indicating that Hamlet remains in mourning for his father. Polonius, in fact, informs Claudius and Gertrude that Hamlet "fell into a sadness, then into a fast" (2.2.147). Obscured by Polonius's buffoonish pedantry, this vital bit of biographical information about Hamlet has largely gone unnoticed by critics. In the "Murder of Gonzago," the Player Queen announces she intends to fast when she becomes a widow—"No earth to me give food" (3.2.198)—a decision Hamlet applauds in hope of catching Gertrude's conscience. Hamlet later denounces "the fatness of these pursy times" (3.4.144)

to his mother, perhaps conveying his disapproval of the feasting at Elsinore in what should be a period of fasting or abstemiousness. While some Protestant Reformers criticized the collective fasting stipulated by the old calendar as a meaningless external observance, many continued to sanction solitary fasting as an unpremeditated expression of personal grief. Hamlet's insistence on the authenticity of his "forms, moods, shapes of grief" would also apply to a personal, commemorative fast.[77] Feasibly, the final phrase, "shapes of grief" (another reading from Q2 often emended to "shows" by modern editors), could even glance at the lean figure resulting from a meager diet. Given this obsession with fasting, Hamlet's mysterious "within that passeth show"—the subject of so much critical rumination—may conceal not only a new gestational stage in modern subjectivity, but also an empty stomach. Indeed, the two are perhaps more closely linked than one would suspect at first blush. In drawing out the distinction between a public and private fast, Protestant divines such as Thomas Becon repeatedly appeal to interiority as the focal point of the experience. In Reformation England, fasting becomes less of an exercise in affirming communal bonds through shared sacrifice and more a means of cultivating an inner spiritual fortitude. In his 1551 treatise, Becon defines fasting as a "forbearing of meats, drinks and other pleasures in which the outward man delighteth." According to Becon, a genuine fast requires a spontaneous renunciation in response to one's own spiritual condition at the moment, rather than a rote custom done according to a timetable dictated by the Church. Although scriptural warrants for fasting exist, Becon is quick point out that they occurred only when "out of a mourning and soroweful heart dyd sprynge outward . . . unfayened tokens of sorowe and mourning." Hamlet's private fast thus emphasizes his alienation from the court and underscores his Protestant-inflected nourishing of the "inward man."[78] Significantly, for my purposes, it is also symptomatic of early modern alienation from the natural world. The date of Lent coincides with periods of scarcity in late winter. Like the Rogation festivals described in Chapter 3 (during which parishes often fasted), corporate fasting not only solidified religious identity, but also synchronized early Christians to the rhythms of nature. As Carol Walker Bynum has remarked, for pre-moderns, to fast was "to join with the vulnerability to famine that threatened all living things."[79] Hamlet's fast thus marks a moment of rupture, which altered a centuries-old, religiously sanctioned strategy for moderating consumption in response to scarcity. Indicative of the Protestant assault on communal fasting, Hamlet's fast signals the early modern subject's growing detachment from the organic cycle of the seasons. The time is out of joint, indeed.

"SLAVE'S OFFAL": HAMLET AS FAILED BUTCHER

An aversion to meat would also help account for the further tendency in Hamlet's imagery to cluster around (expanding Spurgeon's category) animal husbandry and butchery. For instance, his comment "you cannot feed

capons so" alludes to the inhumane methods used to fatten castrated chickens, known as cramming (3.2.86). As Joan Thirsk explains,

> Capons were crammed with barley, wheatened bran, and warm ale or beer, or if economy dictated, were given seeds of cockle (Lychnis) and leaves and seeds of meliot (a sweet clover).[80]

Understanding this agricultural practice sheds light on another murky development in the play. As Hamlet ponders murdering his uncle in 3.3, he finds himself unable to deliver the death-blow, reasoning that Claudius's prayers have rendered him "fit and seasoned for his passage" (3.3.86). Despite the boatloads of ink spilled on Hamlet's fatal delay here, none, to my knowledge, has noted that he imagines Claudius as livestock about to be unsuspectingly slaughtered. Hamlet's reluctance in this scene could in part be explained, as his own comments insinuate, as a backlash against the manner of his father's murder. The Ghost informs Hamlet he died from a poison "hebenon," which is possibly a corruption of the plant henbane, or *hyoscyamus niger.*[81] Ingested in large quantities, henbane is lethal and, as its name implies, was used to kill poultry. In his compendium of scientific/homeopathic experiments, Thomas Hill offers tips on how to kill hens and ducks: "cast to them the seed of henbane and thei will fall downe as thei were dead."[82] In small quantities henbane can have a soporific effect and was sometimes mixed into forage and fodder with the idea that "the tendency to stupor and repose caused by these plants is conducive to fattening."[83] When Hamlet agonizes over the fact his father was killed "grossly full of bread," he pictures him as a capon crammed with wheat-bran and then given henbane (3.3.81).[84]

If, as Edward Berry has recently illustrated, the hunt begins to provoke discomfort in early modern England, the same "structure of feeling" also raised questions about the propriety of meat-eating as well.[85] In *As You Like It* (written shortly before *Hamlet*), Adam warns Orlando that his brother's house is "but a butchery: / Abhor it" (2.3.28–29). Given this play's questioning of the hunt, it is not coincidental that during the pastoral banquet in 2.7, Orlando specifically refers to the food as "fruit" (2.7.98). Shakespeare could have written "meat" and preserved the iambic pentameter. With this single word, he nudges audience members to infer that the Duke and his men are eating a vegetarian meal (a point Kenneth Branagh drives home in his recent film adaptation of the play). Jaques' unflattering portrait of the justice and his "round belly with good capon lined" (2.7.153) casts further aspersions on meat-eating. Despite the reference to offstage hunting, the vegetarian feast in the forest emphasizes the Edenic nature of Arden, and signals the play's movement toward a harmonious co-existence both among the social classes and the other inhabitants of the non-human environment.

Images of animal slaughter punctuate several of Shakespeare's works, including *Julius Caesar*, when Brutus cautions, "Let us be sacrificers, but not butchers Caius" (2.1.166); Mark Antony's anguished cry, however,

foils the conspirators' attempt at image management: "Pardon me, thou bleeding piece of earth / That I am meek and gentle with these butchers" (3.1.257–258). In *The Merry Wives of Windsor*, meanwhile, Falstaff compares himself to a "barrow of butcher's offal" dumped in the Thames. While Falstaff's speech is comic, animal slaughter also provides one of the most poignant epic similes in all of Shakespeare:

> And as the butcher takes away the calf,
> And binds the wretch, and beats it when it strains,
> Bearing it to the bloody slaughterhouse,
> Even so remorseless have they borne him hence;
> And as the dam runs lowing up and down,
> Looking the way her harmless young one went
> And can do naught but wail her darling's loss;
> Even so myself bewails good Gloucester's case.
> (*2 Henry 6* 3.1.210–217)

The affective power of Henry VI's speech depends on the audience's familiarity with such sights in the city shambles, a spectacle from which the methods of industrial farming insulate most urban-dwellers today. Early moderns, in other words, were much closer to the meat industry than moderns, and rather than de-sensitizing them to the violence, the shambles were a constant reminder of the bloodshed required to put beef upon their plate. Although not a vegetarian himself, the sixteenth-century Protestant martyrologist John Foxe admitted "such is my disposition that I can scarce pass the shambles where beasts are slaughtered, but that my mind recoils with a feeling of pain."[86]

Working up the temerity to kill Claudius in cold blood, Hamlet tries to think of himself as a butcher—"I should a fatted all the region kites / with this slave's offal"—but during the confession scene he proves unable to assume the persona (2.2.556). His reluctance to identify himself with what someone of his rank would consider a distasteful profession leads to his inability to avenge his father. This moment highlights one of the key differences between Hamlet and Macbeth, who murders the sleeping Duncan and is branded a "butcher" at the conclusion of his tragedy (5.11.35). Hamlet also thinks of murder as butchery during his banter with Polonius regarding Brutus's assassination of Julius Caesar: "'Twas a brute part of him to kill so capital a calf" (3.2.95). More than foreshadowing of the murder behind the arras, the jest conveys repugnance for the butcher's trade.

SHAKESPEARE THE BUTCHER REVISITED: POLONIUS AND THE KILLING OF THE CALF

The recurring imagery of animal butchery in Shakespeare seems appropriate given the first biographical tidbit ever recorded about the playwright. In his anthology of celebrity gossip, John Aubrey reports

> his father was a Butcher, & I have been told heretofore by some of the neighbors, that when he was a boy he exercised his fathers Trade, but when he kill'd a Calfe, he would do it in a high style, & make a Speech.[87]

Long dismissed as a "patently ludicrous anecdote" by Shakespearean biographers, Katherine Duncan-Jones has recently outlined some compelling reasons for re-opening the case-file.[88] First, John Shakespeare was a whittawer, or dealer in leather goods, and while health regulations prohibited him from slaughtering animals on his property, he would have received his skins from, and thus been a business partner with, the town butcher. Civic documents in fact reveal that the playwright's father served as a constable with, and did some bookkeeping for, a William Tyler, who ran a slaughterhouse on Sheep Street. Since we now know that John Shakespeare violated trade laws by engaging in wool-brogging, it is not impossible that he may have violated legal codes forbidding the slaughter of animals on his land.[89]

There is even contemporary evidence indicating that a past connection with butchery followed Shakespeare to London. In the preface to Greene's *Menaphon* (c. 1589), Thomas Nashe hurls some disparaging quips at upstart, non-university-educated playwrights, who presume they can compete on the public stage with their "killcow conceits."[90] Although most scholars date Shakespeare's arrival in London around 1590, the timeline remains anybody's guess, and this allusion could feasibly refer to the glover's son from Stratford. Reluctant to imagine the young Bard bloodying his hands in such a distasteful trade, modern biographers have speculated that Aubrey's anecdote preserves a garbled recollection of Shakespeare's participating in the Christmas mumming play, known as the killing of the calf.[91] Since whittawers and butchers collaborated on guild plays in the nearby town of Coventry, it is not implausible that the young Shakespeare may have taken a role in such productions. The suggestion is an intriguing one and there is, I believe, textual evidence that Shakespeare was at least aware of this folk drama.

Records of this mumming play, though scarce, do survive. In December 1521 a calf-killing show was performed before Henry VIII's daughter, Princess Mary; court records log a payment "to a man at Wyndesore for kylling a calfe before my ladys grace behynde a clothe."[92] In some parts of England these civic skits continued up until the early twentieth century, and modern accounts flesh out, as it were, the Tudor ledger. No animals were actually killed. Rather the performers, often children, concealed themselves behind a screen where they wielded a pair of horns, a basin of blood, and some raucous sound effects to create the illusion of slaughtering a calf. To Shakespeare's audience, the murder of Polonius—who has just been compared to a calf in the previous scene—behind the arras would recall this peculiar folk-play. The link becomes more probable given that Shakespeare here departed from his sources; Saxo's counselor hides in the straw of the Queen's bed, while Belleforest's conceals himself beneath a "loudier," or bedspread.[93] Shakespeare, assuming he did not

adopt a revision made by Kyd, shifts Polonius behind the arras so that his murder will evoke the mumming play of the killing of the calf behind the curtain which he himself—if we accept this interpretation of Aubrey's story—participated in as a youth. The association with the mumming may imply that during early performances at the Globe, Polonius's slaying would trigger a frisson of recognition from the audience, who would have to ponder the inter-changeability of man and animal.

Even if Aubrey's anecdote is spurious, the idea that Shakespeare would kill a calf "in a high style" (i.e., a tragic register) can be salvaged as a valid piece of literary criticism, reflecting an awareness of how his plays imaginatively blur the boundaries separating, in this case, the bovine and the human. To treat a calf as Caesar or vice versa, even in jest, points toward a correspondence across species that René Girard perceives as common among agrarian societies that practice animal sacrifice.[94] The intent may be not so much to ennoble calves as to de-humanize Polonius (Hamlet even refers to him as a "rat" before delivering the death-blow), but the upshot remains the same: the gap between humans and animals is much narrower than is dreamed of in our philosophy.

The collapse of the ontological divide between beast and human emerges even more clearly in Hamlet's treatment of Polonius's corpse. In Belleforest's *Hystorie*, the Prince throws the dismembered body down the privy "so it might serve for foode to the hogges" (207). Although Shakespeare omits this grisly detail, his revision asserts in effect that the same fate will befall all bodies, even those respectfully interred in the earth.

> *King Claudius:* Now, Hamlet, where's Polonius?
> *Hamlet:* At supper.
> *King Claudius:* At supper? Where?
> *Hamlet:* Not where he eats but where he is eaten. A certain convocation of politic worms are e'en at him. Your worm is your only emperor for diet. We fat all creatures else to fat us, and we fat ourselves for maggots.
> (4.3.20–23)

From presiding over a carnivorous banquet in Act 1, the portly Claudius is forced to consider himself a dish being fattened for a necrophagic feast. In illustrating "how a king may go a progress through the guts of a beggar" (4.3.30), Hamlet presents a twist on the Pythagorean notion that meat is mysteriously contaminated by its promiscuous odyssey through the food chain.[95] Hamlet's morbid ecology is also very much aligned with ecocriticism in its rebuke to anthropocentric assumptions promoted by Christian theology. Of all the creatures on God's green earth, man alone, it was believed, possessed an immortal soul and would be resurrected in bodily form, a point reaffirmed in the funeral services in the Anglican Book of Common Prayer. After questioning the conventional Church dogma regarding the afterlife,

Hamlet soberly concludes that human beings are in fact more animal than angel.

To return to the issue of Hamlet's diet, most of the key incentives motivating vegetarians today—a desire to avoid gratuitous suffering, health concerns, even efficient land-use and reducing hunger—were already circulating in sixteenth-century Europe; Leonardo da Vinci, often upheld as the quintessential Renaissance man, was also a devout Pythagorean. Yet a glaring caveat remains to be addressed: it seems Hamlet does not want to eschew only meat, but all forms of food. Rather than express compassion for animals, his fast primarily signifies a wish to somehow transcend or exempt himself from the biological cycle of growth and decay, and the resultant putrefaction at which his gorge later rises. Like Kafka's Hunger Artist, who sets his cage alongside a menagerie, Hamlet not only grasps the strangely performative nature of the fast but also creates a sense of his metaphysical striving by juxtaposing it with the animal condition:

> What is a man
> If the chief good and market of his time
> Be but to sleep and feed?—A beast, no more.
> (4.4.23–25)

His speeches manifest disgust with feeding and, by extension, with carnality itself; he is notoriously repulsed by his mother's sexuality, which leads him to perceive her bed as a "nasty sty." To put an ecological twist on Janet Adelman's psychoanalytic reading of food in *Coriolanus*, the male protagonist's disgust with eating registers the masculine ego's bristling at its fundamental dependence not just on the mother, but on mother Earth.[96] Yet if Hamlet seems irked by this dependence at first, the play gradually rejects the fantasy of a transcendent subjectivity, as the graveyard scene arrives at a stoic acceptance of carnality.

Certainly Hamlet's philosophy is very different from the humanism often smeared as a target of ecocritical abuse.[97] Long upheld as a *locus classicus* of Renaissance humanism, the Prince's famed monologue, "O what a piece of work is a man," culminates with the grim assertion that this work is ultimately no more than dust. As the play progresses, even dust is shown to be a poetic euphemism for the nauseating reality of physiological decay. Hamlet's curious considering upon mortality leads to an emphatic recognition of the human body as nothing more than a temporarily animated hunk of meat. Recall the lyrics of the grave-digger's song: "O, a pit of clay for to be made / For such a guest is meet" (5.1.88–89). He repeats the refrain twenty lines later, hammering home the pun: "Meet" means apt, fitting, but also meat, dead flesh. Hamlet's fantasy that even Julius Caesar decays into anonymity in the earth reveals that the play also participates in the pro-republican critique of absolutism.[98] "Here's fine revolution, an we had

the trick to see't" (5.1.83). Although Hamlet reaches for a political term here, the thrust of the critique is not primarily political; instead Hamlet appropriates the word "revolution" to imagine death as the restoration of a Republic of Nature unifying all creatures in the grave. Rather than a poetic testament of the metaphysical grandeur of man, *Hamlet* is often critical of existential hubris and eager to expose human dominion as illusory.

To sum up, Hamlet confronts us with an insoluble paradox; he has a keen empathy for animal suffering and likely avoids animal eating animal flesh, yet does so in part because he wishes to escape from his own flesh, to dissociate himself from his carnal nature; he is awed by the unrivalled dignity and mental prowess of human beings, yet acutely conscious that humans are biologically akin to beasts, locked in the same cycle of birth, growth, decay which nullifies any pretensions to supremacy. He reduces his consumption through fasting, yet his individual Protestant fast departs from the collective Lenten fast of Catholic tradition, which was synchronized with a period of scarcity. He anticipates the Cartesian *res cogitans* and its withdrawal from its environment but also experiences both Cartesian and Copernican doubt that undermines the assumption that mankind occupies the zenith of creation. He is therefore a quintessential specimen of the conflicted, contorted attitudes of modern Western civilization toward non-human nature—that, with apologies to Orwell, all animals are equal but some are more equal than others.

This discussion may strike some people as merely the latest attempt to remold Hamlet in our image; since every generation from Goethe to Joyce, Coleridge to Greenblatt, have done so, it seems naive to assume we can avoid this completely. Hamlet's anxiety about what to eat or not to eat, although different in some ways from current environmental soul-searching on this subject, is a tribute to the phenomenal, virtually life-like complexity of the character, and the play's seemingly inexhaustible capacity to absorb and reflect upon the various ethical conundrums of ensuing generations of readers.

Conclusion
Ecocriticism as Version of the Pastoral

In his speech from *The Metamorphosis* (examined in the first and final chapter of this book), Pythagoras proselytizes for vegetarianism and then lectures for 400 lines on his doctrines of mutability, the animistic universe, and the animal soul, before reiterating his plea to treat animals with compassion. The second plea, given what has come before it, resonates with even greater poignancy. If I have executed the design properly, the sequence of the chapters in this book will have a similar rhetorical force. Reconstructing the intellectual framework through which early modern authors viewed the biophysical world, the opening chapter foregrounds the status of Nature as an inter-locking system of correspondences and a holistic, quasi-sentient entity with a colossal authority over all organic life, including the lives of human beings (monarchs not excepted). Two and a half millennia ago, Pythagoras pioneered what we now recognize as a kind of ecosystemic philosophy that enabled early modern thinkers to erode certain dichotomies between subject and object, human and animal, spirit and matter, God and Nature. From this conceptual trunk, subsequent chapters branched out into the material conditions and cultural practices that impacted the ecology of early modern England. The timber shortage documented in Chapter 2 leads to the explosion of the coal industry outlined in Chapter 4. Chapter 3's assessment of the perennial anxiety about food scarcity, exacerbated by the era's climatic instability, provides the historical backdrop for Chapter 4's appraisal of the cultivation of temperance as an ecological virtue. The opening chapter's overview of the intelligence and spirit which Pythagorean-Platonic philosophy credited to the natural world resurfaces in the final chapter's investigation into the pre-history of animal rights.

In formulating and writing these essays, I have sought to keep the concerns of two audiences in mind: (1) early modernists who are either unacquainted with ecocritical theory or perhaps skeptical about its applicability to their field, and (2) ecocritics who may not be especially well versed in sixteenth- and seventeenth-century literary culture. While undertaking this task, I aimed to pry a few bricks out of the disciplinary wall that has kept scholars on one side from speaking to those on the other. To do so, I have had to take a rhetorical mallet to certain commonplaces and assumptions made

by both camps. In particular, the preceding chapters have deliberately sought to qualify and cavil with narratives that tend to categorically dismiss the early modern era as, at best, indifferent to the natural world or, at worse, overtly malicious. The environmental movement did not emerge spontaneously from the American counter-culture of the 1960s. The stark reality is that people have been degrading and exploiting the environment for centuries and debating, at a fluctuating volume perhaps, the ethics of doing so ever since. *Gilgamesh*, probably the earliest surviving literary work, describes a hero's quest to conquer a forest spirit. Hesiod and Ovid's mytho-historiography betokens an awareness of environmental decline that resulted from, respectively, the agricultural revolution and the depredations of the imperial Roman economy that totally altered the landscape of the Ancient Mediterranean World.

One reason why early modernists have been reluctant to embrace literary ecology (and vice versa) is that Elizabethan authors lacked the vocabulary to think with the same sophistication about the non-human. The word "environment," for instance, does not enter the English language until 1603, and even then it means "the action of surrounding, the state of being surrounded," rather than the biophysical world per se—a meaning that only comes into its own in the mid-nineteenth century. If early moderns could not reach for a term like "biocentrism," they, nevertheless, had other words and concepts at their beck that we cannot wield today. When Titus Andronicus speaks of being "environed with a wilderness of sea" (3.1.94), the verb imbues nature with a potent and terrifying agency. What happens to the word "environment" when we think of it as a verb, a process, an encompassing of the human within the non-human, as opposed to a picturesque green haven "over there" where humans do not belong? One of the particular merits of an early modern ecostudies is that it allows for surprising insights and perspectives that are, I think, inaccessible to ecocriticism that has largely tethered itself to twentieth-century poetry and Nature writing. In contrast to the post-Cartesian view of the self as an impregnable, disembodied *res cogitans*, humoral theory, for instance, entails an understanding of the body and temperament as conditioned by its environment. For this reason, the lightning-quick conversions of Oliver and the "humorous" Duke Frederick in *As You Like It* would seem less abrupt to Elizabethans. The very air in Arden has medicinal properties, recalibrating the characters' disordered passions. In short, the challenges these two disciplines pose to one another can be, instead of a source of friction, an incentive to re-evaluate certain theoretical assumptions, expand or re-shape the canon in exciting ways, and cast familiar texts in a new light.

Given the acuity of Shakespeare's engagement with nature, early modern ecostudies will solidify rather than endanger his status as the pre-eminent author of the period. Yet plays like *As You Like It*, *Timon of Athens*, *King Lear*, *Macbeth* and *The Winter's Tale* will no doubt appear quite different glimpsed through this emerald prism. For ecocriticism to confine itself to Shakespeare, however, would be as shortsighted as an ecologist never

setting foot outside Yellowstone. Certainly, the writings of Philip Sidney—in particular the poem known as "Ister Bank"—merit further scrutiny. As a Londoner who spent much of his adult life in the rustic interior of Ireland, Edmund Spenser is another figure who deserves a sizeable sliver of the ecocritical limelight, and whose reputation may benefit as a result. While his work has hardly suffered neglect, ecocriticism may reveal a different profile of his character than the ruthless colonial apologist that has dominated Spenser scholarship in recent decades. In virtually every chapter of this book, I felt compelled to dwell on passages in his poetry because they commented so incisively on the issue in hand. Drayton's *Poly-Olbion*, with its vivid hymns to the regional ecologies of Britain, also seems poised for recuperation as one of the under-sung classics of the era. The works of Giordano Bruno, though written in bombastic Italian, are a prime specimen of the Elizabethan counter-culture and are overdue for another re-discovery (which Bruno seems to enjoy once every fifty years). Constraints of space have regrettably kept me from delving into the work of Mary Wroth and Margaret Cavendish as they deserve. Fortunately, Sylvia Bowerbank and Diane McColley have uncovered the eco-feminist edge of Wroth's and Cavendish's writing better than I could have managed.

Though early modern ecocriticism is still a burgeoning field, what conclusions or master narratives can we cull from this study, and from other scholarship that has appeared thus far? Perhaps the first point worth underscoring is the phenomenal complexity of early modern attitudes toward organic nature, verging at times on the contradictory or hypocritical. Christianity advocates dominion, yet at the same time promotes a sacred regard for the material world as an effusion of divine creativity. Though it promulgates a specious, species-ist self-regard, Christian humanism proves remarkably accommodating to pagan philosophy and accredits Nature as God's deputy, or a quasi-divinity in its own right. Nor can the Reformation be singled out as the primary catalyst of environmental decline. While the assault on magical thinking has grim consequences, the Protestants' intensified emphasis on temperance and thrift anticipate environmental virtue theory. The ancient philosophy and spirituality of Pythagoras, Plato, Aristotle, and Cicero may be more eco-compatible than Christianity, but are far from earth-centered in certain respects. Likewise, early modern authors such as Sidney and Milton can simultaneously subvert and justify human dominion, denounce and glorify hunting, perpetuate and collapse the nature/culture binary. So another caveat this book must sound is the impossibility of segregating the pantheon of authors into green heroes and coal-black villains. In the introduction I discussed Lawrence Buell's four criteria of an environmental text. Yet approving or ranking early modern texts through some sort of literary equivalent of a LEED certification has not been this book's primary task. To allege a now common analogy with second-wave feminism, sorting through the contradictions may perhaps be more valuable than simply applauding texts that already share a firm ecological orientation.

Another significant insight that emerges from this project is that ecocriticism intersects rather than paves over a number of other critical methodologies. Indeed, an inquiry into nature in the Renaissance demands an understanding of religion, moral philosophy, politics, gender and sexuality, colonial encounters with tropical ecologies, economics, agriculture, and the material history of energy usage. All these disciplines are to some extent inseparable from natural philosophy. Knowledge of them, then, will be instrumental for one of the major tasks facing early modern ecocritics: answering Egan's clarion call to restore the World Picture. Sketching this intellectual backdrop for students is, I think, vital to help them achieve the suspension of post-Enlightenment disbelief. This can be done in a way that acknowledges its ideological thrust while allowing students to comprehend similar ideological tendencies in modern science: for example, that Darwin's natural selection reflects the cutthroat capitalism of Victorian England, an economic model that Darwin's work was then taken to justify as natural. To green-wash the Great Chain of Being as promoting anything more than a shallow ecology, however, would be anachronistic. To shift from a hierarchical chain to something resembling an ecological web, this book has focused on the formative influence of Ovidian metamorphosis and Pythagorean metempsychosis on Elizabethan literary culture.

Given the heterogeneous, kaleidoscopic beliefs about nature circulating in early modern England, the notion of a single, all-encompassing picture that framed humans' experience of the cosmos can be deeply limiting. But this metaphor is also problematic in that it unwittingly privileges the visual, perhaps more than a Reformation culture before the advent of photography warrants. Rather than think exclusively in terms of pictures and chains, Shakespeare and his contemporaries were equally taken with the Pythagorean theory of the cosmic symphony of the spheres. Their conception of order was aural as much as visual. Lorenzo instructs Jessica to listen as well as look. As a metaphor for ecological harmony, the fact that this music is inaudible is revealing. Ecological order does not exist for the sake of human delight. But it is a music we are going to have to strain harder to hear. Early modern culture piped out this harmony not simply for the purpose of entrancing the lower orders into complacency, but of promoting efficient forms of social organization and individual behavior adapted to an unstable environment. It is the complex inter-play between this ideal schema and the messy, sometimes violent interactions of organic life with which early modern ecocriticism will need to come to grips.

Finally, approaching early modern texts from a modern environmental viewpoint reminds us that ecocriticism is, at heart, the latest "version of the pastoral." This book itself, as the subtitle hints, is a confessedly pastoral project. Some of these readings set up the pre-industrial early modern period as a "green world," much as the Elizabethans romanticized the golden world of early humans. Pastoral's odes to moral, epistemological, and sexual innocence reverberate in contemporary pleas to protect unspoiled, virgin land. Just as urbane courtiers assumed the persona of the shepherd,

I wrote much of this book—which presumes to speak on behalf of the non-human environment—while living in Seattle, a metropolis of several million humans. Rather than tending sheep, I was tending to the education of undergraduates. As a member of the academy, my research has been supported by the taxes and tuition fees from other people's labor, some of which no doubt negatively impacts the earth. But if ecocriticism has inherited the pastoral's aesthetics and ethics, it need not inherit its foibles. We must keep in the mind the dialectic between the world as it is and the world as we might wish it to be—that is, mediate between a georgic view of the world in which human survival is predicated upon extracting energy from the earth and the pastoral's invitation to gently co-exist with (and thus conserve) a pristine, bountiful blue-green planet. If early modern pastoral can degenerate into escapist or anesthetizing fantasy, its critical descendent must observe a closer correspondence between theory and praxis. Ecocritics, in other words, must pose the same question to themselves with which Thoreau harassed his transcendentalist contemporaries: "How can a man be a philosopher and not maintain his vital heat better than other men?"[1]

Just as there are simple and complex varieties of pastoral, there are facile and complex strains of ecocriticism. Over the past two decades, the field has matured considerably, producing a hardier, more bountiful crop each year. This book has hopefully opened up a few more rows to hoe, showing just how deep the historical roots of our ecologic criticism run. Despite the pejorative odor clinging to the word, it would be a mistake for ecocritics to regard the continuity between the pastoral and their own theoretical enterprise as a stigma rather than an asset. Instead we might take heart from the fact that environmental abuse aroused voices of dissent even in the sixteenth century, and recycle some of the motifs and rhetorical tactics that have given the pastoral such—in Seamus Heaney's phrase—"staying power."[2] This is, after all, what Rachel Carson does by opening *Silent Spring* with a poisoned pastoral. In "A Fable for Tomorrow," a bucolic paradise "living in harmony with its surroundings" is suddenly blighted by "some evil spell." Similarly, George Perkins Marsh begins his momentous *Man and Nature* (1864) by hailing, like an Elizabethan pastoral poet, the Mediterranean landscapes of the Roman Empire as a golden world menaced by "prodigality and thriftlessness.[3] This yearning for a life in harmony with nature, which finds expression in pastoral, may have political and psychological motivations, but this does not prevent the mode from voicing a real empathetic engagement with the biophysical world. If early modern ecocriticism would seem to exude a "radical nostalgia" for The World We Have Lost, this should not be confused with the naive dream of rebooting history. Western society cannot simply reset the clock to 1500, nor should it even if it could. But mentally re-tracing our steps may, nevertheless, empower us to recognize that our current environmental predicament was not a historical inevitability, and perhaps allow us a more far-sighted, unclouded vista of the path we will have to troupe en masse in the century ahead. The pastoral's "staying power," its adaptability, is precisely what we need.

Notes

NOTES TO THE INTRODUCTION

1. Robert Burton, *Anatomy of Melancholy*, ed. Holbrook Jackson (New York: New York Review of Books, 2001), 97, 100.
2. John Milton, *Complete Poems and Major Prose*, ed. Merritt Y. Hughes (New York: Odyssey Press, 1957), 7.519–523. All references to Milton, unless otherwise noted, are from this edition and will be subsequently cited in text.
3. Cicero, *On the Nature of the Gods*, trans. P.G. Walsh (Oxford: Clarendon, 1997), 103.
4. Aldo Leopold, *Sand County Almanac and Sketches Here and There* (New York: Oxford UP, 1949), vii.
5. Keith Thomas, *Man and the Natural World: Changing Attitudes in England 1500–1800* (London: Penguin, 1983). Although the arc of Thomas' narrative suggests that people in 1800 were more eco-conscious than in 1500, it does not follow that green attitudes in the sixteenth century were therefore unformed, feeble, or scarce. Such a thesis is implicitly qualified by the work of medieval ecocritics. See Alf Siewers, *Strange Beauty: Ecocritical Approaches to Early Medieval Landscape* (New York: Palgrave, 2009); Gillian Rudd, *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester: Manchester UP, 2007); Sarah Stanbury, "Ecochaucer: Green Ethics and Medieval Nature," *Chaucer Review* 39:1 (2004): 1–16.
6. Dorothy Davis notes that "the slow evolution of retail trade" in the medieval and early Tudor era changed dramatically during the reign of Elizabeth. Although the word was not coined for another two hundred years, by the end of the sixteenth century the phenomenon "we nowadays recognize as shopping had begun." See *A History of Shopping* (London: Routledge, 1966), 55. Nancy Cox discusses sumptuary laws in connection with moral anxiety about materialism in "'Beggary of the Nation': Moral, Economic, and Political Attitudes to the Retail Sector in the Early Modern Period," *A Nation of Shopkeepers: Five Centuries of British Retailing*, ed. John Benson and Laura Ugolini (London: I.B. Tauris, 2003), 26–51.
7. John Muir, "The Hetch Hetchy Valley," *Sierra Club Bulletin* 6:4 (1908): 211–220. See also Muir's letter to President Roosevelt, rptd. in *John Muir: His Life, Letters, and Other Writings*, ed. Terry Gifford (London: Baton Wicks, 1996), 378–380.
8. Michael Drayton, *The Works of Michael Drayton,* ed. J. William Hebel, 6 vols. (Oxford: Shakespeare Head Press, 1933), 4:25.51–52, 146–148. Hereafter cited in text. Opposition to the project had already begun when Drayton

published this passage in 1622. See H.C. Darby, *Draining of the Fens* (Cambridge: Cambridge UP, 1940). This extract from *Poly-Olbion* represents one of the earliest uses of the word "landscape" in English. Chris Fitter conducts a bold inquest into this concept (derived from Dutch art) in *Poetry, Space, Landscape: Toward a New Theory* (Cambridge: Cambridge UP, 1995). Fitter's book rightly seeks to accommodate both human biology and history, arguing for "the plasticity of trans-historical drives within diverse historical climates" (15). Also see Ruth Morse "'A dim farre of launce-skippe': The Ethics of Shakespeare's Landscapes," *Shakespeare's World/ World Shakespeares*, ed. Richard Fotheringham, Christa Jansohn, and R.S. White (Cranbury, NJ: Associated UP, 2008), 58-72.

9. William Shakespeare, *Norton Shakespeare* (New York: Norton, 2008), 1.6.5–6. All Shakespeare citations are taken from the second Norton edition and will be included in the text.
10. Diane Kelsey McColley, "Milton's Environmental Epic: Creature Kinship and the Language of *Paradise Lost," Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*, ed. Karla Armbruster and Kathleen Wallace (Charlottesville: U of Virginia P, 2001), 57–74; Ken Hiltner, *Milton and Ecology* (Cambridge: Cambridge UP, 2003).
11. John Donne, *The Poems of John Donne*, ed. Herbert J.C. Grierson (London: Oxford UP, 1912), 236. Subsequent quotations from this edition are cited parenthetically.
12. Theodore Spencer, *Shakespeare and the Nature of Man* (London: Macmillan, 1942), 203–205.
13. Philip Sidney, *Miscellaneous Prose of Sir Philip Sidney*, ed. Katherine Duncan-Jones and Jan Van Dorsten (Oxford: Clarendon, 1973), 78. All subsequent citations from the *Defence of Poetry* are taken from this edition.
14. For a sobering, even excoriating look at the trouble with professors claiming the environmental high ground, see Sharon O'Dair "Slow Shakespeare: An Eco-Critique of Method in Early Modern Literary Studies," *Early Modern Ecostudies: From Shakespeare to the Florentine Codex*, ed. Ivo Kamps, Karen Raber, and Thomas Hallock (New York: Palgrave, 2008), 11–30.
15. Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Cambridge: Harvard UP, 1995), 6–8.
16. Stella P. Revard, "Design of Nature in Drayton's *Poly-Olbion*," *Studies in English Literature* 17:1 (Winter 1971), 108.
17. This section on *King Lear* builds on recent work in evocriticism and echoes some of the thoughts expressed by Brian Boyd in *On the Origin of Stories: Evolution, Cognition, and Fiction* (Cambridge: Harvard UP, 2009), 397.
18. Some other significant formalist or old historicist studies of nature in Renaissance literature include John Danby, *Shakespeare's Doctrine of Nature: A Study of* King Lear (London: Faber and Faber, 1961); Kitty Scoular, *Natural Magic: Studies in the Presentation of Nature in English Poetry from Spenser to Marvell* (Oxford: Clarendon, 1965); Donald Cheney, *Spenser's Image of Nature: Wild Man and Shepherd in* The Faerie Queene, (New Haven: Yale UP, 1966); John M. Steadman, *Nature into Myth: Medieval and Renaissance Moral Symbols* (Pittsburgh: Duquesne UP, 1979).
19. Simon C. Estok, "Doing Ecocriticism with Shakespeare," *Early Modern Ecostudies*, 77–91. Also see Estok's "Letter," which appeared in a "Forum on Literatures of the Environment," *PMLA* 114:5 (Oct. 1999): 1095–1096.
20. Karen Raber, "Recent Ecocritical Studies of Renaissance Literature," *ELR (English Literary Renaissance)* 37:1 (Feb. 2007): 151–171.
21. Gabriel Egan, "Review of Robert N. Watson *Back to Nature*," *Review of English Studies* 57 (2006): 817–819. Robert Watson, "Review of Gabriel

Egan *Green Shakespeare*," *Review of English Studies* 57 (2006): 819–822. In brief, Egan's study is ecological but not rigorously critical; Watson's is critically sophisticated but lacks a real ecological orientation. Despite his masterful exposition of the uncanny parallels between Elizabethan natural philosophy and the new worldview being etched by deep ecology, fractal theory, and quantum physics, Egan darts about from play to play and from past to present with dizzying velocity. Moreover, the book offers only a perfunctory sketch of the actual environmental conditions of the early modern world. This same oversight also detracts from the considerable merits of *Back to Nature*. Though often provocative and wittily written, the book characterizes Renaissance pastoral's bucolic hymns as a retreat from an epistemological crisis rather than a backlash against contemporary environmental upheaval. For a somewhat testy critique of both books, see Estok, "Doing Ecocriticism with Shakespeare," 80–83. The work of Egan and Watson has garnered more positive responses from, respectively, Reginald Rampone Jr., *Shakespeare Newsletter* 58:3 (2008-09): 95–96; and Elizabeth Spiller, *Shakespeare Quarterly* 58 (2007): 125-127.

22. Sharon O'Dair, "The State of the Green: A Review Essay on Shakespearean Ecocriticism," *Shakespeare* 4:4 (Dec. 2008): 475–493. Two other monographs also deserve mention: Ken Hiltner's *Milton and Ecology*, and Sylvia Bowerbank's *Speaking for Nature*. The former draws on Heidegger and Reformation theology to explain how Milton's poetry laments the condition of modern man as existentially uprooted from the earth; the latter illustrates how the works of Mary Wroth and Margaret Cavendish anticipate key tenets of ecofeminism. Since my project primarily focuses on the Elizabethan and early Jacobean period, I will touch on these two books only tangentially.
23. W.R. Elton, "Shakespeare and the Thought of His Age," *The Cambridge Companion to Shakespeare Studies*, ed. Stanley Wells (Cambridge: Cambridge UP, 1986), 24.
24. Philip Davis, *Shakespeare Thinking* (London: Continuum, 2007).
25. Robert Pogue Harrison, *Forests: The Shadow of Civilization* (Chicago: U of Chicago P, 1992), 198.
26. Although "old custom" could mean "habituation" (as Robert Watson has privately suggested), my interpretation accords with Juliet Dusinberre's gloss of the line as an allusion to the "ancient traditions of pastoral innocence." *As You Like It* (London: Thompson, 2006), 189n.
27. Buell, *Environmental Imagination*, 85.
28. Karl Kroeber, "Ecology and American Literature: Thoreau and Un-Thoreau," *American Literary History* 9:2 (1997): 309–320. See also Robert Kern, "Ecocriticism: What Is It Good For?" *ISLE Reader: Ecocriticism 1993–2003*, ed. Michael P. Branch and Scott Slovic (Athens: U of Georgia P, 2003), 258–281, and William Rueckert's meditations on the poem as cultural energy in "Literature and Ecology: An Experiment in Ecocriticism," *The Ecocriticism Reader*, 108.
29. The phrase "gigantic toolshed" belongs to Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley: U of California P, 1973). Kate Soper, *What Is Nature?: Culture, Politics, and the Non-human* (Oxford: Blackwell, 1995), 8.
30. Lawrence Buell, *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond* (Cambridge: Harvard UP, 2001), 6. In his recent primer on the field Greg Garrard, while objecting to the term "construction" as culturally loaded, calls for a similar resolution: "we need to distinguish between post-modernist theory which is mainly inimical to

ecocriticism and post-modern ecology, which will increasingly becomes its scientific reference point." *Ecocriticism* (London: Routledge, 2004), 16. Recently, attempts have been made to reconcile Derrida with environmentalism: David Wood, "Specters of Derrida: On the Way to Econstruction," *Ecospirit: Religions and Philosophies for the Earth*, ed. Laurel Kearns and Catherine Keller (New York: Fordham UP, 2007), 264–287, and Matthew Calarco, *Zoographies: The Question of the Animal from Heidegger to Derrida* (New York: Columbia UP, 2008).

31. William Cronon, "The Trouble with Wilderness; or Getting Back to the Wrong Nature," *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York: Norton, 1996), 89. Also see Michael Bennett, "From Wide Open Spaces to Metropolitan Places," *The ISLE Reader*, 297.
32. Philip Sidney, *The Countess of Pembroke's Arcadia (The New Arcadia),* ed. Victor Skretkowicz (Oxford: Clarendon, 1987), 14. Hereafter cited in text.
33. S.K. Heninger, *Touches of Sweet Harmony: Pythagorean Cosmology and Renaissance Poetics* (San Marino: Huntington Library Press, 1974), 307.
34. John Dixon Hunt, *Greater Perfections: The Practice of Garden Theory* (Philadelphia: U of Pennsylvania P, 2000), 9. In her survey of Tudor gardening manuals, Rebecca Bushnell observes that, while they have a pragmatic bent, the books are "deeply engaged with art in their pursuit of profit and delight." *Green Desire: Imagining Early Modern English Gardens* (Ithaca: Cornell UP, 2003), 190.
35. George Puttenham, *Art of English Poesy*, ed. Frank Whigham and Wayne Rebhorn (Ithaca: Cornell UP, 2007), 176. Subsequent references to this edition will be cited parenthetically.
36. Boyd, *On the Origin of Stories*, 87–91.
37. This terse account of linguistic and structural patterns in *Hamlet* is obviously not exhaustive and can be applied to virtually all of Shakespeare's plays. Boyd offers one of *1 Henry IV* (ibid., 91).
38. Mara Miller, *The Garden as an Art* (Albany: State U of New York, 1993), 107-109. Miller borrows the "occasion for versus object of" comparison from Arnold Berleant.
39. Francis Bacon, *The Works of Francis Bacon*, ed. James Spedding, Robert L. Ellis, and Douglas D. Heath, 14 vols. (London: Longmans, 1857–70), 6:485. 488, 490. Future references will be cited parenthetically in the text.
40. Michael Leslie, "Spenser, Sidney, and the Renaissance Garden," *English Literary Renaissance* 22:1 (1992): 14. Robert P. Harrison, *Gardens: An Essay on the Human Condition* (Chicago: U of Chicago P, 2008), 100–101.
41. Thomas More, *Complete Works*, 15 vols. (New Haven: Yale UP, 1963–1997), 4:183. See Julian Yates, "Humanist Habitats; Or 'Eating Well' with Thomas More's *Utopia*," *Environment and Embodiment in Early Modern England*, ed. Mary Floyd-Wilson and Garrett A. Sullivan (New York: Palgrave, 2007), 187–209.
42. Anne Lake Prescott, "Naming and Caring: The Theme of Stewardship in *Paradise Lost*," *Approaches to Teaching Milton's* Paradise Lost, ed. Galbraith M. Crump (New York: MLA, 1986), 162.
43. Harrison describes this "vocation of care" in *Gardens*, 1–13. Egan's accusing the royal gardener of a kind of "fascistic eugenics" (90) misses the play's imprecation that the state has an ethical responsibility toward the land, which the ironically named Bushy and Green have violated.
44. Elaine Scarry borrows this definition from John Rawls in her stimulating monograph *On Beauty and Being Just* (Princeton: Princeton UP, 1999), 93. Francis Bacon makes an argument oddly similar to Rawls' in *The Advancement*

of Learning: "Is there not a true coincidence between commutative and distributive justice, and arithmetical and geometrical proportions?" *The Works of Francis Bacon*, 5:348. Citing Bacon, Paula Blank has recently mapped the congruity between justice and the "social arithmetics" of plays like *Merchant of Venice* and *King Lear* in *Shakespeare and the Mismeasure of Renaissance Man* (Ithaca: Cornell UP, 2006).

45. Scarry, *On Beauty and Being Just*, 89–90.
46. Rueckert, "Literature and Ecology: An Experiment in Ecocriticism,"110. Rueckert's point here has been recently reiterated by Steve Mentz in "Shipwreck and Ecology: Toward a Structural Theory of Shakespearean Romance," *Shakespearean International Yearbook* 8 (2008): 165–182.
47. Watson, *Back to Nature*, 47–48.
48. Walter Brogan, "The Intractable Interrelationship of Physis and Techne," *Heidegger and the Greeks: Interpretive Essays*, ed. Drew Hyland and John P. Manoussakis (Bloomington: Indiana UP, 2006), 43–56.
49. Pierre Hadot, *The Veil of Isis: An Essay on the History of the Idea of Nature*, trans. Michael Chase (Cambridge: Harvard UP, 2006), 92.

NOTES TO CHAPTER 1

1. Glacken, *Traces on the Rhodian Shore*, 708.
2. The classic indictment of Baconian science is Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: HarperCollins, 1980). William Leiss has made similar charges in *The Domination of Nature* (New York: G. Braziller, 1972), and *Under Technology's Thumb* (Montreal, McGill UP, 1990). For correctives to Merchant and Leiss, see Alan Soble, "In Defense of Bacon," *Philosophy of the Social Sciences* 25 (1995): 192–215, and P. Pesic, "Wrestling with Proteus: Francis Bacon and the 'Torture' of Nature," *Isis* 90:1 (1999): 81–94. Merchant has recently defended her thesis in "The Scientific Revolution and *The Death of Nature*," *Isis* 97:3 (Sept. 2006): 513–533.
3. Lorraine Daston, "The Nature of Nature in Early Modern Europe," *Configurations* 6:2 (1998), 166. Although Daston is right that the World Soul was largely reviled or forgotten, scattered campaigns to resuscitate it were carried out by Henry More, Spinoza, and A.W. Schelling. Schelling's theories had a formative impact on the German Romantics, as evident in Goethe's poem "*Weltseele*."
4. For more on the humoral subject and the "ecology of the passions," see Gail Kern Paster, *Humoring the Body: Emotions and the Shakespearean Stage* (Chicago: U of Chicago P, 2004).
5. Lynn White, "The Historical Roots of Our Ecologic Crisis," *The Ecocriticism Reader*, 10. Cato, *On Agriculture*, trans. William Hooper (Cambridge: Harvard UP, 1934), 121.
6. C.S. Lewis, *The Discarded Image: An Introduction to Medieval and Renaissance Literature* (Cambridge: Cambridge UP, 1964), 222–223.
7. Arthur O. Lovejoy, *The Great Chain of Being: A Study in the History of an Idea* (Cambridge: Harvard UP, 1936). Lovejoy's ideas were enshrined in two standard introductory works on the scientific and cultural history of the era, E.M.W. Tillyard, *Elizabethan World Picture* (London: Chatto and Windus, 1943) and C.S. Lewis, *The Discarded Image*. Theodore Spencer spotlights the fissures that began to streak across the World Picture by the late sixteenth century in *Shakespeare and the Nature of Man* (London: MacMillan, 1945).

Although there were some earlier attempts to discard it (Herbert Howarth, *The Tiger's Heart: Eight Essays on Shakespeare* [New York: Oxford UP, 1970], 165–191), the World Picture seemed destined for the critical dustbin in the mid-1980s with the emergence of the Cultural Materialism/New Historicism. The work of Jonathan Dollimore, Stephen Greenblatt, and Louis Montrose contain numerous overt and tacit assaults on the holism of Tillyard.

8. Jeanne Addison Roberts, "Animals as Agents of Revelation: The Horizontalizing of the Chain of Being in Shakespeare's Comedies," *Shakespearean Comedy*, ed. Maurice Charney (New York: New York Literary Forum, 1980), 79–96. Roberts refines and restates some of these ideas from a more stridently feminist perspective in her book, *The Shakespearean Wild: Geography, Genus, and Gender* (Lincoln: U of Nebraska P, 1991), 55–116.
9. Heninger, *Touches of Sweet Harmony*, 328.
10. Egan, *Green Shakespeare*, 29. The phrase "analogical habit of mind" comes from W.R. Elton, "Shakespeare and the Thought of His Age," 17.
11. Richard Dawkins, *The Extended Phenotype: The Gene as the Unit of Selection* (Oxford: Oxford UP, 1982); Stephen Jay Gould, "Kropotkin Was No Crackpot," *Natural History* 106 (June 1997): 12–21; Peter Ward, *The Medea Hypothesis* (Princeton: Princeton UP, 2009).
12. Robert Hooker, *The Works of Richard Hooker*, ed. W. Speed Hill, 2 vols. (Cambridge: Belknap, 1977), 1:67. Hereafter cited in text.
13. Dana Phillips, *The Truth of Ecology* (Oxford: Oxford UP, 2003), 60–69.
14. Though embraced by Harriot and Bacon, Lucretian atomism provoked consternation or ridicule from Spenser, Donne, Davies, Jonson, Greville, Browne, and Milton. Stephen Clucas, "Poetic Atomism in Seventeenth–Century England," *Renaissance Studies* 5.3 (1991): 327–340. *De rerum natura* was not widely known in England prior to 1656, though Stuart Gillespie cavils with this assumption in "Lucretius in the English Renaissance," *Cambridge Companion to Lucretius*, ed. Stuart Gillespie and Philip Hardie (Cambridge: Cambridge UP, 2007), 242–253.
15. For a corrective to Gleason, see Malcolm Nicholson and Robert McIntosh, "H.A. Gleason and the Individualistic Hypothesis Revisited," *Bulletin of the Ecological Society of America* 83:2 (April 2002): 133–142.
16. Tillyard's discussion of Pythagoras consists of a few paragraphs crediting him as the first to celebrate "man's unique comprehensiveness" as an existential alloy of beast and angel (66–68). The Greek philosopher receives only passing acknowledgment by Lewis, Spencer, and Egan; *Green Shakespeare* features a single allusion to metempsychosis (116–117).
17. Charles Kahn summarizes and then challenges this view in *Pythagoras and the Pythagoreans* (Indianapolis: Hackett, 2001), 3.
18. Thomas Cooper, *Bibliotheca Eliotae* (London: 1545) Ee6–Ee6v. Rptd. in Heninger, 25–26. Cooper's account also seems curious in that it fails to explicitly mention what is perhaps the most notorious doctrine of the Pythagorean sect: the transmigration of the soul after death into the body of other living creatures. It is conceivable that Cooper deliberately omits this often ridiculed dogma to encourage the reader to take the rest of Pythagoras's teachings more seriously. But then why not omit the ox story as well, or clearly dismiss it and the various "wonderfull things" as apocryphal accretions? Did he expect his audience would accept it as historical fact and think of Pythagoras as some distant forerunner of St. Francis?
19. Petrarch, "On His Own Ignorance," *The Renaissance Philosophy of Man*, ed. Ernst Cassier, Paul Oskar Kristeller, John Herman Randall Jr. (Chicago: U of Chicago P, 1948), 74, 92.

20. Spoofs on Pythagoras in Elizabethan drama may derive from Lucian's satiric dialogue, "Philosophies for Sale." Like Cooper, though, Lucian treats the philosopher as both sage and charlatan. *Selected Satires of Lucian*, trans. Lionel Casson (New York: Norton, 1962), 314–317.
21. Ben Jonson, *Volpone*, ed. Philip Brockbank (New York: Norton, 1994), 1.2.7. This edition will be subsequently cited in the text.
22. George Peele, *The Honour of the Garter* (London: 1593).
23. Frances Yates, *Giordano Bruno and the Hermetic Tradition* (Chicago: U of Chicago P, 1964); "The Hermetic Tradition in Renaissance Science," *Art, Science, and History in the Renaissance*, ed. Charles S. Singleton (Baltimore: Johns Hopkins UP, 1968), 255–274. The Yates thesis has now come under fire from several critics, most of whom now view the Hermetic tradition as an offshoot of neo-Platonism. See Robert Westman and J.E. McGuire, *Hermeticism and the Scientific Revolution* (Los Angeles: U of California P, 1977); Brian Copenhaver, "Hermes Trismegistus, Proclus, and the Question of a Philosophy of Magic in the Renaissance," *Hermeticism and the Renaissance*, ed. I. Merkel and A.G. Debus (Washington, DC, 1988), 79–93; Brian Vickers, *Occult and Scientific Mentalities in the Renaissance* (Cambridge: Cambridge UP, 1984).
24. See John Dee's "A Mathematicall Preface" to *The Elements of Geometrie of the Most Auncient Philosopher Euclide of Megara*, trans. H. Billingsley (London: 1570), 5r, 6r.
25. A.N. Whitehead, *Science and the Modern World*, 41; qtd. in Kahn, 1.
26. William Eamon, "Technology as Magic in the Late Middle Ages and Renaissance," *Janus* 70 (1983): 171–212.
27. The influence of Pythagoras on Kepler's search for numerical harmony in the planetary orbits is described in Allen G. Debus, *Man and Nature in the Renaissance* (Cambridge: Cambridge UP, 1978), 92–94.
28. Thomas Tryon, *Pythagoras: His Mystical Philosophy Revived* (London: 1691). A second tract is attributed to Whitelock Bulstrode, *An Essay of Transmigration; in Defence of Pythagoras* (London: 1692). Selden's gloss on a verse from Drayton attests that the doctrine was well known in Jacobean England: "You cannot be without understanding of this Pythagorean opinion" (17). Though Selden classifies "transanimation" as heresy, he notes that English Druids subscribed to the same belief, which he suggests they may have learned from Pythagoras, or vice versa.
29. Alfred Harbage, Samuel Schoenbaum, and Sylvia S. Wagonheim. eds., *Annals of English Drama 975-1700* (London: Routledge, 1989), 64-65. The editors guessingly categorize the play as a "classical biography."
30. Christopher Celenza, "Pythagoras in the Renaissance: The Case of Marsillo Ficino," *Renaissance Quarterly* 52 (1999), 668. For a conflicting view of the knotted relationship between Pythagoreanism and Platonism, see Walter Burkert, *Lore and Science in Ancient Pythagoreanism*, trans. Edwin L. Minar Jr. (Cambridge: Harvard UP, 1972), 83-96.
31. Mark McDonald, *Shakespeare's* King Lear *with* The Tempest*: The Discovery of Nature and the Recovery of Classical Natural Right* (Lanham, MD: UP of America, 2004), 2.
32. Cicero, *Tusuculan Disputations: also treatises On the Nature of the Gods and On the Commonwealth*, trans. C.D. Yonge (New York: Harper Brothers, 1890), 219; Lactantius, *The Divine Institutes*, trans. Mary Francis McDonald (Washington, DC: Catholic U of America P, 1964), 219.
33. Celenza, "Pythagoras in the Renaissance," 703–704.
34. Aristotle, *De anima*, trans. Hugh Lawson-Tancred (London: Penguin, 1986), 133; *The Physics*, trans. Robin Waterfield (Oxford: Oxford University Press, 1996), 92.

35. Selections from "The Golden Verses" are reprinted in *The Presocratics*, ed. Philip Wheelwright (New York: Odyssey, 1966), 228.
36. Porphyry, *Life of Pythagoras* 19, DK 14, 8a; qtd. in Richard McKirahan, ed. *Philosophy before Socrates* (Indianapolis: Hackett, 1994), 84.
37. Watson, *Back to Nature*, 8–9.
38. Iamblichus, *Life of Pythagoras*, trans. Thomas Taylor (London; J.M. Watkins, 1818), 42. For more on this ideological rift, see Kahn, *Pythagoras and the Pythagoreans,* 15–16, and McKirahan, *Philosophy before Socrates*, 89–93.
39. Hadot, *The Veil of Isis,* 95. Hadot borrows the phrases "physics of contemplation" from Robert LeNoble.
40. Since the Pythagoreans saw numbers as "ethical archetypes" embodying moral qualities, they regarded mathematics and ethics as inseparable. Margaret Wertheim calls Pythagoras "one of the first to understand that math could be applied to the development of destructive technologies, and hence entails a moral responsibility." *Pythagoras' Trousers*: *God, Physics, and the Gender Wars* (New York: Norton, 1997), 26. Alastair Fowler famously outlined how Pythagorean numerology structures *The Faerie Queene* in *Spenser and the Numbers of Time* (New York: Barnes and Noble, 1964). Paula Blank observes that many early modern poets shared Pythagoras's aversion to exploiting mathematics for purely physical or economic computations in *Shakespeare and the Mismeasure of Renaissance Man*, 124–125.
41. Stephen Jay Gould, *Urchin in the Storm*; qtd. in Phillips, *Truth of Ecology*, 60.
42. Ovid, *Metamorphosis: The Arthur Golding Translation of 1567*, ed. John Frederick Nims (Philadelphia, Paul DeBry Books, 2000), Epistle.288–289.
43. Kahn, *Pythagoras and Pythagoreans*, 148.
44. Heninger, *Touches of Sweet Harmony*, 311–314.
45. For an example of the persistence of Pythagorean rhetoric among modern environmentalists, see Daniel Botkin, *Discordant Harmonies: A New Ecology for the Twenty-first Century* (New York: Oxford UP, 1990).
46. Harry Berger, *Revisionary Play: Studies in Spenserian Dynamics* (Berkeley: U of California P, 1988), 144.
47. An insightful account of how Ovid's Pythagoras haunts the Garden of Adonis can be found in Syrithe Pugh, *Spenser and Ovid* (Aldershot: Ashgate, 2005), 135–145.
48. The neo-Platonic connotations of "dilate" are unfolded by Patricia Parker in *Inescapable Romance: Studies in the Poetics of a Mode* (Princeton: Princeton UP, 1979), 57.
49. Commentators often take the final lines as culminating in a sublime Christian vision, but a transcendent urge is one point at which Christianity and Pythagorean spirituality intersect. It is possible that Christian exegetes grafted this dogma onto the Greek tradition. Alternatively, it could be part of Pythagoras' original teachings, perhaps inherited from Buddhism, as the doctrine does bear a certain resemblance to the Buddhist *moksha*, a liberation from the karmic cycle after successive reincarnations. Insofar as the religious mentality implies that our home is not on the earth, it remains liable to charges of fomenting indifference or even hostility toward the natural world, which raises another hurdle to crowning Pythagoras as a prophet of modern environmentalism. While certain aspects of Pythagoreanism are compatible with Christianity, the sect's teachings align most closely with those of Buddhism, which is widely considered the greenest of the big five.
50. Christopher Marlowe, *Tamburlaine the Great*, ed. J.S. Cunningham (Manchester: Manchester UP, 1991), 2.7.18–20.

51. Christopher Marlowe, *Doctor Faustus*, ed. David Scott Kastan (New York: Norton, 2005), A.5.2.100–105. Future references to *Doctor Faustus* will be cited in the text.
52. Walt Whitman, *Leaves of Grass: A Textual Variorum* (New York: NYU P, 1980), 42.
53. Stephen Greenblatt, *Shakespearean Negotiations* (Berkeley: U of California P, 1988), 22.
54. John Donne, *Complete Poems of John Donne*, ed. H. Grierson (London: Oxford, 1909), 326.
55. Bruce Boehrer, *Shakespeare among the Animals: Nature and Society in the Drama of Early Modern England* (New York: Palgrave, 2002). For more on the pre-Linnean understanding of animals, see Erica Fudge, *Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England* (Ithaca: Cornell UP, 2006); Richard Sorabji, *Animal Minds and Human Morals: The Origin of the Western Debate* (Ithaca: Cornell UP, 1993); and Laurie Shannon, "The Eight Animals in Shakespeare; or Before the Human," *PMLA* 124:2 (March 2009): 472–479.
56. Roberts, "Animals as Agents of Revelation," 79–96.
57. Jonathan Bate, *Shakespeare and Ovid* (Oxford: Clarendon, 1993), 148.
58. Paster, *Humoring the Body*, 137.
59. Shannon, "The Eight Animals in Shakespeare," 477.
60. Boehrer, *Shakespeare among the Animals*, 5.
61. A.W. Jonson reflects on Jonson's reading of Pythagoras in *Ben Jonson: Poetry and Architecture* (Oxford: Clarendon, 1994), 205. Harry Levin, meanwhile, interprets transmigration as a metaphor for Jonson's shifting views on the purpose of playwriting in "Jonson's Metempsychosis," *Philological Quarterly* 23:3 (July 1943): 231–239.
62. Ben Jonson, *Poems*, ed. Ian Donaldson (London: Oxford UP, 1975), 73. The appellation "our Pythagoras" likely refers to the philosopher's legendary ability to speak to animals rather than, as Erica Fudge suggests, his advocacy of transmigration (*Brutal Reasonin*g, 126–127).
63. Michael McDowell, "The Bakhtinian Road to Ecological Insight," *The Ecocriticism Reader*, 381.
64. Mikhail Bakhtin, *Rabelais and His World*, trans. Helen Iswolsky (Bloomington: Indiana UP, 1984), 19–20.
65. William Baldwin, *Beware the Cat*, ed. William Ringler and Michael Flachman (San Marino: Huntington Library Press, 1988), 32. Karen Raber glances briefly at this text in "How to Do Things with Animals: Thoughts on/with the Early Modern Cat," *Early Modern Ecostudies*, 97–98.
66. John Donne, *The Satires, Epigrams, and Verse Letters*, ed. W. Milgate (Oxford: Clarendon, 1967), 26.
67. Elizabeth D. Harvey, "The Souls of Animals: John Donne's Metempsychosis and Early Modern Natural History," *Environment and Embodiment in Early Modern England* (New York: Palgrave, 2007), 55–70, 55–56.
68. For more on the peculiar status of the ape in the Renaissance, see James Knowles, "'Can ye not tell a man from a marmoset?': Apes and Others on the Early Modern Stage," *Renaissance Beasts: Of Animals, Humans and Other Wonderful Creatures*, ed. Erica Fudge (Urbana: U of Illinois P, 2005), 138–163.
69. Thomas, *Man and the Natural World*, 138.
70. Plato, *Timaeus*, trans. Desmond Lee (New York: Penguin, 1971), 43.
71. Heninger, *Touches of Sweet Harmony*, 291.
72. A. Kent Hieatt, *Short Time's Endless Monument* (New York: Columbia UP, 1960). Hieatt's theories are expanded by Fowler in *Spenser and the Numbers*

of Time. Viewing Spenser's prosody through a post-colonialist filter, Thomas Herron sees the elegantly structured stanzas of *The Faerie Queene* as evidence of a "plantation aesthetic," a desire to impose colonial order on a chaotic ravaged Irish landscape. *Spenser's Irish Work* (Aldershot: Ashgate, 2007), 94–95.

73. Thomas Stroup, *Microcosmos: The Shape of an Elizabethan Play* (Lexington: U of Kentucky, 1965); Frances Yates, *Theatre of the World* (Chicago: U of Chicago P, 1969). Yates's theories have been updated by Kent van den Berg, *Playhouse and Cosmos: Shakespearean Theatre as Metaphor* (Cranbury, NJ: Associated UP, 1985), 45–52, and John Gilies, *Shakespeare and the Geography of Difference* (Cambridge: Cambridge UP, 1994), 91–92.
74. Plato, *The Republic*, trans. Richard W. Sterling and William C. Scott (New York: Norton, 1985). "He who loves wisdom and the divine order will himself reflect that order in the degree it is permitted to men" (190).
75. Iamblichus, *Life of Pythagoras*, 59–61.
76. Heninger, *Touches of Sweet Harmony*, 5.
77. Dee owned a copy of Giorgi's treatise in his library at Mortlake. Frances Yates focuses on the Cabalistic aspects of his work at the expense of its Pythagorean influence in *The Occult Philosophy of the Elizabethan Age* (London: Routledge, 1979), 33–42.
78. On Pythagorean musical theory in Jonson, see Kristin Rygg, *Masqued Mysteries Unmasked: Early Modern Music Theatre and Its Pythagorean Subtext* (Hillsdale, NY: Pendragon Press, 2000).
78. Brian Boyd outlines a strong case for evocriticism in *On the Origin of Stories*. Yates's underscoring of the Cabalistic tenor in Giorgi's treatise further refutes the reading of Lorenzo's speech as a conversion (*Occult Philosophy*, 152).
80. Lawrence Danson, *The Harmonies of* The Merchant of Venice (New Haven: Yale UP, 1978), 185–189.
81. David Spangler, "Imagination, Gaia, and the Sacredness of the Earth," *This Sacred Earth: Religion, Nature, Environment*, ed. Roger Gottlieb (New York: Routledge, 1996), 611–619, 612.
82. Lewis, *Discarded Image*, 37.
83. "Nature," *OED Online* (Oxford UP), 15 January 2010 <http://dictionary.oed. com>. Reliable guides through the semantic labyrinth that is the word Nature, include Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford UP, 1985), 219–224, and C.S. Lewis, *Studies in Words* (Cambridge: Cambridge UP, 1967), 24–74. Williams has the advantage of concision, but Lewis gives a much fuller picture of its place in the literature of the medieval and early modern periods. For more on its usage in seventeenth-century science, see Daston, "The Nature of Nature in Early Modern Europe," 149–172.
84. McKirahan, *Philosophy before Socrates*, 120. For an illuminating discussion of the possible meanings of the phrase, see Hadot, *The Veil of Isis*, 39–57.
85. Donald Howard, *Chaucer: His Life, His Works, His World* (New York: E.P. Dutton, 1997), 316.
86. Macrobius, *Commentary on the Dream of Scipio*, trans. William Harris Stahl (New York: Columbia UP, 1952), 87. Iamblichus reports that Pythagoras worshipped idols that were not anthropomorphic but shaped in the form of brass spheres "because they . . . have a nature and morphe similar to the universe" (81).
87. For an overview of the impact of the neo-Platonic tradition on the medieval personifications, see George Economou, *The Goddess Natura in Medieval Literature* (Cambridge: Harvard UP, 1972).

88. Geoffrey Chaucer, *The Riverside Chaucer*, ed. Larry Benson (Oxford: Oxford UP, 1987), 379–381. References throughout are to line numbers and will be cited in the text.
89. James Hankins, "The Study of the *Timaeus* in Early Renaissance Italy," *Natural Particulars: Nature and the Disciplines in Renaissance Europe*, ed. Anthony Grafton and Nancy Sirasi (Cambridge: MIT Press, 1999), 77–119, 88. Michael J.B. Allen outlines Plato's debt to the Pythagoreans and the text's impact on early modern scientific method in "The Ficinian *Timaeus* and Renaissance Science," *Plato's* Timaeus *as Cultural Icon* (South Bend, IN: Notre Dame Press, 2005), 238–250. Allen remarks that Ficino's fascination with the World Soul "directs our attention away from the notion of particular entities and species toward the general concepts of life, potentiality, being, and specifically of being part of a greater whole" (246), and stands in sharp contrast to the anthropocentric concerns of other Renaissance humanists.
90. Walter Ralegh, *The Works of Walter Ralegh*, 8 vols. (New York: Burt Franklin, 1829), 2:222. Cited hereafter in text.
91. Pliny, *Natural History*, trans. Philemon Holland (New York: McGraw-Hill, 1962), 29.
92. Virgil, *Virgil*, trans. H.R. Fairclough, 2 vols. (Cambridge: Harvard UP, 1965), 1: 557.
93. Balbus's keen admiration for the harmony and elegant design of the natural world, verging on an ecological Panglossianism, gives way to a presumptuous supposition that the telos of the phenomenal universe is human happiness: "everything on earth was made for man's use." Many people in the Renaissance no doubt shared Balbus's outlook. However, the assaults on Providence in Books 1 and 3 of Cicero's text seriously undermine the anthropocentric logic on which the argument for human supremacy rests. Montaigne deflates Balbus's pretensions in *The Apology for Raymond Sebond*.
94. Brian P. Copenhaver, ed. *Hermetica*, (Cambridge: Cambridge UP, 1992), 85. Subsequent citations will be recorded in the text.
95. Walter Ralegh, *Poems of Sir Walter Ralegh: A Historical Edition*, ed. Michael Rudick (Tempe: Renaissance English Texts, 1998), 112. Unfortunately, Ralegh's emphasis on Nature's authority leads him to downplay the agency of the individual living organisms under its jurisdiction, claiming they have "no other self-ability than a clock, after it is wound up by a man's hand" (2:24). Since he falls more in the *Mathematici* camp of the Pythagorean sect (at one point he mistakenly credits Pythagoras with inventing the apothegm attributed to Protagoras "man is the measure of all things"), Ralegh represents a denomination of the vitalist tradition that fed into mechanist philosophy.
96. Anxieties about Nature's aging, voiced as far back as Lucretius, surface periodically throughout the Elizabethan period, and reach an apex in the early Jacobean period. A bilingual edition of Milton's essay is reprinted in *Complete Poems and Major Prose*, 32–35.
97. Giordano Bruno, *Cause, Principle and Unity*, trans. Jack Lindsay (Westport, CT: Greenwood Press, 1976), 49. Subsequent citations included in the text. For more on the *anima mundi* in Bruno's philosophy see P.H. Michel, *The Cosmology of Giordano Bruno*, trans. R.E.W. Maddison (Ithaca: Cornell UP, 1973), 250–268, and Merchant, *The Death of Nature*, 114–116.
98. Giordano Bruno, *The Expulsion of the Triumphant Beast*, trans Arthur D. Imerti (Lincoln: U of Nebraska P, 1992), 240. Subsequent citations will be noted in the text.
99. John Buxton, *Sir Philip Sidney and the English Renaissance* (London: Macmillan, 1954), 165. Frances Yates argues that Bruno may have had an impact

on Spenser in *Occult Philosophy*, 123–124, and previously sought to associate Bruno with Berowne in *Love's Labour's Lost*. Hilary Gatti looks at parallels between Bruno's writings and those of Shakespeare and Marlowe in *The Renaissance Drama of Knowledge: Giordano Bruno in England* (London: Routledge, 1989).

100. Katherine Park, "Nature in Person: Medieval and Renaissance Allegories and Emblems," *The Moral Authority of Nature*, ed. Lorraine Daston and Fernando Vidal (Chicago: U of Chicago P, 2004), 50–73. This corrective to Park's theory is particularly important because of the emphasis often placed on the engraving from Robert Fludd's 1617 treatise *Utriusque cosmi historia*, which does depict Nature as topless and chained to God. Edward Tayler examines this illustration as representative of early modern natural philosophy in *Nature and Art in Renaissance Literature* (New York: Columbia UP, 1964).
101. John Lyly, *The Woman in the Moon*, ed. Leah Scragg (Manchester: Manchester UP, 2006); Ben Jonson, *The Complete Masques*, ed. Stephen Orgel (New Haven: Yale UP, 1969), 221.
102. Margaret Cavendish, *Poems and Fancies* (London, 1653). See Sylvia Bowerbank's excellent chapter on Cavendish in *Speaking for Nature*, 52–79. Cavendish's critical attitude toward Pythagoras seems misplaced, given that the sect promoted gender equality in education. Wertheim, *Pythagoras' Trousers*, 23–24.
103. H.L. Weatherby, "Dame Nature and the Nymph," *English Literary Renaissance* 26 (1996): 243–258; Glen Steinberg, "Chaucer's Mutability in Spenser's *Mutabilitie Cantos*," *Studies in English Literature* 46:1 (Winter 2006): 27–42.
104. Lisa Kiser chronicles the way that Chaucer's Nature also gestures at the limits and artificiality of its anthropomorphism, in "Chaucer and the Politics of Nature," *Beyond Nature: Expanding the Boundaries of Ecocriticism*, ed. Karla Armbruster and Kathleen Wallace (Charlottesville: U of Virginia P, 2001), 41–56.
105. Cheney, *Spenser's Image of Nature*, 244.
106. Weatherby, "Dame Nature and the Nymph," 246.
107. Gabriel Harvey, *The Works of Gabriel Harvey*, ed. Alexander Grosart (New York: AMS Press, 1966), 1:54–56.
108. Peter R. Moore, "The Nature of *King Lear*," *English Studies* 87:2 (April 2006): 169–190; McDonald, *Shakespeare's* King Lear *with* The Tempest, 40–42; Danby, *Shakespeare's Doctrine of Nature: A Study of* King Lear.
109. "For the following apothegm was . . . an epitome and summary as it were of his own opinions; that we should avoid and amputate by every possible artifice . . . from the body, disease; from the soul, ignorance; from the belly, luxury; from a city, sedition; from a house, discord; and at the same time, from all things, immoderation." Iamblichus, *Life of Pythagoras*, 16.
110. Virginia Woolf, *Mrs. Dalloway* (London: Harcourt Brace Jovanovich, 1925), 211–212.
111. Tillyard, *Elizabethan World Picture*, 46.
112. Mentz, "Shipwreck and Ecology," 176.
113. Gretchen T. Legler, "Ecofeminist Literary Criticism," *Ecofeminism: Women, Culture, Nature*, ed. Karen Warren and Nisval Erkal (Bloomington: Indiana UP, 1997), 230. Also see Elizabeth Harlow, "The Human Face of Nature: Environmental Values and the Limits of Nonanthropocentrism," *Environmental Ethics* 14 (1992): 27-42.
114. *England's Helicon 1600, 1614*, ed. Hyder Edward Rollins (Cambridge: Harvard UP, 1935), 10–11.

115. Roy Strong, *Portraits of Queen Elizabeth I* (Oxford: Clarendon, 1963); Frances Yates, *Astraea: The Imperial Theme in the Sixteenth Century* (London: Routledge, 1975); Louis Montrose, *The Subject of Elizabeth: Authority, Gender, Representation* (Chicago: U of Chicago P, 2006).
116. Account books at Hardwick Hall record a payment of 3 pounds to Hilliard for a picture in 1592. David Durant, *Bess of Hardwick: Portrait of an Elizabethan Dynast* (London: Weinfeld, 1977), 170.
117. Montrose offers an insightful appraisal of the Ditchley portrait in *The Subject of Elizabeth*, 129–131.
118. Scoula, *Natural Magic*, 24.
119. At the entertainment at Kenilworth, for instance, a wild man of the woods came and kneeled in submission before the Queen. Aristocrats decorated their estates with artificial hills with commanding prospects, and gardens with bushes or flowers arranged to spell out Elizabeth's initials as a means of imposing royal authority over the land. See Bruce Smith, "Landscape with Figures: The Three Realms of Queen Elizabeth's Country-House Revels," *Renaissance Drama VIII*, ed. Leonard Barkan (Evanston: Northwestern UP, 1977), 57–115, and James J. Yoch Jr., "Subjecting the Landscape in Pageants and Shakespearean Pastoral," *Pageantry in the Shakespearean Theatre*, ed. David Bergeron (Athens: U of Georgia P, 1995), 194–246. Another fascinating pastoral entertainment germane to this discussion is Mary Sidney's "Dialogue betweene two shepheards, Thenot and Piers." Though Elizabeth is identified with Astraea, the shepherd Piers likens her to "a field in flowry Roabe arrayd," and boasts "with all the earth she may compare." *Collected Works of Mary Sidney, Countess of Pembroke*, ed. Margaret Hannay, Noel Kinnamon, and Michael Brennan, 2 vols. (Oxford: Clarendon, 1998), 1: 89-91. The other shepherd, Thenot, scoffs at the analogy, pronouncing the Queen superior to the changeable natural world. His impatience with the fawning Piers, however, allows for a more complex reading of the poem as a wry critique of the idolatrous flattery of the Queen by poets who had appropriated a religious allegory for political ends.
120. Richard Helgerson, "The Land Speaks: Cartography, Chorography, and Subversion in Renaissance England," *Representing the English Renaissance*, ed. Stephen Greenblatt (Berkeley: U of California P, 1988), 353, 336; Barbara Ewell, "Drayton's *Poly-Olbion*: England's Body Immortalized," *Studies in Philology* 75:3 (Summer 1978), 300–301. For a more favorable assessment of Spenser's poetry as attune to environmental concerns, see the sixth chapter of Richard Chamberlain's book, *Radical Spenser: Pastoral, Politics, and the New Aestheticism* (Edinburgh: Edinburgh UP, 2005), 117–138.
121. Andrew Hadfield presents a reading of the *Mutabilitie Cantos* as expressing the poet's dissatisfaction with the Queen in "Duessa's Trial and Elizabeth's Error: Judging Elizabeth in Spenser's *Faerie Queene*," *The Myth of Elizabeth*, ed. Susan Doran and Thomas S. Freeman (New York: Palgrave, 2003), 56–76.
122. Weatherby, "Dame Nature and the Nymph," 247. Entranced by a reference to Christ's transfiguration, Weatherby argues that Spenser crafts his new theology from some obscure, controversial views of nature in the Eastern Orthodox Church. It is more likely, I think, that the poem's vision of Nature takes an impetus from the Pythagorean doctrines of the kind revived by Bruno. Anthony Esolen, meanwhile, contends that Spenser's veneration of Nature may have been influenced by the account of the Mater Magna (Great Mother) in Lucretius's *De Rerum Natura*. "Spenserian Chaos: Lucretius in *The Faerie Queene*," *Spenser Studies* 11 (1990): 31–51.

123. Bruno Latour, *Politics of Nature*, trans. Catherine Porter (Cambridge: Harvard UP, 2004); Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge: Harvard UP, 2007), 14–21.
124. Luke Higgins, “Toward a Deleuze-Guattarian Micropneumatology of Spirit Dust,” *Ecospirit: Religion and Philosophies for the Earth*, ed. Laurel Kearns and Catherine Keller (New York: Fordham UP, 2007), 253.
125. Bruce V. Foltz, “Nature’s Other Side: The Demise of Nature and the Phenomenology of Givenness,” *Rethinking Nature: Essays in Environmental Philosophy*, ed. Bruce V. Foltz and Robert Frodeman (Bloomington: Indiana UP, 2004), 330–341.
126. When Pamela speaks of the Great “breath-giver,” such language enables us to grasp what ecotheologian Anne Primavesi terms the “symbolic gift of Gaia.” Although the life sciences help us to rationalize the gift, Primavesi argues that it might also “be conceived in what exceeds . . . discursive thought: in imagination and dream, myth and ritual.” Literature, of course, also belongs on this list. See “The Preoriginal Gift—and Our Response to It,” *Ecospirit*, 231, and Spangler, “Imagination, Gaia, and the Sacredness of the Earth,” 619.

NOTES TO CHAPTER 2

1. G.W.F. Hegel, *Phenomenology of Spirit*, trans. A.V. Miller (Oxford: Oxford UP, 1977), 448.
2. Thomas Harriot, *A Briefe and True Report of the New Found Land of Virginia* (London: 1590), 22–23. In an odd coincidence, DeBry had made a famous engraving of Sidney’s funeral procession just three years previously.
3. Critics have paid little attention to this exchange, which is omitted from the 1616 B-text of the play. The oversight is surprising given that it dramatizes with extraordinary precision one of the main moral conflicts of the Renaissance: the use and misuse of human reason applied to the natural world. [Ominously, the B–text does endow Faustus with the power to make “trees remove at [his] command” (3.4.20)]. When Mephistopheles immediately produces the book out of thin air, Faustus suspects the demon is putting him on: “O, thou art deceived” (2.1.172). Faustus’s ambiguous reply, which could be addressed either to Mephistopheles or to himself in the second person, casts doubt on whether such an endeavor is feasible. Since Marlowe knew Harriot through Walter Ralegh, this scene could conceivably be a response to the catalogue in the *Report*.
4. Turner produced a more thorough version, titled *A New Herball*, in 1551. A few general studies touching on plants predate his work but are largely derivative and uncritical. The earliest is the thirteenth-century *De properietatibus rerum* (On the Properties of Things) by Bartholomaeus Anglicus, which features a brief Latin herbal; the book was translated by John Trevisa in 1495 and republished by Stephen Batman in 1582 as *Batman Uppon Bartholome His Book*. The others include Bancke’s *Herbal* (1525), *The Grete Herball* (1526), and *The Vertuous Boke of Distyllacyon* (1527), the latter two by Hieronymous Braunschweig. See the Introduction to the British museum facsimiles of Turner’s texts, ed. W.T. Stern (London: Ray Society, 1965), 1–12. An anonymous translation of a medieval Latin herbal had appeared shortly after Turner in 1539 and was reprinted in 1541, 1552, 1555, and 1559. At one point this collection was spuriously attributed to Floridus Macer and Thomas Linacre; a man named William Copland edited the later editions.

Gerard's herbal, however, was the most thorough and authoritative, and was reprinted in handsome editions in 1633 and 1636. Interest in herbals remained high in the seventeenth century, stimulated by the exotic flora of the New World. In his 1658 work on the history of horticulture, *The Garden of Cyrus*, Thomas Browne notes, "New Herbals fly from America upon us." See *The Works of Thomas Browne*, ed. Geoffrey Keynes, 4 vols. (London: Faber and Faber, 1928), 1:175.

5. For more on the textual history of Sidney's epic romance, see Jean Robertson's introduction to her edition of *The Old Arcadia* (Oxford: Clarendon, 1973), xlii–lxxi; Jon S. Lawry, *Sidney's Two "Arcadias": Pattern and Proceeding* (Ithaca: Cornell UP, 1972); Michael McCanless, *The Text of Sidney's Arcadian World* (Durham: Duke UP, 1989); and H.R. Woudhuysen, *Sir Philip Sidney and the Circulation of Manuscripts 1558–1640* (Oxford: Clarendon, 1996).
6. Sir Philip Sidney, *The Countess of Pembroke's Arcadia* (*The Old Arcadia)*, ed. Jean Robertson (Oxford: Clarendon, 1973), 86–87. Unless otherwise noted, future citations are from this edition. In four of the extant manuscripts of the *Old Arcadia*—[St] St John's College, Cambridge, MS. I.7, [Je] Jesus College MS. 150, [HM] Helmingham Hall MS, and [Ra] Bodleian Library MS. Rawlinson Poetical 85—the tree catalogue is accompanied by marginal annotations. The glosses decode the allegorical meanings assigned to seven of the seventeen species: Laurel-victory; Myrrh-lamentation; Olive-quietness; Myrtle-love; Willow-refusal; Cypress-death; Palms-happy marriage. Whether Sidney or a later scribe supplied the annotations remains unclear. Curiously, the tree catalogue is missing from the 1590 Quarto that emphasizes military exploits over pastoral romance; credit goes to Mary Sidney for restoring it to the 1593 Folio. The influence of the Countess as both the editor and implied reader of *The Arcadia* may help account for the book's affinity with certain aspects of ecofeminism.
7. Geoffrey Chaucer, *The Riverside Chaucer*, ed. Larry Benson (Oxford: Oxford UP, 1987), 387. The tree catalogue in *The Parliament of Fowls* features thirteen species, of which eleven also appear in *The Old Arcadia*. The opening prose section of Sannazaro's romance contains a description of a pristine, natural arboretum with all the trees "arranged in a non-artificial order," which Sidney embellished and set in verse. Jacopo Sannazaro, *Arcadia and Piscatorial Eclogues*, trans. Ralph Nash (Detroit: Wayne State UP, 1966), 30–31. Seizing on this passage from Sannazaro, Frederic Moorman claims that Renaissance pastoral inaugurates a "new interpretation of nature," one characterized by "a delight in the waywardness of nature, which is in direct contrast to the trimness and order of Guillaume de Lorris, Chaucer, and their followers." See *William Browne His Britannia's Pastorals and the Pastoral Poetry of the Elizabethan Age* (New York: Burt Franklin, 1969), 82. Sidney probably discovered the book during the Italian leg of his grand tour in 1573. For more on Sidney's debt to Sannazaro, see Walter Davis, *A Map of Arcadia: Sidney's Romance in Its Tradition* (New Haven: Yale UP, 1965), and David Kalstone, *Sidney's Poetry* (Cambridge: Harvard UP, 1965), 9–39.
8. Virgil includes brief tree catalogues in the *Eclogues*, 7.53–66 and *The Aeneid*, 6.178–182, while recounting the clear-cut to build Misenus's tomb. A more extensive list appears in *Virgil's Gnat*, Spenser's translation of the pseudo-Virgilian *Culex*, which he completed in either 1579 or 1580, around the same time as Sidney wrote *The Old Arcadia*; its "riddle rare" has also been deciphered as a critique of the French marriage. See *The Yale Edition of the Shorter Poems of Edmund Spenser*, ed. William A. Oram, Einar Bjorvand,

Ronald Bond, Thomas H. Cain, Alexander Dunlop, and Richard Schell (New Haven: Yale UP, 1989), 295. The tree catalogue in *The Faerie Queene* (1.1.8–9) is more concise and may have been modeled on *The Parliament of Fowls*, which Spenser acknowledged as a source for his own *Mutabilitie Cantos*. See Anthony Esolen, "The Disingenuous Poet Laureate: Spenser's Adoption of Chaucer," *Studies in Philology* 87 (1990): 285–311; Herron, *Spenser's Irish Work*, 122–127; and Christopher Burlinson, *Allegory, Space and the Material World in the Writings of Edmund Spenser* (Oxford: D.S. Brewer, 2006), 173–175. Burlinson presents a stimulating account of Spenser's ambiguous attitude toward the woods as both a poetic sanctuary and a troublesome refuge for Irish rebels.

9. Anne Ferry, *The Art of Naming* (Chicago: U of Chicago P, 1988), 145. Ferry characterizes Spenser's catalogue in *The Faerie Queene* as "a poetic ritual of naming" by which the poet celebrates language's "divine power over the natural world"(151), but seems to exempt Sidney from this charge, observing that his catalogue hinges on the correspondence between subject and landscape.
10. Sukanta Chaudhuri, *Renaissance Pastoral and Its English Developments* (Oxford: Clarendon, 1989), 156. While Chaudhuri praises Spenser's portraits of rural life, he follows the standard critical line on the *Arcadia* as more interested in the romantic escapades of courtiers than the natural world.
11. Leopold, *Sand County Almanac*, 249. Like the Sidneys, Leopold's parents also planted a tree to commemorate their son's birth.
12. Carolyn Merchant pegs Sidney's *Arcadia* as a typical pastoral in that its idyllic vision of nature as "a benevolent nurturer" only reinforces a sense of it as "subordinate and essentially passive" (*The Death of Nature*, 8–9).
13. Aubrey's correspondent from Wiltshire, D. Tyndale (his first name remains unknown), corroborates this story in his *Key to Pembroke's Arcadia* (1687), noting that Sidney "lived much in these parts and his most masterly touches of his pastorals he wrote here upon the spot, where they were conceived. 'Twas about these purlieus that the muses were wont to appear to Sir Philip Sidney, and where he wrote down their dictates in his table book, though on horseback" (284). Aubrey repeats these observations as his own in his *Natural History of Wiltshire* (London: Wiltshire Topographical Society, 1847), 108.
14. Coleridge complained about the "defects" of Sidney's style but Hazlitt most famously stated the Romantic grievances with the artifice of *The Arcadia* in his "Lectures Chiefly on the Dramatic Literature of the Age of Elizabeth," *Complete Works of William Hazlitt*, ed. P.P. Howe, 21 vols. (London: J.M. Dent, 1930–1934), 6:318–326; rptd. in *Sidney: The Critical Heritage*, ed. Martin Garrett (London: Routledge, 1996), 318–321.
15. *The Old Arcadia* reflects its author's awareness in contemporary developments in botany. In 1578 the first sycamore saplings, brought back by pilgrims from the Holy Land, were planted in England, and Sidney registers this interest in importing plants when Philanax questions the foreign monarch chosen to serve as protector as to "whether the goodly tree of your virtue will live in all soils" (361).
16. For more on Sidney's friendship with L'Ecluse see John Buxton, *Sir Philip Sidney and the English Renaissance* (London: Macmillan, 1987), 51–52, 60–62. L'Ecluse's letter to Sidney in which he enclosed a copy of his book on Spanish plants (*Rarorum aliquot stirpium per Hispanias observatorum historia*) is reprinted in James M. Osborne, *Young Philip Sidney* (New Haven: Yale UP, 1972), 418. In addition to L'Ecluse, Sidney also talked botany with the emperor's physician Carto von Kafftheim—who in a letter dated March 20, 1575

asked Sidney to send him an English book on medical plants—and the scholar Joachim Camerarius, befriended by Sidney during a stopover in Prague. See Buxton, *Sir Philip Sidney and the English Renaissance*, 61, 89. Osborne has questioned whether L'Ecluse accompanied Sidney on the trip to Hungary; if Osborne is right, the two men may not have met until September 1574. See *Young Philip Sidney,* 100, and *A Sidney Chronology 1564–1654*, ed. Michael Brennan and Noel J. Kinnamon (New York: Palgrave, 2003), 43.

17. Buxton, *Sir Philip Sidney and the English Renaissance*, 60.
18. Terry Gifford associates the Arcadian mode with antiseptic and "idealized discourse" about the countryside in his essay "Towards a Post-Pastoral View of British Poetry," *The Environmental Tradition in English Literature*, ed. John Parnham (Aldershot: Ashgate, 2002), 51–63. Also see the quotation from Merchant in note 13. Joseph Meeker likewise offers a wholesome condemnation of the genre as anthropocentric (citing only a single poem, a satire by Juvenal, as representative of the entire 2,000-year-old tradition) in *The Comedy of Survival: Literary Ecology and a Play Ethic* (Tucson: U of Arizona P, 1974), 50–73. Greg Garrard in his recent primer on ecocriticism leapfrogs over Renaissance pastoral completely, pausing only to echo Williams's attack on the mystifications of the country-house poem. *Ecocriticism*, 33–58. Glen A. Love presents a more sympathetic take on the genre with the caveat that it must learn to appreciate wilderness in "Et in Arcadia Ego: Pastoral Theory Meets Ecocriticism," *Western American Literature* 27 (1992): 195–207.
19. Raymond Williams, *The Country and the City* (Oxford: Oxford UP, 1973), 18.
20. Theodor Adorno, *Minima Moralia*, trans. E.F.N. Jephcott (London: Verson, 1978), 95. I would like to thank Robert Abrams for drawing my attention to this text.
21. According to environmental historian J. Donald Hughes, "the loss of forests was the most widespread and noticeable change made in the natural environment by Roman activity" and around Ovid's lifetime the growing scarcity forced imperial officials to create tree plantations to harvest lumber. *Ecology in Ancient Civilizations* (Albuquerque: U of New Mexico P, 1975), 99.
22. Although Sidney never traveled across the Atlantic, he did invest in the 1583 expedition of Sir Humphrey Gilbert, securing the right to three million acres of America. There was only one small catch: the land itself had not yet been discovered! Less than a month later, however, he sold his claim to a Catholic sympathizer, Sir George Peckham. Sidney's logic is a bit difficult to parse out, prompting a recent biographer to ponder: "Did he really believe that his letters patent would make him master of a huge estate that would make up for the loss of his uncle's expected inheritance, or was this just another cynical scheme for making money out of beleaguered Catholics?" Katherine Duncan-Jones, *Sir Philip Sidney: Courtier Poet* (New Haven: Yale UP, 1991), 230. Perhaps the most plausible explanation is that the contract permitted Sidney to briefly indulge in the fantasy of possessing his own private wilderness without the pesky responsibilities normally attendant on managing one in earnest.
23. Thomas, *Man and the Natural World,* 193.
24. Martin Heidegger, "The Question Concerning Technology," trans. William Lovitt, *Basic Writings*, ed. David Farrell (San Francisco: Harper, 1977), 323. For a complex assessment of the case to canonize Heidegger as the theoretical prophet of deep ecology, see Michael Zimmerman, *Heidegger's Confrontation with Modernity: Technology, Politics, Art* (Bloomington: Indiana UP, 1990), 241–244.
25. The rise of fiscal forestry in Germany and its global influence is outlined in Ramachandra Guha, *Environmentalism: A Global History* (New York:

Longman, 2000), 33–43, and James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale UP, 1998), 14–22. Fiscal forestry practices developed in England throughout the sixteenth and seventeenth centuries, culminating in the 1664 publication of *Sylva*, John Evelyvn's handbook on forestry management.

26. See Joyce Young's section on the Church and the breakup of monastic estates in *The Agrarian History of England and Wales IV: 1500–1640*, ed. Joan Thirsk (Cambridge: Cambridge UP, 1967), 306–356; 19 & 20 Car. II, c. 8 (1668); qtd. in Thomas, *Man and the Natural World*, 200.
27. Thomas Middleton, *The Works of Thomas Middleton*, ed. A.H. Bullen, 8 vols. (New York: AMS Press, 1964), 1:3.4.15.
28. Oliver Rackham, *Trees and Woodland in the British Landscape* (London: J.M. Dent, 1976), 97.
29. Ibid., 91. The theory that England suffered a "timber famine" in the late sixteenth and early seventeenth centuries was first popularized by John Nef in *The Rise of the British Coal Industry*, 2 vols. (London: Routledge, 1932), 1:161. While Nef's argument has been subjected to revisionist critiques suggesting that some regions may have been unaffected, his basic thesis remains compelling. See John F. Richards, "Landscape Change and Energy Transformation in the British Isles," *The Unending Frontier: An Environmental History of the Early Modern World* (Berkeley: U of California P, 2003), 193–241.
30. Anthony Low, *The Georgic Revolution* (Princeton: Princeton UP, 1985).
31. Andrew McRae, "Husbandry Manuals and the Language of Agricultural Improvement," *Culture and Cultivation in Early Modern England: Writing and the Land*, ed. Michael Leslie and Timothy Raylor (Leicester: Leicester UP, 1992), 45.
32. The tree catalogue in *The Georgics* bears a closer resemblance to Harriot's: "Even the barren woods on Caucasian peaks . . . yield products, each after its kind, yield useful timber." Virgil, *Virgil*, trans. H. Ruston Fairclough, 2 vols. (Cambridge: Harvard UP, 1955), 2.440–453.
33. Originally titled *A Hundreth Good Points of Husbandrie*, Thomas Tusser's book was later expanded and renamed *Five Hundred Points of Good Husbandry.* This citation is taken from the 1580 edition, 38.7–10. Conrad Heresbach, *Four Bookes of Husbandry*, trans. Barnaby Googe (London, 1577), 69–110.
34. Joseph Hall, "Virgidemiarum," *Collected Poems*, ed. Arnold Davenport (Liverpool: Liverpool UP, 1949), 85; qtd. in Andrew McRae, *God Speed the Plough: The Representation of Agrarian England, 1500–1660* (Cambridge: Cambridge UP, 1996), 89.
35. Edwin Greenlaw first put forward the theory that Sidney's fiction criticizes Elizabeth's foreign policy in 1913 in "Sidney's *Arcadia* as an Example of Elizabethan Allegory," *Essential Articles for the Study of Sir Philip Sidney*, ed. Arthur Kinney (Hamden, CT: Archon, 1986), 271–285. Further analysis of the connection between romance and reality in Sidney can be found in Richard McCoy, *Sir Philip Sidney: Rebellion in Arcadia* (New Brunswick, NJ: Rutgers UP, 1979); Annabel Patterson, "'Under . . . Pretty Tales': Intention in Sidney's *Arcadia*," *Studies in the Literary Imagination* 15:1 (1982): 5–21; Alan Sinfield, "Power and Ideology: An Outline Theory and Sidney's *Arcadia*," *English Literary History* 52:2 (1985): 259–277; and Blair Worden, *The Sound of Virtue: Philip Sidney's Arcadia and Elizabethan Politics* (New Haven: Yale UP, 1996).
36. Burghley's earlier court appointments are discussed in B.W. Beckingsale, *Burghley: Tudor Statesman 1520–1598* (New York: Macmillan, 1967), 34, 247–248. In addition to butting heads over the Anjou affair, Sidney would

likely have resented Cecil in principle as an upstart and an obsequious yes-man, the polar opposite of Sidney's ideal courtier who would unflinchingly speak his mind to the monarch and hold the good of the nation above the desire for personal advancement. In a letter, Burghley pledged to the queen that he would always "be a minister of your Majesty's determinations and not of my own" and would without hesitation stoop to perform any of her requests "though it were in your Majesty's kitchen or *garden*" (qtd. in McCoy, 1979, 5). This is precisely the kind of language Sidney loathed and the antithesis of that which he personally used both in his own letter and when defending himself before the queen during his tennis court dispute with Oxford. Sidney wrote several exasperated letters to Burghley, some of which still survive and are reprinted in *The Complete Works of Sir Philip Sidney*, ed. Albert Feuillerat, 4 vols. (Cambridge: Cambridge UP, 1923), 3:73–186.

37. B.W. Beckinsdale, *Burghley*, 262–263. Cecil's obsession with constructing ornate gardens is also documented in John Summerson, "The Building of Theobalds," *Archaeologia* 97 (1959): 107–126, and Terry Comito, *The Idea of the Garden in the Renaissance* (New Brunswick, NJ: Rutgers UP, 1978), 15–19.
38. Jonson, *The Complete Poems*, 91. In a footnote, Donaldson reads Jonson's poem as an implicit rebuke of Burghley's materialistic and showy construction projects at Theobalds.
39. In *The Yale Edition* of Spenser's poetry, William Oram suggests that the portrait of the noble courtier derives from Castiglione (329), but it also bears an unmistakable resemblance to the hero of *Astrophel*, Spenser's elegy to Sidney.
40. 13 Elizabeth c.25, based on 35 Henry 8, c.17. As Joan Thirsk usefully reminds us, "enclosure" is a vague term covering many different types of land management. If the conversion of common woodlands to private farmland was initially part of the problem, the enclosure of woodlands was perceived by the end of the century as a form of preservation. See *The Rural Economy of England* (London: Hambledon, 1984), 65–83.
41. 23 Elizabeth c.5
42. Robert Albion, *Forests and Sea-Power: The Timber Problem of the Royal Navy 1652–1862* (Cambridge: Harvard UP, 1926), 123–124; qtd. in Richards, *Unending Frontier*, 226.
43. John Manwood, *A Treatise and Discourse of the Lawes of the Forrest* (London: 1592), 1.2. My reading of Manwood is indebted to Robert Pogue Harrison's pioneering work, *Forests: The Shadow of Civilization* (Chicago: U of Chicago P, 1992), 69–75, and Richard Marienstras who has also argued that "we can detect a measure of ecological consciousness" in Manwood's program in *New Perspectives on the Shakespearean World*, trans. Janet Lloyd (Cambridge: Cambridge UP, 1985), 17.
44. Sidney's only extant dramatic work, *The Lady of May*, was performed before the queen in either 1578 or 1579. It has also been interpreted as advising the queen against the Anjou match. See Stephen Orgel, *The Jonsonian Masque* (Cambridge: Harvard UP, 1965), 44–57.
45. Although "laurel" is used today as a generic term covering several different species, Sidney undoubtedly refers to the *laurus nobilis*, or sweet bay, associated with poets. It seems to have been imported to England sometime in the early sixteenth century. L.F.J. Brimble, *Trees in Britain* (London: Macmillan and Co., 1946), 143–146. Thirty years before Sidney penned his *Defence,* Turner reports in his *Names of Herbes* (1548): "Bay trees are commune in gardines in the South parte of England" (47).
46. Louisa Mackenzie, "'Ce ne sont pas de bois': Poetry, Regionalism, and Loss in the Forest of Ronsard's Gatine," *Journal of Medieval and Early Modern Studies* 32:2 (Spring 2002): 343–374.

47. Myron Turner, "The Disfigured Face of Nature: Image and Metaphor in the Revised *Arcadia*," *Sidney in Retrospect: Selections from English Literary Renaissance*, ed. Arthur Kinney (Amherst: U of Massachusetts P, 1988), 181–200. *The Penguin Book of English Pastoral Verse*, ed. John Barrel and John Bull (London: Penguin, 1982), 18.
48. Maurice Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London: Routledge, 1962), 373, italics mine.
49. Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (Cambridge: Harvard UP, 1936). Long out of favor with historicist critics, Lovejoy's model (and its redaction in Tillyard's *Elizabethan World-Picture*) is beginning to be rehabilitated by ecocriticism. See Egan, *Green Shakespeare*, 25.
50. Aristotle, *De anima*, trans. Hugh Lawson-Tancred (London: Penguin, 1986), 158–162.
51. Theophrastus, *De causis plantarum*, trans. Benedct Einarson and George K. Link, 3 vols. (Cambridge: Harvard UP, 1976). The same organizing principle shapes the *Natural History* of Pliny the Elder, who devotes books 17–19 in Volume 5 to trees and arboriculture, while his herbal fills all of Volumes 6 and 7. Pliny, *Natural History*, ed. H. Rackham, 10 vols. (Cambridge: Harvard UP, 1945). Both he and Theophrastus invariably examine trees before mentioning other plants in keeping with the hierarchical view of the natural world outlined by Aristotle. Lovejoy cites *De anima* as a formative influence on "the Great Chain of Being" (58–59).
52. Ralph Waldo Emerson, *Collected Works*, ed. Alfred Ferguson (Cambridge: Belknap, 1971), 1:10. Emerson's description of a psychic reciprocity between humans and plants echoes that of Sidney's almost verbatim: "I am not alone and unacknowledged. They nod to me and I to them."
53. George Gascoigne, *The Queenes Maiesties Entertainment at Woodstocke* (London: 1585), 8–9; Duncan-Jones, *Sir Philip Sidney*, 101. Given that Sidney composed several entertainments for the queen, it is possible he may have collaborated with Dyer on "The Song in the Oak." Either of them could have lifted the idea from Gascoigne's entertainment at Kenilworth a decade earlier, in which a sorceress boasts of transforming Inconstancy into a poplar tree.
54. John Lyly, *Endymion*, ed. David Bevington (Manchester: Manchester UP, 1986), 5.2.86. A similar scene occurs in *Love's Metamorphosis* where a dryad cries out when the tree in which she resides is attacked with an axe (1.2). Lyly's acting company is thought to have owned a hollow tree in order to stage such illusions. See the footnote in Bevington's edition, 194n.
55. In her recent Arden edition of *As You Like It*, Juliet Dusinberre acknowledges Sidney's influence but neglects to mention the 1598 reprinting of the *Arcadia* as a factor that drew Shakespeare to the pastoral at this moment in his career (85–86).
56. The opening line of the first pastoral poem reads: "That pine-tree by the spring and your touch on the pipe / Both whisper a music to draw the listener in" (Theocritus, *The Idylls*, trans. Robert Wells [London: Penguin, 1989], 55). Leo Marx performs a shrewd reading of Virgil's echo in his path-breaking text, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (London: Oxford UP, 1964), 23.
57. Ruskin coined the phrase "pathetic fallacy" in his 1856 landmark study *Modern Painters*. The essay is reprinted in *Works of John Ruskin*, ed. E.T. Cook and Alexander Wedderburn, 39 vols. (London: G. Allen, 1903–1912), 2:152–167. Despite this famous objection, Ruskin elsewhere observes how

"the sympathy of very lofty and sensitive minds usually reaches so far as to the conception of life in the plant" (2:92). E.K., the mysterious commentator who wrote the critical apparatus for *The Shepheardes Calender*, repeatedly praises Spenser's mastery of this "lively figure, which geveth sense and feeling to unsensible creatures" (51). Spenser himself uses the rhetorical term as the first part of the title of his *Mother Hubberds Tale*.

58. Folz, "Nature's Other Side," 334.
59. See Patterson, "'Under . . . Pretty Tales,'" 17; and Martin Raitiere, *Faire Bitts: Sir Philip Sidney and Renaissance Political Theory* (Pittsburgh: Duquesne UP, 1984), 79–101.
60. Christopher Manes, "Nature and Silence," *The Ecocriticism Reader,* 16. My reading here concurs with Lawrence Buell, who notes that "to ban the pathetic fallacy—were such a thing possible—would be worse than to permit its unavoidable excesses. For without it, environmental care might not find its voice. For some, it might not even come into being" (*The Environmental Imagination*, 218).
61. George Gascoigne, "Princely Pleasures at Kenilworth Castle," *The Complete Works of George Gascoigne*, ed. John Cunliffe, 2 vols. (Cambridge: Cambridge UP, 1910), 2: 97–100. Another famous account of the entertainment is recorded in *Robert Laneham's Letter*, ed. Johannes Pieter Kuin (Amsterdam: U of Amsterdam P, 1973), 19–21.
62. Parts of this discussion echo, as it were, Joseph Loewenstein, *Responsive Readings: Versions of Echo in Pastoral, Epic, and the Jonsonian Masque* (New Haven: Yale UP, 1984), 92. Loewenstein, a former professor of mine, was in turn a student of John Hollander, who wrote a celebrated study on the subject, *The Figure of Echo: A Mode of Allusion in Milton and After* (Berkeley: U of California P, 1981). Hollander deals mostly with seventeenth- and eighteenth-century poetry and while he briefly glances at Gascoigne's performance at Kenilworth, he overlooks Sidney's version.
63. Galen Strawson, "Realistic Monism: Why Physicalism Entails Pan-Psychism," *Consciousness and Its Place in Nature* (Charlottesville, VA: Imprint Academic, 2006), 3–31. For more on the history of this concept in the premodern era, see David Sbrinka, *Panpsychism in the West* (Cambridge: MIT Press, 2005).
64. Merleau-Ponty, *The Phenomenology of Perception*, 230. David Abrams has nicely unraveled the ecological implications of Merleau-Ponty's theories in *The Spell of the Sensuous: Perception and Language in a More-Than-Human World* (New York: Vintage, 1996), 44–72. A provocative examination of prosopopeia in Marvell and Milton can be found in Diane McColley, "The Commodious Ark: Nature's Voice in Early Modern Poetry," *The Environmental Tradition in English Literature*, ed. John Parnham (Aldershot: Ashgate, 2002), 130–143. For a glimpse of how pan-psychism may contribute to the growing synergy between religion and ecology, see Brian J. Walsh, Marianne B. Karsh, and Nik Ansell, "Trees, Forestry, and the Responsiveness of Creation," *This Sacred Earth*, ed. Roger Gottlieb (New York: Routledge, 1996), 423–435.
65. Michel de Montaigne, *The Complete Essays of Montaigne*, trans. Donald M. Frame (Stanford: Stanford UP, 1957), 331.
66. The poem by Cowley, "Of Solitude" (1656), appears in his collected *Essays* (Cambridge: Cambridge UP, 1923), 26.
67. Mary Wroth, *The First Part of the Countess of Montgomery's Urania*, ed. Josephine Roberts (Binghamton, NY: Medieval & Renaissance Texts and Studies, 1995). Subsequent references will be cited in the text. The mount shown on the frontispiece to *Urania* and the wooded "Mount cast

up by nature" (133.1–2) are both reminiscent of the one described in "Penshurst."

68. Sylvia Bowerbank, *Speaking for Nature: Women and Ecologies of Early Modern England* (Baltimore: Johns Hopkins UP, 2004), 33, 17.
69. Oliver Elton, *Michael Drayton* (New York: Russell and Russell, 1966), 110.
70. Maggie Campbell-Culver, *A Passion for the Trees: The Legacy of John Evelyn* (London: Eden Books, 2006).
71. John Evelyn, *Sylva, or a Discourse of Forest-trees and the Propagation of Timber in his Majesties Dominions* (London: 1664), B3r.
72. John Aubrey records some English superstitions about sacred groves and avenging dryads placing curses on woodcutters in his "Remaines of Gentilisme and Judaisme," *Three Prose Works*, ed. John Buchanan-Brown (Fontwell: Centaur Press, 1972), 195-197.
73. Timothy Sweet, "Would Thomas More Have Wanted to Go to Mars?: Colonial Promotion and Bio-Power," *Early Modern Ecostudies*, 269.
74. Beavers were just reintroduced into England for the first time in over 500 years in October 2005.
75. McRae, *God Speed the Plough*, 259.
76. Bernard Newdigate, *Michael Drayton and His Circle* (Oxford: Shakespeare's Head Press, 1941), 4. The second of the three houses rumored to be Drayton's childhood home fared no better. It was torn down to make room for a motorway.
77. George Wither's poem appears in the preface to the second part of the poem, l.69–70, 72.

NOTES TO CHAPTER 3

1. See Stuart Piggot, *The Druids* (London: Thames and Hudson, 1968), 63; Anne Ross, *Pagan Celtic Britain* (London: Constable, 1967).
2. Gregory's first letter is reprinted by Bede in *The Ecclesiastical History of the English Nation* (London: J.M. Dent, 1916), 1, 30.
3. "The Council of Cloveshoe," *Documents Illustrative of the History of the English Church,* ed. Henry Gee and William John Hardy (New York: Macmillan, 1896), 22–23.
4. My research has uncovered only one previous critical study on literature and Rogation, Rhonda Sanford's discussion of the festival as a shaping influence on Jonson's "To Penshurst," in *Maps and Memory in Early Modern England: A Sense of Place* (New York: Palgrave, 2002), 88.
5. *Eleven Old English Rogation-tide Homilies,* ed. Joyce Bazire and James E. Cross (Toronto: Toronto UP, 1982), xxi. For more on the history of Rogation, see Steve Hindle, "Beating the Bounds of the Parish: Order, Memory, and Identity in the English Local Community, c.1500-1700," *Defining Community in Early Modern Europe*, ed. Michael J. Halvorson and Karen Spierling (Aldershot: Ashgate, 2008), 205–227; Ronald Hutton, *The Stations of the Sun: A History of the Ritual Year in Britain* (Oxford: Oxford UP, 1996), 278–287; Dorothy Gladys Spicer, *Yearbook of English Festivals* (New York: H.W. Wilson Company, 1954), 222–224; E.K. Chambers, *The Medieval Stage* (London: Oxford UP, 1903), 119–120. Spicer reports that Rogation was a merger of two Roman festivals: *Ambarvalia*—a communal procession to drive winter from the fields—and *Terminalia*—a ceremony in which neighbors erected stone shrines as property markers. To Spicer's list I would also add the *Robigalia* (from the Latin for rust or mold), in which prayers

were offered to spare crops from mildew. Early modern authors would have come across descriptions of these ceremonies in works by Roman poets such as Tibullus and Ovid. John Aubrey perceptively notes the similarities between the pagan Rubigalia and the Christian perambulations in his "Remaines of Gentilisme and Judaisme," *Three Prose Works*, 144.

6. The celebration of these fertility rituals in the days just prior to the holiday of Christ's Ascension is, I believe, not accidental. Environmentalists may decry the story on the Ascension, like the opening line of the Lord's Prayer, as proof that Christianity evicts spirit from the earth and enthrones a sky-God in its stead. But if the rupture implied in the phrase "Our Father who art in Heaven" is to some extent qualified by the wish "As in heaven, so in earth," so, too, the Rogation week was time when early Christians recognized a divine immanence in the natural world.
7. *Eleven Old English Rogation-tide Homilies*, 112.
8. James Frazer, *Golden Bough: A Study in Comparative Religion* (London: 1890), 9.
9. The parading of relics and gospels was part of the celebrations as recognized in the Council of Orleans in 511. Since parish boundaries in England were not officially established until the thirteenth century, some scholars believe the perambulations came later. It is equally possible, however, that the processions pressured communities to draw up firmer boundaries in the first place. In the 1230s the Bishop of Lincoln reported that the processions often erupted in skirmishes between neighboring parishes. See Hutton, *Stations of the Sun*, 278.
10. William Tyndale, *An Answer to Sir Thomas More's Dialogue*, ed. H. Walter (Cambridge: 1850), 62; "The Injunctions of Elizabeth," *Documents Illustrative of English Church History*, 426.
11. Henry Machyn, *The Diary of Henry Machyn: Citizen and Merchant Taylor of London from A.D. 1550 to A.D. 1563* (London: Camden Society, 1848), 87–89, 137.
12. "The State of the Melford Church as I, Roger Martyn, Did Know It," *The History of Long Melford* (London: 1873), 70–73; rptd. in *Religion and Society in Early Modern England: A Sourcebook*, ed. David Cressy and Lori Ann Ferrel (London: Routledge, 1996), 12–13.
13. Insightful summaries of the Protestant assault on Rogation can be found in Keith Thomas, *Religion and the Decline of Magic* (New York: Oxford UP, 1971), 62–64, and Eamon Duffy, *The Stripping of the Altars*: *Traditional Religion in England 1400-1580* (New Haven: Yale UP, 1992), 136–139. Bishop Grindal criticizes the perambulation in the eighteenth section of his *Iniunctions Giuen by the most reuerende father in Christ, Edmonde . . . in his Metropolitical visitation of the Prouince of Yorke* (London, 1571). Appropriately, the first recorded use of the verb to "beat" for this festival comes from Barnabe Googe, the Protestant author of the most important pre-Spenserian work of pastoral verse in English.
14. The notion of "disenchantment," used by Merchant, can be traced back to Max Weber's essay, "Science as a Vocation," *From Max Weber: Essays in Sociology*, ed. H.H. Gerth and C. Wright Mills (New York: Oxford UP, 1946), 155.
15. Hindle, "Beating the Bounds of the Parish," 208–210.
16. Robert P. Harrison praises the ecological moral of the *Metamorphosis* in *Forests*, 26. On Shakespeare's familiarity with Aesop and Ovid, see *Shakespeare and the Classics*, ed. Charles Martindale and A.B. Taylor (Cambridge: Cambridge UP, 2004), and Bate, *Shakespeare and Ovid*. Another touchstone on this subject is Jean Seznec's *The Survival of the*

Pagan Gods: The Mythological Tradition and Its Place in Renaissance Humanism and Art, trans. Barbara F. Sessions (Princeton: Princeton UP, 1972). Although Seznec focuses primarily on continental authors, he does briefly address the use of mythological sources in Spenser, Jonson, and Shakespeare, 312–316.

17. Ronald Bond interprets it as voicing the older generation's anxieties about their "supplantation" in the hierarchy of the Elizabethan court in "Supplantation in the Elizabethan Court: The Theme of Spenser's February Eclogue," *Spenser Studies* 2 (1981): 55–65. Louis Montrose presents a similar take but argues that Spenser, himself a scholarship boy, recognizes the need for social mobility; see "Interpreting the February Eclogue," *Spenser Studies* 2 (1981): 67–74. Paul McLane, meanwhile, deciphers the Oak and the Briar as an allegory of the feud between the Earl of Leicester, the Queen's sturdy supporter, who had been suddenly overshadowed by her new favorite, the Earl of Oxford. *Spenser's* Shepheardes Calender: *A Study in Elizabethan Allegory* (South Bend: U of Notre Dame P, 1961), 61–76. A similar allegory may underlie the felling of the oak in the poem "Erst in Arcadia's londe much prais'd was found," attributed to John Harington; *John Harington of Stepney: A Tudor Gentlemen His Life and Works*, ed. Ruth Hughey(Columbus: Ohio State UP, 1971), 133-134. As with Sidney's "Ister Bank," the political allegory can only sway readers in proportion to their outrage at the destruction of the tree.
18. G.A. Thornton, 96; qtd. in Duffy, *The Stripping of the Altars,* 137. A similar custom survives to this day in Japan, as Shinto shrines commonly feature sacred trees whose trunks are girdled round with ropes to protect them from felling.
19. Anthea Hume, *Edmund Spenser: Protestant Poet* (Cambridge: Cambridge UP, 1984), 1; John N. King, *Spenser's Poetry and the Reformation Tradition* (Princeton: Princeton UP, 1990), 34.
20. Ruth Samson Luborsky, "The Illustrations to *The Shepheardes Calender*," *Spenser Studies* 2 (1981): 30.
21. The reference to the oracular oak occurs in Book 16 of *The Odyssey*, trans. Robert Fagles (New York: Viking, 1996), 312.
22. C.S. Lewis, *The Allegory of Love* (London: Oxford UP, 1958), 297–360.
23. Kenneth Gross, *Spenserian Poetics, Idolatry, Iconoclasm, and Magic* (Ithaca: Cornell UP, 1985), 31, 11.
24. Chaucer was considered a proto-Protestant by many Reformers thanks largely to apocryphal texts like *The Ploughman's Tale,* appended onto the 1542 edition of his works. Spenser undoubtedly knew and admired this work; in addition to copying the format of the debate between Protestant and Catholic speakers in "Maye," in the "Aprill" eclogue he filches the phrase "forswank and forswatt" from it. *The Ploughman's Tale* is reprinted in *The Complete Works of Geoffrey Chaucer*, ed. Walter Skeat (Oxford: Clarendon, 1897), 7:147–190.
25. J.A. Sharpe, "Economy and Society," *The Sixteenth Century 1485-1603*, ed. Patrick Collinson (Oxford: Oxford UP, 2002), 25.
26. Thomas, *Religion and the Decline of Magic*, 5.
27. Bernard Capp, *English Almanacs 1500-1800: Astrology and the Popular Press* (Ithaca: Cornell UP, 1979), 20. Keith Thomas estimates the number of different almanacs published in England prior to 1600 at six hundred, in *Religion and the Decline of Magic*, 294.
28. One early study on the subject is Mary Parameter, "Spenser's Twelve Aeglogues Proportionable to the Twelve Months," *English Literary History* 3 (1936): 190–217. The almanac from which Spenser pilfered his title was

published originally in French, translated in 1502, and reprinted dozens of times throughout the sixteenth century. All citations are taken from a reprint of the 1518 edition, *The Kalendar and Compost of Shepherds* (London: Peter Davies, 1931).

29. An overview of the agricultural advice contained in almanacs can be found in Capp, *English Almanacs*, 114. The citation from the epilogue of the French facsimile of the *Kalendrier* is quoted in Luborsky, "The Illustrations to *The Shepheardes Calender*," 48.
30. A concise history of the origin of "ecology" appears in the essay that coined the term "ecocriticism," William Howarth, "Some Principles of Ecocriticism," *Ecocriticism Reader*, 73.
31. William Perkins, *Four Great Lyers* (London: 1585).
32. Reginald Scot, *The Discoverie of Witchcraft* (New York: Dover, 1972).
33. Scot's story of the ass-headed man as an inspiration for Bottom was first proposed by Frank Sidgwick, *The Sources and Analogues of* A Midsummer Night's Dream (New York: Duffield and Company, 1908), 29–30.
34. Barbara Mowatt, "'A local habitation and a name': Shakespeare's Text as Construct," *Style* 23 (1989): 335–351.
35. Stephen Greenblatt, *Will in the World: How Shakespeare Became Shakespeare* (New York: Norton, 2004), 112.
36. Richard Corbett, *The Poems of Richard Corbett,* ed. J.A.W. Bennet and H.R. Trevor-Roper (Oxford: Clarendon, 1955), 49. Incidentally, Corbett's ballad also calls attention to the role of the faeries as overseers of domestic management. A popular superstition in early modern England decreed that one must perform household chores with care and without complaint in order to appease the faeries. John Aubrey reports that in his childhood "country people" believed that if they swept the hearth clean they would find three pence in their shoe the next morning as a gift from the faeries. See Aubrey, *Three Prose Works*, 203–204. This aspect of fairy-lore helps explain why Puck was commonly represented as toting around a broom. While it would be easy to dismiss this as a patronizing hoax invented by parents and masters to extort more work out of children and servants, such legends would also have encouraged a more thoughtful and efficient use of resources. Recalling that the word "ecology" derives from the concept of household management, the faeries of English folklore could truly be described as some of the first ecological figures in fiction. For more on Shakespeare's treatment of the faeries see K.M. Briggs, *The Anatomy of Puck: An Examination of Fairy Beliefs among Shakespeare's Contemporaries and Successors* (London: Routledge, 1959); Diane Purkiss, *At the Bottom of the Garden: A History of Fairies, Hobgoblins, and Other Troublesome Things* (New York: New York UP, 2000).
37. Robert Herrick, *Poems*, ed. L.C. Martin (London: Oxford UP, 1965), 91.
38. Brian Fagan, *The Little Ice Age: How Climate Made History 1300-1850* (New York: Basic Books, 2000), 103.
39. Accounts of the unseasonably bad weather appear in John Stow, *Annales of England* (London: 1600), 1278–1279. Peter Clark, "A Crisis Contained? The Condition of English Towns in the 1590s," *The European Crisis of the 1590s*, ed. Peter Clark (London: George Allen and Unwin, 1985), 44–66. Clark reports that famine exerted such a strain on society that "in London in 1595, it seemed as if the whole fabric of the urban community might be about to disintegrate" (56).
40. John Styrpe, *Annals of the Reformation* (London: 1825–1831) 4:210–211. Ludwig Lataver, *Three Christian Sermons*, trans. William Barlowe (London: 1596).

41. Sidney Thomas, "The Bad Weather in *A Midsummer Night's Dream*," *Modern Language Notes* 64:5 (1949): 319–322. Based on a reading of Stow, Thomas believes 1596 the more likely date for the play.
42. Hindle, "Beating the Bounds of the Parish," 217.
43. Richard Taverner, *Postils on the Epistles and Gospels*, ed. E. Cardwell (Oxford: 1841), 280; qtd. in Thomas, *Religion and the Decline of Magic*, 63.
44. Alan Brissden, *Shakespeare and the Dance* (Atlantic Highlands, NJ: Humanities Press, 1981). Brissden refers to the dance at the end of the *Dream* as a "strong visual image of concord" (34).
45. George Herbert, *Works*, ed. F.E. Hutchinson (Oxford: Clarendon, 1941), 284.
46. Hutton, *Stations of the Sun*, 287.
47. Linda Woodbridge, *The Scythe of Saturn: Shakespeare and Magical Thinking* (Urbana: U of Illinois P, 1994), 200. For a discussion of the problems that vexed earlier anthropological criticism, see Richard F. Hardin, "'Ritual' in Recent Criticism: The Elusive Sense of Community," *PMLA* 98 (1983): 846–862.
48. Thomas Nashe, *The Works of Thomas Nashe*, ed. R.B. McKerrow, 5 vols. (New York: Barnes and Noble, 1966), 3:543–546, 549–551. Subsequent references are cited in the text by line number.
49. C.L. Barber, *Shakespeare's Festive Comedy: A Study of Dramatic Form and its Relation to Social Custom* (Princeton: Princeton UP, 1959), 60.
50. Robert Markley, "Summer's Lease: Shakespeare in the Little Ice Age," *Early Modern Ecostudies*, 137.
51. Hindle describes the practice of mnemonic beatings in "Beating the Bounds of the Parish," 205-227. My reading of the perambulation of Falstaff is indebted to a suggestion made by Vin Nardizzi. Northrop Frye refers to Falstaff as a fertility spirit in *Anatomy of Criticism* (Princeton: Princeton UP, 1957), 60.
52. Samuel Daniel, *Complete Works in Verse and Prose*, ed. Alexander Grossart, 5 vols. (New York: Russell and Russell, 1963), 3:218.
53. Meeker, *Comedy of Survival*, 30.
54. My reading here echoes Egan, *Green Shakespeare*, 134. For more on the positive correlation between low sunspot activity and climate change, see Fagan, *The Little Ice Age*, 120-122.
55. Frye, *Anatomy of Criticism*, 182. After insisting that ritual seeks to recapture a rapport with nature, Frye adds an important caveat:

    > The impetus of the magical element in ritual is clearly toward a universe in which a stupid and indifferent nature is no longer the container of human society, but is contained by that society, and must rain or shine at the pleasure of man . . . In its anagogic phase, then, poetry imitates human action as total ritual, and so imitates the action of an omnipotent human society that contains all the powers of nature within itself. (119–120)

    While there is some validity to Frye's claim, it is important to note that not all ritual actions or poems that aspire to ritual automatically promote fantasies of human omnipotence. Milton's *On the Morning Christ's Nativity*, however, does seem to ascribe such powers to Christ and, by extension, the Puritan faithful.
56. The episode of Pan's death is reported by Plutarch in "Why the Oracles Cease to Give Answers," in *Plutarch's Lives and Writings*, ed. A.H. Clough and William Goodwin, 10 vols. (London: Simpkin, Marshall, Hamilton, Kent and Company, 1914), 9:22–24. Joseph Mede, *The Works of the Pious and Profoundly Learned Joseph Mede* (London: 1672), 194.
57. White, "The Historical Roots of Our Ecologic Crisis,"10. In the past four decades, White's now infamous theory has been challenged or modified by, among others, Rene Dubos, "A Theology of Earth," *Western Man and*

Environmental Ethics, ed. Ian G. Barbour (Reading, MA: Addison-Wesley, 1973), 43–54; Gabriel Fackre, "Ecology and Theology," *Western Man and Environmental Ethics*, 116–131; H. Paul Santmire, *The Travail of Nature: The Ambiguous Ecological Promise of Christian Theology* (Philadelphia: Fortress Press, 1985); Max Oelschlaeger, *The Idea of Wilderness: From Prehistory to the Age of Ecology* (New Haven: Yale UP, 1991), 41–42, 61–62; and Robin Atfield, "Social History, Religion, and Technology: An Interdisciplinary Investigation into Lynn White Jr.'s 'Roots'" *Environmental Ethics* 31:1 (Spring 2009): 31–50. Keith Thomas soberly comments that animistic religions did not prevent ecological degradation in Ancient Rome or in modern nations like Japan, *Man and the Natural World,* 23–24. Certainly, environmental mismanagement is not a problem exclusively among the Christian West. More ambivalent views of Christianity as potentially ecofriendly can be found in Roger S. Gottlieb, *A Greener Faith: Religious Environmentalism and Our Planet's Future* (Oxford: Oxford UP, 2006); John B. Cobb Jr. "Protestant Theology and Deep Ecology," *Deep Ecology and World Religion*, ed. David Barnhill and Roger S. Gottlieb (Albany: State University of New York Press, 2001); Nicholas Johnson, "Anima-tion at Little Gidding," *Early Modern Ecostudies*, 149–155; and Roger D. Sorrell, who argues that St. Francis's belief in the sanctity of all creation was not nearly as unorthodox as White suggests. See *St. Francis of Assisi and Nature: Tradition and Innovation in Western Christian Attitudes toward the Environment* (New York: Oxford UP, 1988), 147–148. Despite these critiques, White's theory continues to find eloquent acolytes in Carolyn Merchant; Steven Rockefeller, "Faith and Community in an Ecological Age," *Spirit and Nature: Why the Environment Is a Religious Issue*, ed. Steven C. Rockefeller and John Elder (Boston: Beacon Press, 1992), 142; and Pierre Hadot, who insists "the Christian character of this mechanistic revolution of the seventeenth century cannot be overemphasized" (*The Veil of Isis*, 129).

58. See T.K. Meier "Milton's *Nativity Ode*: Sectarian Discord," *Modern Language Review* 65:1 (1970): 7–10.
59. Stephen M. Buhler, "Preventing Wizards: The Magi in Milton's *Nativity Ode*," *Journal of English and Germanic Philology* 96 (1997): 43–57.
60. Barry Spar, "Sable-stoled Sorcerers," *Milton Quarterly* (1992): 46–47.
61. Plutarch, "Of Isis and Osiris," *Plutarch's Lives and Writings*, 9:99–100; Frazier, *Golden Bough*, 304.
62. Mark Berge looks at how Milton twists the figure of Orpheus and his supposed control over nature into a symbol of how poetry can regulate sexuality in "Milton's Orphic Harmony: Ovidian Imitation and Christian Revelation *in The Nativity Ode* and *The Passion*," *Sacred and Profane: Secular and Devotional Interplay in Early Modern British Literature*, ed. Helen Wilcox, Richard Todd, and Alasdair MacDonald (Amsterdam: VU Press, 1996), 259–274.
63. Virgil, *Eclogues*, trans. Barbara Hughes Fowler (Chapel Hill: U of North Carolina P, 1997), 11.
64. T.K. Meier's desperate attempt to explain the anomaly away by reading Pan as a pun on "bread" and therefore an appropriate sobriquet for Christ seems strained ("Milton's *Nativity Ode*: Sectarian Discord," 8).
65. McColley, "Milton's Environmental Epic: Creature Kinship and the Language of *Paradise Lost*,"; Hiltner, *Milton and Ecology.*

NOTES TO CHAPTER 4

1. Frye, *Anatomy of Criticism*, 345.

2. Berger, *Revisionary Play*; Paul Alpers, *What Is Pastoral?* (Berkeley: U of California P, 1996); Williams, *The Country and the City*; Louis Montrose, "'Eliza, Queene of Shepheardes,' and the Pastoral of Power," *English Literary Renaissance* 10 (1980): 153–182, and "Of Gentlemen and Shepherds: The Politics of the Elizabethan Pastoral Form," *English Literary Renaissance* 50 (1983): 415–459; Annabel Patterson, *Pastoral and Ideology: Virgil to Valery* (Berkeley: U of California P, 1987).
3. Richard Cody, *The Landscape of the Mind: Pastoralism and Platonic Theory in Tasso's* Aminta *and Shakespeare's Early Comedies* (Oxford: Clarendon, 1969), 12.
4. Watson, *Back to Nature*, 3.
5. Ibid., 4.
6. See Edgar Wind, *Pagan Mysteries in the Renaissance* (New York: Norton, 1967), 47. E.K.'s gloss of the mottos is somewhat ambiguous, as it seems to conflate these two "olde philosophers" into one person.
7. On courtesy as a natural virtue, see Humphrey Tonkin, *Spenser's Courteous Pastoral: Book Six of* The Faerie Queene (Oxford: Clarendon, 1972), 25. In implying that rational beings have an ethical responsibility for the irrational, courtesy resembles a kind of ecological noblesse oblige. The likelihood that the *Hermetica*'s notion of a community of living things influenced Spenser's portrait of courtesy is investigated in Robert Cummings, "Spenser's 'Twelve Private Morall Virtues,'" *Spenser Studies* 8 (1987): 35–59.
8. Cheney, *Spenser's Image of Nature*, 211.
9. Hallet Smith, *Elizabethan Poetry* (Cambridge: Harvard UP, 1952), 10, 2.
10. For an overview of New Historicism's reluctance to tackle the didactic, see Marshall Grossman, *Reading Renaissance Ethics*, ed. Marshall Grossman (London: Routledge, 2007), 5. A few critics who have examined the ethical underpinnings of pastoral and to whom this chapter is indebted, include Renato Poggioli, *The Oaten Flute: Essays on Pastoral Poetry and the Pastoral Ideal* (Cambridge: Harvard UP, 1975), and Andrew Ettin, *Literature and the Pastoral* (New Haven: Yale UP, 1984), 146–178.
11. Berger, *Revisionary Play*, 277–289; Alpers, *What Is Pastoral?*, 28–37.
12. Ben Jonson, *The Works of Ben Jonson*, ed. C. Herford and Percy Simpson, 11 vols. (Oxford: Clarendon, 1925–1963), 8:595.
13. David Beauregard, *Virtue's Own Feature: Shakespeare and the Virtue Ethics Tradition* (Newark: U of Delaware P, 1995), 37, 45.
14. Thomas Elyot, *The Governour* (London: T. Berthlet, 1531), 1, 92; see John M. Major, *Sir Thomas Elyot and Renaissance Humanism* (Lincoln: U of Nebraska P, 1964), 148–149. Lodowick Bryskett knew Spenser personally through their mutual employer, Lord Grey. Bryskett pitches his work as a modernized, accessible rendition of Aristotle into English. *A Discourse of Civill Life: Containing the Ethike part of Morall Philosophie* (London: 1606), 24.
15. John Cottingham, *Philosophy and the Good Life* (Cambridge: Cambridge UP, 1998), 2.
16. Poggioli, *The Oaten Flute*, 4–5.
17. Keith Thomas, *The Ends of Life: Roads to Fulfillment in Early Modern England* (Oxford: Oxford UP, 2009), 110.
18. Poggioli, *Oaten Flute*, 9.
19. Gerard Hughes, *Aristotle on Ethics* (London: Routledge, 2001), 22–23.
20. Latin citations from Virgil are taken from the Loeb edition. A.J. Boyle *The Chaonian Dove: Studies in the Eclogues, Georgics, and Aeneid of Virgil* (Leiden: Brill, 1986), 15. See also Charles Martindale, "Green Politics: The Eclogues," in *The Cambridge Companion to Virgil*, ed. Charles Martindale (Cambridge: Cambridge UP, 1997), 107–124.

21. Boyle, *The Chaonian Dove*, 21.
22. The adage "according to nature" also appears in the work of Chrysippus, Stobaeus, and Diogenes Laertius. A handy anthology of excerpts ruminating on this famous maxim appears in *The Hellenistic Philosophers*, eds. A.A. Long, D.N. Sedley (Cambridge: Cambridge UP, 1987), 394–401. David Hahm provides a history of the Stoic definition of nature, and its deviations from Aristotle, in *The Origins of Stoic Cosmology* (Columbus: Ohio State UP, 1977), 200–212.
23. Unless otherwise specified, citations of Cicero have been taken from Elizabethan translations: *Marcus Tullius Ciceroes thre bokes of duties*, ed. Gerald O'Gorman (Washington, DC: Folger Shakespeare Library, 1988), and *Those fyue questions, which Marke Tullye Cicero, disputed in his manor of Tusculanum*, trans. John Dolman (London, 1561), 207r.
24. Cottingham, *Philosophy and the Good Life*, 42–43.
25. Mary Midgley, *Beast and Man: The Roots of Human Nature* (London: Routledge, 1979), footnote, 260.
26. John Stuart Mill, *Nature: The Utility of Religion and Theism* (London: Longmans, 1874). Curiously, Herman Melville presents a similar caveat about sentimentalizing Nature, which seems tailor-made for my reading in Chapter 1:

    'Sure you don't think that natur, Dame Natur [sic] will hurt a body, do you?'

    'Natur is good Queen Bess, but who's responsible for the cholera?' *The Confidence Man* (New York: Russell and Russell, 1963), 140–141.
27. The quotations from, respectively, Diogenes Laertius and Epicetus are reprinted in *The Hellenistic Philosophers*, 395–396.
28. Cicero, *On the Good Life*, ed. Michael Grant (London: Folio, 2003), 5.24. The Elizabethan translation of *Those fyve questions . . . disputed in his manor of Tusculanum* speaks of the mind's power "to see the causes of all thinges to be necessarily knyt, one to another" (203v).
29. Susan Sauvè Meyer, *Ancient Ethics* (New York: Routledge, 2008), 138–139.
30. Aristotle, *The Ethics*, trans. J.A.K. Thompson (Hammondsworth: Penguin, 1976), 6.7.1141a20. An abridged English translation of this monumentally important text was published in 1547.
31. Seizing upon this portion of *The Ethics*, Susanne E. Foster argues that Aristotle equips readers with the conceptual spectacles to view natural phenomena as capable of a state of flourishing. See "Aristotle and the Environment," *Environmental Ethics* 24 (Winter 2002): 409–428. Pastoral, I would argue, fosters a similar recognition, as borne out by the declaration of the Duke in *As You Like It* that his sylvan exile enables him to perceive "good in everything" (2.1.17). Along with a hazy, sentimental intimation of a benevolence suffusing nature, the line suggests that other creatures may have their own particular notion of flourishing, an insight that immediately raises moral qualms about his hunting deer in Arden.
32. Ronald Sanders, *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics* (New York: Columbia UP, 2007), ix, 39–40. In a survey of recent studies on the ethics of consumerism, David A. Crocker posits that "the neo-Aristotelian approach has emerged as the most promising way to conceptualize human well-being," and to arrive at a distinction between conspicuous and conscientious consumption. "Consumption, Well-Being, and Virtue," *The Consumer Society*, eds. Neva R. Goodwin, Frank Ackerman, and David Kiron (Washington DC: Island Press, 1997), 17.
33. Sanders, *Character and Environment*, 55–56.
34. Aldo Leopold, *Game Management* (New York: Scribner, 1933), xxxi.

35. Peter Marinelli uses the phrase "the nearness of Sparta" to signify something like the reality principle, the idea that a pastoral retreat is only temporary, not an end in itself. *Pastoral* (London: Methuen, 1971), 64.
36. It should hardly come as a surprise that Sidney was a devout student of the moral treatises mentioned in this study. In a letter to Edward Denny (written in 1580 and re-discovered in 1971), Sidney recommended that he read "Aristotles Ethickes, Tullyes offices, [and] some of Pluttarcks discourses." The letter is reprinted in full in Osborne, *Young Philip Sidney*, 538–539. For more on Sidney's "Stoic pastoral" and his frequent appeals to nature as a moral norm, see Robert Stillman, *Sidney's Poetic Justice:* The Old Arcadia*, Its Eclogues, and Renaissance Pastoral Traditions* (London: Associated UP, 1986), 70–74.
37. Marlowe's poem first appeared without its title in *The Passionate Pilgrim* (c. 1598). Paul Alpers acknowledges that the speaker's shepherd guise wears thin, but still classifies the piece as a pastoral lyric (*What Is Pastoral?*, 223–224).
38. Montrose, "'Eliza, Queene of Shepheardes,'" 168, 158.
39. E.A.J. Honigmann, *Shakespeare's Impact on His Contemporaries* (Totowa, NJ: Barnes and Noble, 1982), 1–14.
40. William Fenn DeMoss, *The Influence of Aristotle's* Politics *and* Ethics *on Spenser* (Chicago: U of Chicago P, 1920). Rosemond Tuve emphasizes Spenser's debt to the exegetical tradition, particularly Cicero, Macrobius, and pseudo-Seneca, rather than a narrow allegiance to Aristotle, in *Allegorical Imagery: Some Medieval Books and Their Posterity* (Princeton: Princeton UP, 1966), 57–143, 77; an authoritative synopsis of Spenser's moral philosophy and its sources can be found in Ronald Horton, "Aristotle and his commentators,' *Spenser Encyclopedia*, ed. A.C. Hamilton (Toronto: U of Toronto P, 1990), 57–60.
41. Louke van Wensveen, "Attunement: An Ecological Spin on the Virtue of Temperance," *Philosophy in the Contemporary World* 8:2 (Fall–Winter 2001). Wensveen revisits this theory in her book-length study, *Dirty Virtues: The Emergence of Ecological Virtue Ethics* (New York: Humanity Books, 2000), 32.
42. Paul Alpers, *The Poetry of* The Faerie Queene (Princeton: Princeton UP, 1967), 256.
43. Spenser's pastoral has much in common with Horace's praise of country life in opposition to the decadence of Rome. Horace's allusion to Tantalus as a symbol of the acquisitive temperament occurs in Ode 2.18. *The Odes of Horace*, trans. David Ferry (New York: Farrar, Strauss, and Giroux, 1997), 149. J. Maskit rightly argues that environmentalism cannot simply promote ascetic sacrifice; it must also rethink the subject. "Subjectivity, Desire, and the Problem of Consumption," *Deleuze/Guattari and Ecology*, ed. Bernard Herzogenrath (New York: Palgrave, 2008).
44. C.S. Lewis, *Allegory of Love* (London: Oxford UP, 1958), 297–360; Stephen Greenblatt, *Renaissance Self-Fashioning* (Chicago: U of Chicago P, 1980), 157–192.
45. The phrase *primavera eterna* comes from the notorious Chorus of Tasso's pastoral drama, *Aminta*, ed. and trans. by Charles Jernigan and Irene Marchegiani Jones (New York: Italica, 2000), 52.
46. Burlinson, *Allegory, Space and the Material World in the Writings of Edmund Spenser*, 179.
47. The following account of Elizabethan tavern signs matches Spenser's description exactly:

    The signs then were suspended from an iron bar, fixed either in the wall of the house, or in a post or obelisk standing in front of it; in both cases the

ironwork was shaped and ornamented with that taste so conspicuous in the metal-work of the Renaissance period . . . [and] where there was sufficient room in the streets, the sign was generally suspended from a kind of small triumphal arch, standing out in the road, partly wood, partly iron, and ornamented with all that carving gilding, and colouring could bestow upon it.

—Jacob Larwood, *The History of Signboards* (London: J.C. Hotten, 1866), 7–8.

The proverb "Good wine needs no Bush," mentioned by Rosalind in *As You Like It*, dates back to Roman times. "The Vine" and "The Bush" appear among the litany of popular tavern-names in a ballad inserted in the 1630 edition of Thomas Heywood's *Rape of Lucrece* (London: 1630), 17v.

48. Alison V. Scott, "Toward a Reevaluation of the Bower of Bliss: The Taxonomy of Luxury in *The Faerie Queene*, Book Two," *Explorations in Renaissance Culture* 33:2 (Winter 2007): 221. For more details on contemporary concerns about luxurious foreign imports, see Joan Thirsk, *Economic Policy and Projects: The Development of a Consumer Society in Early Modern England* (Oxford: Clarendon, 1978), and Nancy Cox, "'Beggary of the Nation': Moral, Economic, and Political Attitudes to the Retail Sector in the Early Modern Period," *A Nation of Shopkeepers*, 26–51.
49. For the background of the Earl of Bridgewater's prosecution of sexual crimes and his family's involvement in the Castlehaven scandal, see Leah Marcus, "The Milieu of Milton's *Comus*: Judicial Reform at Ludlow and the Problem of Sexual Assault," *Criticism* 25 (1983): 293–327. Milton expounds on the virtue of temperance in *The Christian Doctrine*, 1014.
50. For example Sukanta Chaudhuri observes "a low-key critique of pastoral runs through the corpus of Milton's poetry," in *Renaissance Pastoral and Its English Developments,* 406.
51. David Norbrook, "The Reformation of the Masque," *The Court Masque*, ed. David Lindley (Manchester: Manchester UP, 1984), 94–110; Leah Marcus, *The Politics of Mirth: Jonson, Herrick, Milton, Marvell and the Defense of Old Holiday Pastimes* (Chicago: U of Chicago P, 1986), 169–212.
52. Cedric Brown, *John Milton's Aristocratic Entertainments* (Cambridge: Cambridge UP, 1985), 42.
53. Kevin Sharpe, *The Personal Rule of Charles I* (New Haven: Yale UP, 1992), 121. For more on Comus as a representative of the emergent bourgeois economy, see Michael Wilding, *Dragons Teeth: Literature in the English Revolution* (Oxford: Clarendon, 1987), and Blair Hoxby, *Mammon's Music: Literature and Economics in the Age of Milton* (New Haven: Yale UP, 2002).
54. Wendell Berry, *Standing by Words* (San Francisco: North Point Press, 1983), 112.
55. Timaios of Locri, *On the Nature of the World and the Soul*, trans. Thomas Tobin (Chico: Scholars' Press, 1985). The attribution to the Timaeus who appears in Plato's text is now thought to be spurious, as certain internal references suggest a provenance in the Middle Platonic period, c. 100 BCE–100 CE.
56. Thomas, *Man and the Natural World*, 301.
57. Woodbridge, *Scythe of Saturn*, 78.
58. John Stow, *Annals* (London: 1610), 210.
59. Georgius Agricola, *De natura fossilum*, trans. Mark and Jean Bandy (New York: Geological Society of America, 1955), and *De re metallica*, trans. Herbert Hoover (New York: Dover, 1912). John Hatcher, *The History of the British Coal Industry: Before 1700* (Oxford: Clarendon, 1993), 221.
60. Hatcher, *History of the British Coal Industry*, 45. See also J. U. Nef's monumental study, *The Rise of the British Coal Industry.*

61. Peter Brimblecombe, *The Big Smoke: A History of Air Pollution in London since Medieval Times* (London: Methuen, 1987), 9, 30, 32.
62. Greg Garrard calls attention to the irony of Bacon, who has often been scape-goated as the prophet of industrialism, coining the word "pollution" in *Ecocriticism*, 8. John Evelyn, *A Character of England: as it was lately presented in a letter to a noble man of France* (London: Jo. Crooke, 1659); qtd. in Brimblecombe, *The Big Smoke*, 47.
63. John Steadman, "The 'Inharmonious Blacksmith': Spenser and the Pythagoras Legend," *PMLA* 79:5 (Dec. 1964): 664–665. This allusion strengthens Chapter 1's claim that Spenser subscribed to aspects of Pythagorean cosmology.
64. Harbage, Schoenbaum, and Wagonheim, eds., *Annals of English Drama*, 46-7. This play may or may not be an earlier version of *Grim the Collier of Croydon* printed in 1662.
65. Hatcher, *History of the British Coal Industry*, 249.
66. David Read, *Temperate Conquests: Spenser and the Spanish New World* (Detroit: Wayne State UP, 2000), 65–82. Maureen Quilligan associates Mammon's cave with the exploitation of the land by a financially strapped aristocracy in *Milton's Spenser: The Politics of Reading* (Ithaca: Cornell UP, 1983), 61. The poem "News from Newcastle" has been attributed to Thomas Winnard; qtd. in Hatcher, *History of the British Coal Industry*, 547.
67. Ironically, the English exploitation of the Irish woodlands seems to have ignited the early modern Irish coal industry. Although written records of the Leinster and Munster coal fields only date back, respectively, to the early seventeenth and eighteenth centuries, it seems highly probable that small-scale mining did occur during Spenser's lifetime. Michael Conry, *Dancing the Culm: Burning Culm as a Domestic and Industrial Fuel in Ireland* (Avila: Chapelstown, 2001), 13–26.
68. Hatcher, *History of the British Coal Industry*, 548.
69. Richards, *Unending Frontier*, 240.
70. Hiltner, *Milton and Ecology*, 61, 69. Hiltner has recently published a searching essay presenting seventeenth-century coal consumption as a domestic rather than an industrial problem. "Renaissance Literature and Our Contemporary Attitude Toward Global Warming," *Interdisciplinary Studies in Literature and the Environment* 16:3 (Summer 2009): 429-441.
71. Diane McColley contrasts Comus's speech with another Mask written by a mining engineer in her essay, "Milton and Ecology," *A Companion to Milton*, ed. Thomas Corns (Oxford: Blackwell, 2001), 164–167. Michael Wilding has also commented briefly on the *Mask*'s critique of contemporary mining practices, but mainly focuses on silver and lead mines in Wales instead of the coal mines in the Severn Valley. See *Dragons Teeth*, 75.
72. Hatcher, *History of the British Coal Industry*, 141.
73. Ibid, 145.
74. Hoxby, *Mammon's Music,* 18. The greed of another Mammon leads to the burning of copious amounts of charcoal, as opposed to rock coal, in Jonson's *Alchemist*.

NOTES TO CHAPTER 5

1. Laurence Sterne, *A Sentimental Journey Through France and Italy* (Gainesville; U of Florida P, 2002), 95-–96. For further evidence of Sterne's prescience, see the chapter on "Caged Birds and Wild" in David Perkins, *Romanticism and Animal Rights* (Cambridge: Cambridge UP, 2003), 130–147. Matthew

Calarco has observed that modern animal rights discourse too often is marginalized as "a kind of distinct politics unrelated to other progressive, leftist issues" (7). Approaching nature as a republic helps side-step this pitfall, but not Calarco's second caveat: in evoking empathy for animal pain, many authors I examine see non-humans as morally eligible only "inasmuch as [they] manifest morally relevant human, or subject-like traits." *Zoographies: The Question of the Animal from Heidegger to Derrida* (New York: Columbia UP, 2008), 8.

2. R.S. Crane, "Suggestions toward a Genealogy of the 'Man of Feeling,'" *English Literary History* 1 (1934): 205–230.
3. Thomas, *Man and the Natural World*, 153–154. The denunciation of hunting as inhumane goes back even further than Thomas realizes; John of Salisbury inveighs against the sport in his *Policraticus*, published in 1159.
4. Thomas Macaulay, *History of England* (New York: Harper Bros., 1878), 1:121. Phillip Stubbes, *Anatomie of Abuses* (New York: Garland, 1973), P2v. Spelling has been modernized in accordance with Margaret Kidd's edition.
5. Thomas Dekker, *Worke for Armourers; or, the peace is broken* (London: 1609), B2r.
6. John Dod and Robert Cleaver, *A Plain Exposition of the Eleventh and Twelfth Chapters of Proverbs* (London: 1607), 140–142.
7. Edward Berry, *Shakespeare and the Hunt: A Cultural and Social Study* (Cambridge: Cambridge UP, 2001), 1.
8. Thomas Paine, *Complete Works of Thomas Paine* (New York: Citadel Press, 1945), 1:421.
9. Pliny, *Natural History*, trans. H. Rackham, 3:17.
10. Cicero, *Letters to His Friends*, trans. W. Glynn Williams (Cambridge: Harvard UP, 1959), 7:1. This idea may also reflect Cicero's admiration of Pythagoras. *On the Commonwealth* notes, "Pythagoras and Empedocles declare that all kinds of living creatures have a right to the same justice" (433).
11. For more on the history of the vegetarian movement in the nineteenth century, see Perkins, *Romanticism and Animal Rights*, 116–129.
12. Andrew Hadfield, *Shakespeare and Republicanism* (Cambridge: Cambridge UP, 2005), 26.
13. Throughout the early modern era, butchers were actually prohibited from serving on juries in capital crimes due to their alleged predilection for cruelty (Thomas, 295). It is no accident that the bloodiest line in all of Shakespeare—"First thing we do, let's kill all the lawyers" (4.2.70)—is spoken by a butcher.
14. Erasmus, *Praise of Folly*, trans. H.H. Hudson (Princeton: Princeton UP, 1941), 53–54.
15. Cornelius Agrippa, *On the Vanity of the Arts and Sciences*, ed. Catherine M. Dunn (Northridge, CA: California State UP, 1974), 260.
16. George Gascoigne, *The Noble Art of Venerie* (London: 1575), A4v. Berry, *Shakespeare and the Hunt*, 10–11.
17. Gascoigne's poem "The Hare, to the Hunter" is reprinted in *The Green Knight: Selected Poetry and Prose of George Gascoigne*, ed. Roger Pooley (Manchester: Carcanet Press, 1982), 89.
18. George Gascoigne, *A Hundreth Sundrie Flowres*, ed. G.W. Pigman (Oxford: Clarendon, 2000), 312.
19. Thomas, *Man and the Natural World*, 46.
20. For a standard political reading of the poem, see Worden, *The Sound of Virtue*, 266–280. The only book-length study on "Ister Bank" is Martin Raitiere's *Faire Bitts: Sir Philip Sidney and Renaissance Political Theory* (Pittsburgh: Duquesne UP, 1984). He, too, dissects the poem's republican ideology but argues that Sidney "commented on it in order to reject it" (x),

and sees him disavowing the primitivist ethos of pastoral. While Raitiere usefully complicates facile readings, his central piece of evidence, the reference to "fair bits," seems dubious given that the word "fair" in context connotes "beautiful" rather than "just." Sidney implies that the monarchy seduced the aristocracy with wealth and prestigious titles into accepting their servility. Raitiere also points to Philisides advising the animals to "bide your hell" as preaching quietism, while ignoring the subsequent line in which he offers a stark alternative: "Or know your strengths and then you shall do well." It seems unrealistic to fault the poem for stopping short of explicitly advocating armed revolution; Sidney had an English, not a continental, audience in mind, and while he may have disliked Elizabeth's laissez-faire foreign policy he would never dream of endorsing her assassination. For a brief overview of the political readings of the poem that situates it closer to the radical end of the spectrum, see William R. Drennan, "'Or Know Your Strengths': Sidney's Attitude toward Rebellion in Ister Banke" *Notes and Queries* 231 (Sept. 1986): 339–340.

21. The other leading candidate for the authorship of the *Vindiciae* is Philippe du Plessis-Mornay, whom Sidney also befriended during his Grand Tour and corresponded with frequently. The actual identity of the author of this treatise is therefore irrelevant, since the *Vindiciae* espouses arguments that align perfectly with the known beliefs of Protestant intellectuals among Sidney's circle. Raitiere outlines a compelling case for Languet's authorship in an Appendix to *Faire Bitts*, 113–141. The text's recent editor, George Garnett, remains more skeptical, perhaps overly so; his statement that Sidney's poem bears only a superficial resemblance to the treatise suggests he has not read the *Arcadia* very closely. See *Vindiciae Contra Tyrannos: or concerning the legitimate power of a prince over the people, and of the people over a prince*, trans. George Garnett (Cambridge: Cambridge UP, 1994), lxxi.
22. The sole exception is Sidney's biographer, Katherine Duncan-Jones, who astutely comments that the fable's "political application functions fully only if it is also accepted on a literal level" (57).
23. Annabel Patterson, *Censorship and Interpretation: The Conditions of Writing and Reading in Early Modern England* (Madison: U of Wisconsin P, 1984), 39. Patterson's remarks have been seconded by Edward Berry, who views the poem as "a critique of the pastoral form" for being politically impotent—a reading that grates against Sidney's position stated in the *Defence*; see *The Making of Sir Philip Sidney* (Toronto: U of Toronto P, 1998), 89–90. In his recent cultural history of the hunt in early modern England, Berry, comparing "Ister Bank" with incidents in the *New Arcadia*, detects a slight vacillation in Sidney's attitude toward the sport: "In the pastoral *Arcadia* hunting is either ignored or condemned outright as a mark of tyranny; in the heroic revisions hunting is accepted as a lively, if slightly disturbing, aristocratic entertainment" (*Shakespeare and the Hunt*, 161).
24. On the political level, Sidney established contacts among several prominent Protestant monarchomachs during his Grand Tour, and came to fisticuffs with the Earl of Oxford when de Vere sought to pull rank on Sidney to kick him off a tennis court. During his stay in the Venetian republic he not only discovered a copy of Sannazaro's *Arcadia*, he also befriended a writer by the name of Cesare Pavesi, who had composed a book of animal fables modeled on Aesop, including "The Frogs Imploring Jove for a King," which has obvious republican overtones and may have been a source for "Ister Bank."
25. John Harington, *A New discourse of a stale subiect, called the metamorphosis of Aiax: vvritten by Misacmos, to his friend and cosin Philostilpnos*, ed. Elizabeth Story Donno (London: Routledge, 1962), 108.

26. Philip Camerarius jotted down Sidney's remarks during their dinner conversation in Prague. His account is reprinted in Osborne, *Young Philip Sidney*, 464–466. Although Sidney here considers wolves as vermin, he follows Thomas More in associating hunters with criminals. The speech also exhibits an understanding that human actions can lead to extinction. For another example of critics' refusing to take Sidney's comments on natural history literally, see Barbara Brumbraugh, "'Under the pretty tales of Wolves and Sheep': Sidney's Ambassadorial Table Talk and Protestant Hunting Dialogues," *Spenser Studies* 14 (2000): 273–290. His niece, Mary Wroth, seems to have shared his antipathy for the sport; in *Urania*, a boorish husband bores a dinner party by speaking of nothing but hunting. *The First Part of the Countess of Montgomery's Urania*, ed. Josephine Roberts (Binghamton: Renaissance English Text Society, 1995), 7.29–30.
27. The letter is reprinted in Osborne, *Young Philip Sidney*, 170. These lines from the joust are assigned to the Blue Knight, which is thought to have been the disguise of Sidney as he also wore blue in his entertainment "The Four Foster Children of Desire." An account of the tournament survives in B.L. MS. Lansdowne 99 fols. 259a–264b. rptd. in Malone Society Collection 1:2, 181–187. See also Duncan-Jones, *Sir Philip Sidney*, 203.
28. Thomas, *Man and the Natural World*, 130.
29. John of Salisbury, *Policraticus: Frivolities of Courtiers and Footprints of Philosophers*, trans. Joseph B. Pike (Minneapolis: U of Minnesota P, 1938), 19.
30. While clinging to a sense of anthropocratic privilege, Milton's Adam denounces Nimrod's hunting as an abuse of dominion over animals, as Diane McColley notes in *Poetry and Ecology in the Age of Milton and Marvell* (Aldershot: Ashgate, 2007), 223–225.
31. I am thinking here in particular of Sidney's assertion that we can appreciate the literary and moral significance of Aesop's fables without actually believing them to be "true."
32. William Empson, *Some Versions of Pastoral* (New York: New Directions, 1974), 11.
33. Sidney's fable corresponds with Porphyry's declaration that "luxury, war, and injustice came in together with the slaughter of animals." See *On Abstinence from Killing Animals,* trans. Gillian Clark (Ithaca: Cornell UP, 2000), 101. A Latin translation of Porphyry's text had been printed in Venice in 1547.
34. Peter Singer, *Animal Liberation* (New York: Avon, 1975), 145.
35. An informative, if eccentric, account of Shakespeare's knowledge of hunting can be found in Dodgson Madden, *The Diary of Master William Silence: A Study of Shakespeare and Elizabethan Sport* (London: Longman, 1907). For more on the cuckold, see Roberts, *The Shakespearean Wild*, 85–92.
36. Jeffrey Theis, "The 'ill-kill'd' Deer: Poaching and the Social Order in *The Merry Wives of Windsor*," *Texas Studies in Language and Literature* 43:1 (Spring 2001): 46–73.
37. Biancamaria Fontana, *Montaigne's Politics: Authority and Governance in the* Essais (Princeton: Princeton UP, 2008), 117. See also David Quint, *Montaigne and the Quality of Mercy* (Princeton: Princeton UP, 1998), 42–74.
38. Edwin Greenlaw first outlined the similarities between Jaques' lament and Philisides' eclogue in "Shakespeare's Pastorals," *Studies in Philology* 13 (1916): 122–154. Claus Uhlig reads this scene as informed by contemporary anti-hunting diatribes in "'*The Sobbing Deer*': As You Like It*, II.i.21-66 and the Historical Context,*" *Renaissance Drama 3* (Evanston: Northwestern UP, 1970), 79–109. See also Edward Berry's chapter linking Prospero's hunt of the conspirators with James's defense of absolutism. He argues that Mon-

taigne's "Of Cruelty" may have fueled Shakespeare's sympathy for Caliban as much as "Of the Cannibals." *Shakespeare and the Hunt*, 190–208. For an overview of the convention of the sobbing deer in Renaissance literature, see Matt Cartmill, *A View to a Death in the Morning: Hunting and Nature through History* (Cambridge: Harvard UP, 1993), 76–91.

39. The Duke comes across as a sentimentalist in the pejorative sense of the word defined by Oscar Wilde: "one who desires to have the luxury of an emotion without paying for it."
40. Watson, *Back to Nature*, 77–107.
41. For a revisionist take on the compatibility of republican politics and analogical zoology, see Karen Edwards, *Milton and the Natural World: Science and Poetry in* Paradise Lost (Cambridge: Cambridge UP, 1999), 129–138.
42. Juliet Dusinberre, ed. *As You Like It* (London: Thomson, 2006), 53n. My reading of this scene differs from Watson's, who sees it as a "brutal parody of th[e] effort to enter into the unmediated experience of nature." He does acknowledge, however, the use of the Actaeon myth as a fit punishment for hunters in anti-hunting tracts (*Back to Nature,* 84).
43. E.C. Cawte, *Ritual Animal Disguise* (Cambridge: D.S. Brewer, 1978), 192.
44. A summary of Lodge's history play can be found in Hadfield, *Shakespeare and Republicanism*, 66-7.
45. For more on enclosure and land-use in Arden, see Victor Skipp, *Crisis and Development: An Ecological Case Study of the Forest of Arden 1570–1674* (Cambridge: Cambridge UP, 1978); Anne Barton, "Parks and Ardens," in *Essays Mainly Shakespearean* (Cambridge: Cambridge UP, 1994), 352–379; and James Shapiro, *A Year in the Life of William Shakespeare: 1599* (New York: HarperCollins, 2005), 242–243. Reflecting on the changing demographics in early modern England, Skipp notes "in ecological terminology, the early Tudor communities of north Arden, with their comparatively small populations and long-established pastoral economies, were living in a balanced relationship with their environment; while the unprecedented population growth of Elizabethan times represents a disturbance of this state of ecological equilibrium" (10).
46. A. Stuart Daley, "Where Are the Woods in *As You Like It*?" *Shakespeare Quarterly* 34 (1983): 172–180.
47. Richard Wilson, "'Like the Old Robin Hood': *As You Like It* and the Enclosure Riots," *Shakespeare Quarterly* 43:1 (Spring 1992): 1–19. Typical of the pessimism in much New Historicist analysis, Wilson's article ultimately sees the play retracting its subversive critique, characterizing Rosalind and Celia's purchase of real estate in Arden as "a discursive rehearsal of the enclosure legislation invoking the 'royal' disposition of the wilderness only to authorize its destruction" (17).
48. David Loewenstein, "Digger Writing and Rural Dissent in the English Revolution: Representing England as a Common Treasury," *The Country and the City Revisited*, eds. Gerald Maclean, Donna Landry, Joseph P. Ward (Cambridge: Cambridge UP, 1999), 74–88.
49. Gerrard Winstanley, *Works*, ed. George Sabine (Ithaca: Cornell UP, 1941), 323.
50. The definitive work on the play as an imaginative resolution of social and fraternal conflict in Elizabethan England is Louis Montrose, "The 'Place of a Brother' in *As You Like It*: Social Process and Comic Form," *Shakespeare Quarterly* 32 (1981): 28–54.
51. Richard Gardiner, *Profitable Instructions for the Manuring, Sowing, and Planting of Kitchin Gardens* (London: 1599), A3r. Joan Thirsk comments on Gardiner's experiment in "Food in Shakespeare's England," in *Fooles and*

Fricassees: Food in Shakespeare's England, ed. Mary Anne Caton (Seattle: U of Washington P, 1999), 18.

52. My reading here has been anticipated by Theis, "The 'ill-kill'd' Deer," 46–73.
53. Garrett Hardin, "The Tragedy of the Commons," *Ecological Crisis: Readings for Survival*, ed. Glen A. Love and Rhoda M. Love (New York: Harcourt Brace Jovanovich, 1970), 107–121.
54. A fairly objective account of Shakespeare's involvement with the Stratford enclosures is relayed in Samuel Schoenbaum, *William Shakespeare: A Compact Documentary Life* (New York: Oxford UP, 1977), 245, 281–285.
55. Woodbridge, *Scythe of Saturn*, 191.
56. James Thomson, *The Seasons* (New York: Clark, Austin, and Co., 1854), 98.
57. William Cowper, *The Poems of William Cowper*, ed. John D. Baird and Charles Ryskamp, 3 vols. (Oxford: Clarendon, 1980), 2:251.
58. Caroline Spurgeon, *Shakespeare's Imagery and What It Tells Us* (Cambridge: Cambridge UP, 1961), 119–121.
59. Joan Fitzpatrick, *Food in Shakespeare: Early Modern Dietaries and the Plays* (Aldershot: Ashgate, 2007), 80. Ken Albala largely agrees with Fitzpatrick that vegetarianism was viewed as unhealthy; however he notes that notions of a healthy diet differed widely based on temperaments. Thus "individuals with strong or 'hot' stomachs could digest tougher and heavier foods, whereas the weak and delicate needed to subsist on lighter fare. Beef would nourish the former but be impossible to digest for the latter, offering no nutritional value." *Eating Right in the Renaissance* (Berkeley: U of California P, 2002), 6. See also Thomas, *Man and the Natural World*, 287–300, and Colin Spencer, *The Heretic's Feast: A History of Vegetarianism* (London: Fourth Estate, 1993).
60. John Taylor, *The Old, Old, Very Old Man: Or the Age and Long Life of Thomas Parr* (London: 1635). Robert Appelbaum, *Aguecheek's Beef, Belch's Hiccup, and Other Gastronomic Interjections: Literature, Culture, and Food among the Early Moderns* (Chicago: U of Chicago P, 2006). Although Appelbaum cautions (rightly, I think) that a full-blown discourse of ethical vegetarianism did not emerge until the late seventeenth century, his findings that *Hamlet* betrays "an anxiety concerning the ontology of food and the brutality of eating meat" (184–187, 26) corroborates my thesis perfectly.
61. Plutarch, "Of the Eating of Flesh," in *Plutarch's Lives and Writings*, ed. A.H. Clough and William Goodwin (London: Simpkin, Marshall, Hamilton and Kent, 1914), 10:3–16; Philemon Holland's 1603 translation dilutes the radicalism of the original. Driving a wedge between Plutarch and Pythagoras, he claims the former's real aim was not strict abstinence but merely "cutting off and abridging of the great excesse of superfluite in purveying, buying, and spending of viands" (571). This interpretation accords with the policies of Elizabeth and James to regulate the meat trade. Porphyry, *On Abstinence from Killing Animals*; *Hermetica*, ed. Brian Copenhaver (Cambridge: Cambridge UP, 1992), 92. On Spenser's Savage Man, see Cheney, *Spenser's "Image of Nature"*, and G.M. Pinciss, "The Savage Man in Spenser, Shakespeare, and Renaissance English Drama," in *The Elizabethan Theatre VIII,* ed. G.R. Hibbard (Ontario: P.D. Meany, 1982), 69–89.
62. For more on the sources of this 404-line speech and Ovid's motives in inserting it a climactic juncture in the book, see Philip Hardie, "The Speech of Pythagoras in Ovid's *Metamorphoses* 15: Empedoclean Epos," *Classical Quarterly* 45:1 (1995): 204–214.
63. Harvey, "The Souls of Animals," 55. Donne even raises questions about the ethics of eating fish: the supposedly pious act of abstaining from beef

and poultry turns a Lenten fast, from the fishes' perspective, into a kind of Church-sanctioned genocide.

64. John Dryden, *Fables Ancient and Modern* (London: 1721), 299–319. John Gay, *The Poetical Works of John Gay*, ed. G.C. Faber (New York: Russell and Russell, 1926), 262–263. Thomas, *Man and the Natural World*, 295, 297.
65. Joan Thirsk, "Food in Shakespeare's England," 13; Duffy, *The Stripping of the Altars*, 41; Werner Rosener, *The Peasantry of Europe* (Oxford: Oxford UP, 1994), 149. On the ubiquity of fish in the diet of the English poor, see Brian Fagan, *Fish on Friday: Feasting, Fasting, and the Discovery of the New World* (New York: Basic Books, 2006), and Edward M. Test, "*The Tempest* and the Newfoundland Fishery," in *Global Traffic: Discourses and Practices of Trade in English Literature and Culture from 1550 to 1700*, ed. Barbara Sebek and Stephen Deng (New York: Palgrave, 2008), 201–220.
66. Barbara Lewalski, *Milton's Brief Epic* (Providence: Brown UP, 1966), 200–202, 219–226.
67. *The order and doctrine of the generall fast appoynted by the Generall Assemblie of the churches of Scotland, holden at Edenburgh the 25. day of December, 1565* (London: 1603). One of the many proclamations from the Commonwealth era is *Votes of Parliament for setting apart a day of publique fasting and humiliation.* Wednesday the ninth of February, 1652. (London: John Field, 1652 [i.e. 1653]).
68. *Orders conceaued and set dovvne by the Lords of her Maiesties Priuie Counsel, by her highnesse special direction, to be put in execution for the restraint of killing and eating of flesh* (London: 1589). A proclamation in 1591 raised the number of butchers who could conduct business during Lent to five; the number grew to eight by 1610. See Frederic Youngs, *The Proclamations of the Tudor Queens* (Cambridge: Cambridge UP, 1976), 123–125.
69. Thirsk, "Food in Shakespeare's England," 14.
70. Ibid., 14. Also see Appelbaum, *Aguecheek's Beef*, 6–7.
71. Fitzpatrick, *Food in Shakespeare*, 80.
72. Richard Gardiner of Shrewsbury, *Profitable Instructions for the Manuring, Sowing, and Planting of Kitchin Gardens* (London: 1599), A3v.
73. Appelbaum provides an authoritative survey of the ambiguous medical theory underlying this remark in *Aguecheek's Beef*, 3.
74. Ibid., 19.
75. Francis de Belleforest, "The Hystorie of Hamblet," (London: 1608); rptd. in *The Sources of Hamlet, With an Essay on the Legend*, ed. Sir Israel Gollancz (New York: Octagon Books, 1967), 235.
76. In comparison to eating crocodiles and drinking eisel, Hamlet's challenging Laertes to a fasting contest (5.1.260) may not be quite so far-fetched. See the accounts "Of wonderfull fasting" in Joannes Jonstonus, *An History of the Wonderful Things of Nature* (London: 1657), 315–316.
77. Hamlet's position resembles that of the Swiss Reformer, Huldrych Zwingli during a controversial incident in the history of Protestantism. In 1522 a Zurich printer served sausages to a group of friends on the first Sunday in Lent. Out of the twelve Reformers, Zwingli alone refused the sausage but later published a sermon arguing that the meat-fast during Lent was unnecessary. See Diarmaid MacCulloch, *The Reformation: A History* (New York: Viking, 2003), 135.
78. Thomas Becon. *A Fruitful Treatise of Fasting* (London: John Day, 1551), B2.
79. Caroline Walker Bynum, *Holy Feast and Holy Fast: The Religious Significance of Food to Medieval Women* (Berkeley: U of California P, 1987), 34.
80. Thirsk, "Food in Shakespeare's England," 14.

81. A definitive identification of the poison has proved elusive. Some scholars believe it may be "the juice of Hebon" (3.4.101) Marlowe refers to in *The Jew of Malta*, but henbane's Latin name (*hyoscyamus niger*) could feasibly have led Shakespeare to conflate it with ebony. See Variorum *Hamlet,* and Henry Bradley, "'Cursed Hebenon' (or 'Hebona')," *Modern Language Review* 15:1 (1920): 85–87.
82. Thomas Hill, *A briefe and pleasaunt treatise, intituled, Naturall and artificiall conclusions* (London: 1581), 31.
83. Maud Grieve, *A Modern Herbal* (New York: Hafner, 1971), 399. Evidence for use of henbane as a poison can be found in Charles Estienne's popular husbandry manual, *Maison Rustique:*

    Take of the root and seed of Henbane a good quantitie, and lay it to steepe in a basen full of water a whole day and a night, afterward put thereinto Wheat, and boyle all together vntill the said Corne be well steept and swelled, afterward you shall put of the same Corne in the said place, for the wild Duckes will runne vnto it, and as soone as they shall haue eaten it, they will fall downe all astonishe and giddie. This kind of fowle is made fat in such manner as the young Geese, that is to say, with the same food.

    Maison Rustique, or The Countrie Farme, trans. Richard Surflet (London: 1600), 109–110. In the best-known early modern herbal (published 1597), John Gerard observes that henbane flourishes "about dunghills and untoiled places," like the unweeded garden Hamlet sees as a synecdoche for the world in Act 1. John Gerard, *Gerard's Herball* (London: Spring Books, 1964), 87. Situating Gerard's comment alongside Hill's advice—"To fat Hennes or Capons" (30) by letting them feed on herbs that grow on dunghills —offers further evidence that small amounts of henbane may have been used for capon feed in the early modern period.
84. Rather than focus on animal slaughter, Appelbaum memorably likens King Hamlet's poisoned body to a "fungus-encrusted wheel of cheese" (*Aguecheek's Beef*, 24).
85. Berry, *Shakespeare and the Hunt*.
86. Qtd. in Thomas, *Man and the Natural World*, 293. Hamlet's attempt to imagine himself as a butcher also helps clarify his mocking of Polonius as a "fishmonger." All of the Privy Council's proclamations restricting the meat industry in Lent stipulate that four members of the company of fishmongers will be chosen to enforce the policy. Given the likelihood of corruption, the guild-members selected for this task would have to have a reputation for ethical integrity. This explains Hamlet's gibe at Polonius: "And I would you were so honest a man." Hamlet thinks of Polonius as a fishmonger because he polices Hamlet as fishmongers did butchers, obstructing his attempt to murder Claudius. For more on the rivalry between butchers and fishmongers, see Michael Bristol, *Carnival and Theatre: Plebeian Culture and the Structure of Authority in Renaissance England* (New York: Methuen, 1985), 72–87.
87. `John Aubrey, *Aubrey's Brief Lives*, ed. Oliver L. Dick (Ann Arbor: U of Michigan P, 1957), 275.
88. Katherine Duncan-Jones, "Did the Boy Shakespeare Kill Calves?" *Review of English Studies* 55:2 (April 2004): 183–195; E.K. Chambers, *William Shakespeare: A Study of Facts and Problems* (Oxford: Clarendon, 1930), 2:253.
89. Greenblatt, *Will in the World*, 56.
90. Nashe's remark appears in the preface to Robert Greene's *Menaphon* (Oxford: B. Blackwell, 1927), 5.
91. The suggestion that Shakespeare participated in a calf-killing mumming play was first made by Douglas Hanmer in a review of *Shakespeare's Lives* published in *The Review of English Studies* 22:4 (Nov. 1971): 482–485;

Schoenbaum incorporated the idea into his *William Shakespeare: A Compact Documentary Life*, 74.

92. Qtd. in Hanmer, "Shakespeare's Lives," 484.
93. Saxo Grammaticus, "Hamlet," rptd. in *The Sources of Hamlet*, 114–115, and Belleforest, "Hystorie of Hamblet," rptd. in *The Sources of Hamlet*, 206. Confusingly, the English translator, influenced by Shakespeare's play, switches bedspread to arras. For more on this scene, see Yngve B. Olsson, "In Search of Yorick's Skull: Notes on the Background of *Hamlet*," *Shakespeare Studies 3*, ed. J. Leeds Barroll (Cincinnati: U of Cincinnati P, 1967), 183–220, 204.
94. René Girard, *Violence and the Sacred*, trans. Patrick Gregory (Baltimore: Johns Hopkins UP, 1977), 3–4.
95. Steven Doloff, "Hamlet's Progress of Dust: A Parody of Pythagoras' Metempsychosis?" *Notes and Queries* 53:1 (March 2006): 69-70.
96. Janet Adelman, "'Anger's My Meat': Feeding, Dependency, and Aggression in *Coriolanus*," *Representing Shakespeare: New Psychoanalytic Essays*, ed. Murray Schwartz and Coppelia Kahn (Baltimore: Johns Hopkins UP, 1980), 129–149.
97. David Ehrenfeld, *The Arrogance of Humanism* (New York: Oxford UP, 1978). A standard dour view of humanist tragedy as inimical to environmental virtues can be found in Meeker, *The Comedy of Survival*, 24. Meeker does, though, offer a quirky ecological reading of Hamlet's delay as a study of sublimated animal aggression.
98. Hamlet must grapple with the ethics of assassinating an anointed ruler, or to take *Vindiciae Contra Tyrannos*. On the subversive political features of the play, see Bristol, *Carnival and Theatre*, 186–193, and Hadfield, *Shakespeare and Republicanism*, 184–204.

NOTES TO THE CONCLUSION

1. Henry D. Thoreau, *Walden* (Princeton: Princeton UP, 1971), 16.
2. Seamus Heaney, "Eclogues *In Extremis*: On the Staying Power of Pastoral," *Proceedings of the Royal Irish Academy* 103C.1 (2003): 1–12.
3. Rachel Carson, *Silent Spring* (Boston: Mariner, 1962), 1; George Perkins Marsh, *Man and Nature* (Cambridge: Harvard UP, 1965), 7–13.

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