



Shakespeare Grounded: Ecocritical Approaches to Shakespearean Drama

Citation

Grossman, Joanna Rebecah. 2014. Shakespeare Grounded: Ecocritical Approaches to Shakespearean Drama. Doctoral dissertation, Harvard University.

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Shakespeare Grounded: Ecocritical Approaches to Shakespearean Drama

A dissertation presented

by

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to

The Department of English

in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy
in the subject of
English

Harvard University Cambridge, Massachusetts

August 2014

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Abstract

Using the "Great Chain of Being" – which was integral to the Elizabethan understanding of the world – as a starting point, this dissertation examines the sometimes startling ways in which Shakespeare's plays invert this all-encompassing hierarchy. At times, plants come to the forefront as the essential life form that others should emulate to achieve a kind of utopian ideal. Still other times, the soil and rocks themselves become the logical extension of a desire to remove man from the pinnacle of earthly creation. Over the course of this project, I explore plays that emphasize a) alternative, non-mammalian modes of propagation, b) the desire to sink the human body into the earth (or, at a minimum, man's closeness to the ground), and c) the imagined lives of flora and fauna, while underscoring man's kinship with myriad organisms. In many of the works explored, a modern vision of materiality comes to the forefront, presenting a stark contrast to the deeply held religious views of the day. In flipping the ladder upside down, Shakespeare entices his reader to confront inherent weaknesses in human and animal biology, and ultimately to question why man cannot seek a better model from the lowly ground upon which he treads.

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Acknowledgements

This dissertation would not be what it is without the guidance of my remarkable advisors: Stephen Greenblatt, Marc Shell, and Daniel Albright. Their brilliance astounds me on a daily basis and their insightful readings and comments continuously steered me in the right direction and helped me find my footing in the course of developing this project.

I have been so fortunate to have Stephen Greenblatt as my primary advisor. Without his careful direction, this dissertation would have been an aimless endeavor. It is hard to imagine someone more conscientious and who cares as much about helping his students succeed. His patience and sharp observations throughout this process have meant the world to me.

I want to thank Marc Shell for his warmth and humor, and for inspiring me to think outside the box when interpreting texts. Our discussions always left me energized and eager to pursue new ideas. Indeed, the seed of this project sprouted in his seminar on kinship during my first semester of graduate school. I also want to thank Daniel Albright for being incredibly generous with his time, for being the wealth of knowledge that he is, and for his uncanny ability to perceive hidden connections and illuminate allusions in the blink of an eye.

I am grateful to my parents, Howard and Virginia, for their love and support every step of the way. Their encouragement set me on the path to pursuing my love for literature, and for Shakespeare in particular.

Most of all, I want to thank my husband and soulmate, Brad Grossman, for everything – for being the most kindhearted, wise, and compassionate person I know; for sitting with me through countless Shakespeare plays as part of my "research"; for carefully reading my drafts; and for helping me to stay sane and grounded through it all. You give my life new meaning each and every day, and I dedicate this dissertation to you.

Introduction

"I wonder if it wouldn't have been better if the Almighty had created us all as - well - as sort of plants. You know, firmly embedded in the soil. Then none of this rot about wars and boundaries would have come up in the first place...Can you imagine it...all of us rooted in the soil? Just imagine it!"

-Kazuo Ishiguro

There has long been a tradition of publishing books that catalogue the flowers mentioned in Shakespeare's works (see Shakespeare's Fantastic Garlands, A Gathering of Flowers from Shakespeare, Flowers from Shakespeare's Garden, and Shakespeare's Flowers, for a sampling). 1 This fascination and veritable potpourri of information has led to the cultivation of numerous "Shakespeare gardens" across the world. To be sure, such collections (whether printed or planted) usually underscore more of a layman's pastime than a serious scholarly pursuit. Nevertheless, I find it curious that such widespread interest in Shakespeare's use of plants has not led to greater headway on this particular subject within the burgeoning field of ecocriticism. While locating studies that focus on the fauna in Shakespeare or other Renaissance texts is not difficult (see Bruce Boehrer's Shakespeare Among the Animals (2002) or Erica Fudge's Animals, Rationality, And Humanity in Early Modern England (2006) for two fairly recent book-length studies), plant life and the soil from which plants sprout have received comparatively short shrift.

In truth, remarkably little ecocritical scholarship has been devoted exclusively to Shakespeare's plays and poems; to date, only four books have attempted to stake out this ground: Green Shakespeare (2006), Ecocriticsm and Shakespeare (2011), Ecocritical Shakespeare

¹ A list of this nature could become absurdly long if one expanded it to include all plants. A small sample follows: The plant-lore and garden-craft of Shakespeare, Shakespeare gardens: Design, Plants, and Flower lore, Shakespeare's Garden: With Reference to Over a Hundred Plants, Shakespeare's Plants and Gardens: A Dictionary, The Botany of Shakespeare. Suffice it to say, Shakespeare had extensive knowledge of plants and used them freely in his works.

(2011), and *Shakespeare's Ocean* (2012).² Of course, a great deal has already been written about the natural world in Shakespeare. But ecocriticism aims to distinguish itself from the "old thematicism and nature studies" in a number of ways (Hallock 80). As Dan Brayton and Lynne Bruckner explain in their introduction to *Ecocritical Shakespeare*, ecocriticism diverges from prior research in its "attention to anthropocentrism, ecocentrism, living systems, environmental degradation, ecological and scientific literacy, and an investment in expunging the notion that humans exist apart from other life forms" (Bruckner 3).

For the purposes of my dissertation, I am most interested in the last meaning – that is to say, the blurring of the boundaries among life forms. As Sir Thomas Browne put it in his *Religio* Medici (1642), "to call our selves a Microcosme, or little world, I thought it onely a pleasant trope of Rhetorick, till my neare judgment...told me there was a reall truth therein. For first we are a rude mass...next we live the life of plants, the life of animals, the life of men, and at last the life of spirits" (Browne 66-7). Though written in the seventeenth century, Browne's notion of a "mysterious nature" and a "corporeal and spiritual essence" that "unites...incompatible distances" hardly seems far removed from the inspiration behind the best-selling 1973 book, *The* Secret Life of Plants (followed by a 1979 documentary of the same name), which, as the subtitle explains, chronicles the "physical, emotional, and spiritual relations between plants and man" (Browne 66-7). In essence, the controversial but popular book provided a history of experiments in plant sentience (Nollman 96). Though categories like the "emotional" or "spiritual" are necessarily vague, I cite the title of this famous work because it provides a fairly apt description of the underlying aim behind my dissertation. More generally, I am interested in the imagined animate life of organic entities – whether they be plants, rocks, or dirt. In the effort to analyze

² This last book, which focuses on the maritime dimension of certain Shakespeare works (most notably in *The Tempest* and *The Comedy of Errors*), develops chapters included in *Ecocritical Shakespeare*.

Shakespeare's treatment of organic material and living beings effectively, I integrate information from medieval lapidaries, as well as early modern botanical tracts and herbals, and examine the intersection between art and nature (e.g., lifecasting), the relationship between dirt and life (e.g., spontaneous generation), Ovidian myths that depict man's ties to the earth (e.g., the Golden Age, Pythagoras, Deucalion), hylozoism (the theory that matter is endowed with life), the influence of humanist thought, and Christian theological teachings on hierarchy and order.

This last issue is of particular importance given that I hope to reveal how each of the plays examined manages to decenter the notion of the human. Using the "Great Chain of Being" - which was integral to the Elizabethan understanding of the world - as a starting point, this dissertation examines the sometimes startling ways in which Shakespeare's plays invert this allencompassing hierarchy. At times, plants come to the forefront as the essential life form that others should emulate to achieve a kind of utopian ideal. Still other times, the soil and rocks themselves become the logical extension of a desire to remove man from the pinnacle of earthly creation. Over the course of this project, I explore plays that emphasize a) alternative, nonmammalian modes of propagation, b) the desire to sink the human body into the earth (or, at a minimum, man's closeness to the ground), and c) the imagined lives of flora and fauna, while underscoring man's kinship with myriad organisms. In many of the works explored, a modern vision of materiality comes to the forefront, presenting a stark contrast to the deeply held religious views of the day. In flipping the ladder upside down, Shakespeare entices his reader to confront inherent weaknesses in human and animal biology, and ultimately to question why man cannot seek a better model from the lowly ground upon which he treads.

Overview of Ecocriticism and Related Methodologies

a) Ecocriticism and the Posthumanities

Before delving further into the arguments advanced in this dissertation, I wish to address some of the more general but relevant points regarding the present state of ecocriticsm and related fields like the posthumanities and object-oriented philosophy (and specifically their relation to early modern studies). By no means is there complete agreement about how exactly these methodological approaches ought to work within Shakespeare scholarship. With respect to ecocriticism, in one recent essay on this topic, Sharon O'Dair argues "Shakespearean ecocriticism" must be "presentist" (Bruckner 85). Jonathan Bate would prefer that scholars "separate ecopoetics from ecopolitics" because, in his view, "green has no place in the traditional political spectrum" (Bate 266-7). Conversely, Gabriel Egan maintains that separating ecocriticism from politics would be as absurd as removing the political from Marxist or feminist literary criticism (Egan 44). In "Shipwreck and Ecology: Toward a Structural Theory of Shakespeare and Romance", Steve Mentz maintains that "the triple pillars of ecological thinking [are] interconnectedness, persistence in space, and the decentering of heroic individuals" (Bradshaw 168). By removing "heroic" from the third pillar, we are left with one of the key tenets of post-human studies more broadly. As Dominic Pettman explains, "theoretical work in the humanities has been branching out for several years now...striving to go beyond the traditional human subject in order to account for other types of existence and experience, including animals and autonomous machines. A new field has emerged, loosely labeled 'the posthumanities', which attempts to fill in the millennia-long blind spots caused by our own narcissism. Such scholars are united in their efforts to expose or deconstruct ongoing anthropocentrism" (Pettman).

To be clear, ecocriticism and posthumanism often overlap (or run parallel to one another), but one useful way to think about the distinction between the two fields is that posthumanism is a specific point of view that someone working in ecocriticism can adopt (Garrard 225-6). In other words, one could produce literary criticism that falls under the umbrella of ecocriticism, but does not address questions of what constitutes the posthuman. "Posthuman" is essentially a broad term describing attempts to represent existences other than the human – i.e., to move past this category that has so dominated our worldview and scholarship. In that sense, the posthumanities are aligned with object-oriented philosophy/ontology (a phrase coined by Graham Harman), a metaphysical movement that rejects the privileging of human existence over the existence of nonhuman objects. Once again, scholars in this field are keenly interested in anthrodecentrism (a recurring theme in the chapters ahead).

b) Object-oriented Ontology and Alien Phenomenology

As scholars like Ian Bogost and others have observed, for far too long, humanity has stood at the center of philosophical thinking. Bogost's own work seeks to remedy this while recognizing the unavoidable problem of what he recently termed "alien phenomenology." Drawing upon Thomas Nagel's famous "What is it like to be a bat?" essay, Bogost discusses the inherent elusiveness of the experiential world of nonhuman entities: "The only way to perform alien phenomenology is by analogy: The bat, for example, operates like a submarine...We never understand the alien experience, we only ever reach for it metaphorically" (Bogost 64-6). Part of the problem, in other words, is that the supposedly objective evidence we use to describe nonhuman existence (in this case a bat) leads us further away from the experience of what it is

actually like to perceive the world as a bat does. It is no wonder then, that Bogost concludes that "anthropocentrism is unavoidable, at least for us humans" (Bogost 64). For Bogost, then, our best avenue for acquiring knowledge of nonhuman entities is to contemplate the space between ourselves and the foreign existence. A metaphor of course cannot eradicate the distance between the observer and the observed, but it exposes that void and guides us in our encounters and perceptions of alien objects.

I dwell upon this subject because many of the chapters in this dissertation strive to highlight the underlying metaphorical processes at work in making sense of nonhuman organic material in Shakespeare's plays. But equally important for my purposes are the implications of merely pursuing an examination of alien phenomenology. As Pettman eloquently states, "we will never truly know what it means to be a tree. But does that mean that we should...relegate trees to the margins of our own discourses, treating them as mute and ambient things-in-themselves, with no stakes in the present or future? Or should we take up the challenge of somehow acknowledging and respecting the radical alterity in the heart of our own thinking, and perhaps even render it intelligible?" (Pettman).

c) Thing Theory, Ethical Ramifications, and Key Terms

Though of a slightly different tenor than posthumanism and object-oriented ontology, Bill Brown's work is part of a growing corpus of scholarship on nonhuman entities. Brown, in his essay "Thing Theory", notes that "we begin to confront the thingness of objects when they stop working for us: When the drill breaks, when the car stalls, when the windows get filthy...The story of objects asserting themselves as things, then, is the story of a changed relation to the human subject and thus the story of how the thing really names less an object than a particular

subject-object relation" (Brown 4). The idea of beginning with relations rather than preexisting entities is critical to ecocriticism's scope and aims since frequently the relationship in question is our link to the environment around us (Hayles 298). Ecological thinking is deeply concerned with the networks and interconnectivity found in – or rather inherent to – nature (e.g., environmental harms never occur in a vacuum and without broader consequence). However, I also think that Brown taps into precisely the ethical consequences of object-oriented studies by implicitly asking what if "things" are not for our use? What if their existence is not predicated on our needs?

Graham Harman argues that object-oriented ontology offers "not the oft-lamented 'naïve realism' of oppressive and benighted patriarchs, but a weird realism in which real individual objects resist all forms of causal or cognitive mastery" (Harman 188). Put differently, these movements refuse to allow nonhuman entities to become the pawns of the masters and kings who would otherwise rule over them; in adopting these philosophical positions or outlooks we come closest to allowing them to remain beyond appropriation and exploitation. But in the "intellectual rush to lobby on behalf of nonhuman existence", plants (to say nothing of the soil from which they sprout) have, on the whole, been ignored (Pettman). The most notable of the handful of books that have attempted to broach the subject are Michael Marder's *On Plant-Thinking* (2013) and Jeffrey Jerome Cohen's *Animal, Vegetable, Mineral: Ethics and Objects* (2012), with the latter focusing specifically on medieval and early modern texts. With respect to the former, I do not think it is an overstatement to say Marder is doing nothing short of advocating for the rights of plants (or at least the right to be considered every bit as intelligent and adaptive as other life forms on this planet). In that sense, this project is heavily indebted to

this line of thinking and Marder's ideas are discussed in detail and integrated throughout the chapters that follow.

To return to Animal, Mineral, Vegetable, this collection of essays examines what happens when we cease to assume that only humans exert agency, and, more broadly, argues against anthropocentricity. As Cohen says, "sheep, wolves, camels, flowers, chairs, magnets, landscapes, refuse, and gems are more than mere objects. They act; they withdraw; they make demands" (Animal, Mineral, Vegetable 298). In this dissertation I frame things somewhat differently since the "objects" I deal with (be they animal, vegetable, or mineral) are rarely literally exerting agency (though in some instances and with some of the organisms one can make the case that they are). What I am interested in is what happens in plays where humans imagine that animals, minerals, vegetables, plants, and dirt exert agency, and more specifically how might that conception affect an individual or collective worldview? Does it imply or expand our set of ethical obligations to the earth or to specific creatures? As the phrasing in "more than mere objects" implies, like Cohen, I find it problematic to label any living thing as an object (and wish to avoid such phrasing wherever possible) since I would contend that living organisms cannot accurately be described using the term. I prefer to adopt a strict definition of "object" and limit the word to non-sentient inanimate things, existences, and items.

Continuing with this issue of defining key terms, Marder correctly observes that plants often serve as synecdoche for "nature as a whole" (Plant-Thinking 31). And yet, I fully expect to receive pushback on the very (fraught) notion of nature. Nature, after all, is everything: "the most toxic chemical substance and the most exquisite flower alike are composed of the elements that constitute nature" (Bushnell 2).³ Every technologically advanced contraption that we have

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³ Rebecca Bushnell goes on to observe (correctly, in my view) that humans nevertheless "persist in opposing nature and not nature, needing a nature outside of ourselves" (Bushnell 2).

created is technically a part of nature. Yet, I would argue that in order to have a productive conversation, it is fair, and indeed preferable, to limit and demarcate the meaning. Vegetation, soil, wildlife, and the spaces apart from civilization – these categories constitute nature. In literature and other artistic works, such spaces are often obvious (e.g., court vs. forest). Of course, in the real world, the matter is rarely black and white; the tree beyond one's window with squirrels running up and down and birds building a nest is nature. Even in the midst of an urban jungle, a plot of dirt with an anthill is nature. However, for the sake of avoiding needless confusion and obfuscation, I would say something like "all known entities" when referring to everything that belongs to nature by default. This may seem like a trivial point, but resistance to defining nature can become little more than a copout; defining the term overtly, after all, invites us to start considering seriously our impacts on the environmental other.

Elizabethan Environmental Concerns and Contemporary Comparisons

Regardless of which methodological angle one takes, it is difficult to deny that part of the reason for ecocriticism's growth in the last decade is that individuals living in the twenty-first century have an increased awareness about a range of environmental issues. Whereas environmentalism was once associated primarily with "tree huggers" and fringe movements, we now live in a world where the local supermarket will encourage customers to carry reusable bags. This awareness of limited resources and the pollution that stems from wastefulness is only the tip of the iceberg. Every day, readers are bombarded with articles about global warming, air quality, toxins infiltrating water, the ozone layer, marine debris (e.g., the great Pacific garbage patch), endangered species, factory farming, rainforest and coral reef destruction, and alternative energy. Although these concerns may seem like uniquely modern-day problems, in fact they

help to bridge the gap between our culture and people living in the sixteenth and seventeenth centuries. Indeed, part of what I find so appealing in applying ecocriticism to Renaissance literature is that it presents the opportunity to meld "presentist" concerns with a new historicist methodology.

Although romantic era nature writing has been the primary focus of ecocriticism, the influence of ecological concerns can be seen in Sidney, Shakespeare, Milton, Marvell, and countless other early modern authors. In this period, botany was coming into its own as a scientific discipline while problems such as rampant deforestation and loss of wetlands were occurring. Even before the Elizabethan and Jacobean eras, there were concerns about England's forests, as evidenced by Henry VIII's Act for the Preservation of Woods (1543). At the end of the sixteenth century, John Manwood wrote in A Treatise and Discourse of the Lawes of the Forrest (1598) that "the greatest part of [forests]" were "spoiled and decayed" (Manwood 2). This deforestation had widespread ramifications – most notably, as Sir William Cecil explained in 1596, that "London and all other towns near the sea...[were] mostly driven to burn coal...for most of the woods [had been] consumed" (Hattaway 557). A few decades later, John Evelyn was complaining in Fumifugium: Or The Inconveniencie of the Aer and Smoak of London (1661) that the city's air was "eclipsed with such a cloud of sulfure, as the sun it self...is hardly able to penetrate" (Fumifugium 6). I shall examine the impacts of medieval and Renaissance era deforestation in several of the chapters, but go into particular detail in chapter four, which focuses on the use of trees in *The Tempest*.

Concurrent with logging efforts, increased demand for meat and wool led to overgrazing, which in turn, contributed to the draining of marshes and wetlands (Hiltner 2). But attempts to convert terrain into pasture and cropland were not enough to shield Elizabethans from severe

grain shortages and harvest failure. Such problems have an odd resonance with modern society; even putting aside the ethics of eating animals, it is no longer possible to deny the substantial environmental impact of consuming meat. An estimated 150 billion animals are slaughtered worldwide each year and meat consumption is one of the biggest factors contributing to global warming and a host of other environmental disasters (e.g., antibiotic resistance, toxic runoff, fecal matter "lagoons", and deforestation).⁴ And we persist on this hazardous path even knowing that the staggering amount of grain and water used to produce meat could be used more efficiently. As I hope to demonstrate, plays like *As You Like It* directly encourage us to think about the ethics of killing animals for food and what impact such behavior has on human society.

As if daily life were not sufficiently difficult for people living in the Elizabethan era, the climate itself was perhaps the biggest culprit behind harvest failures given that the 1590s were the coldest decade of the sixteenth century (Fagan 94). Though Elizabethans did not know it, they were living in the midst of what geologists now refer to as the Little Ice Age. Of course, cold spells were not the only climatic phenomenon that affected the general population. Brian Fagan explains that "storm activity increased by 85 percent" in the late 1500s (much to the chagrin of the Spanish Armada) (Fagan 91). English seamen undertaking journeys to the New World knew firsthand the dangers of severe tempests or "hurricanoes." While *The Tempest* and *King Lear* are likely the first Shakespearean plays that come to mind when considering inclement weather, the first chapter illustrates that *The Winter's Tale* is perhaps the playwright's work that is most profoundly concerned with how climate affects our lives.

Last but certainly not least, early modern exploration and imperialism engendered profound changes in how humans viewed the world around them. A vast new world of resources

⁴ In 2006, the United Nations estimated that roughly one fifth of greenhouse gases were attributable to raising livestock for food. However, World Bank economists concluded that the number was, in fact, much higher and closer to fifty percent.

was at man's disposal and, when reading texts like Thomas Hariot's *A Brief and True Report of the New-found Land of Virginia*, one can plainly intuit an intense fascination with all that the land has to offer. *Timon of Athens* and *The Tempest* deal explicitly with what humans can obtain from the land, but both also raise questions regarding what happens when resources are scarce or run out, and whether mankind has an obligation to refrain from exploiting the land (even when resources are plentiful).

Things They are not always as they seem

Implicit in virtually any statement concerning what the land has to offer is the phrase "to man" – as in what sort of things does nature have to offer humans in particular. In assessing the world around us, we possess a seemingly limitless aptitude for converting entities into objects for our use. But I would argue that this tendency to objectify exists even on a subtle linguistic level (one that need not pertain to using resources). Consider the famous Phaedrus quotation from his Fabulae Aesopiae: "Non semper ea sunt quae videntur" (Book IV). For centuries, this has been loosely translated to something along the lines of "things are not as they seem" or "things are not always what they appear to be." The line comes from a passage on the fables and events to be discussed, so the author is not talking about any particular person, animal, plant, object, or "thing." While I realize that "thing" can refer to any circumstance or object of thought (a revealing phrase in and of itself), I find the history of this adage curious and telling since it shows our propensity at all times (and especially in language) to revert to "thingness" when describing that which is external to us - i.e., otherness or alterity in any form. Of course, as the reader has no doubt surmised, the Latin translates into "not always are they what [they] seem." What if speakers used this idiom instead? No doubt to most of us it would seem ridiculous to go

around saying "they are not what they seem" about the myriad "things" we do not consider to be on equal footing with those fortunate enough to receive pronouns to describe their existence. But if there is to be any hope of decentering the human and knocking man off his pedestal, a good place to start is in recognizing and correcting (even in small ways, like in language use) the supposedly vast distance between us and the very "things" that seem farthest away from our station.

As I alluded to in the previous section, we live in a simultaneously tumultuous and exciting age. On the one hand, the growing threat of climate change suggests we are on the brink of disaster. In 2014, the Intergovernmental Panel on Climate Change concluded that unless countries enact policies to reduce carbon emissions 40-70% by 2050 (and to near zero by the century's end), the earth's temperature will rise 6.7-8.4 degrees Fahrenheit by the year 2100. Meanwhile, a new study published in *Science* in May of 2014 concludes we are experiencing the sixth great extinction event in the earth's history (surprise – it's our fault). Yet ours is a paradoxical epoch; there are few times throughout history that our species has been so close to catastrophe, while at the same time expanding our knowledge and understanding of our closeness to other life forms. Exciting developments are occurring in all fields and directions. In terms of our relationship to nonhuman animals, walls are slowly but surely being torn down as legal scholars make the case for the concept of legal personhood (already extended to U.S. corporations) to be extended to creatures such as cetaceans (see India's constitutional declaration for one notable example). Meanwhile in biology and ecology, scientific evidence is forcing us to look at invertebrates and even plant life in an entirely new light.

a) "Higher" organisms

In short, what we are learning is that a whole host of life forms are indeed not what they seem – especially when it comes to the intelligence of so-called lower organisms. On that note, for the purposes of the present discussion, I am not going to deal much with the intelligence of mammals and "higher" life forms since this is now accepted widely (though unfortunately not universally – e.g., most people do not realize pigs being kept in extreme confinement in factory farms perform better than canines on cognitive tests). While many individuals may be surprised to learn that elephants engage in mourning rituals, dolphins understand syntax, apes recognize themselves in mirrors, and that birds craft their own tools, such discoveries are no longer beyond our ken.

As I detail in chapter six, which focuses primarily on nonhuman animals, the early modern period – in some respects even more so than our age – understood the shared existence and bond between animals and humans (e.g., enthusiasm for theriophillic literature, court trials for animals, scientific treatises on physiological resemblances). In one sense, this is perhaps not surprising given that the rise of industrialization has resulted in many individuals no longer having day-to-day contact with animals (other than the few domesticated species that we bring into our homes as pets). Even in the earliest stage of his career, we see Shakespeare exploring the close bond between man and certain animals, as in the humorous but touching scenes with Launce and Crab in *The Two Gentleman of Verona* (c. 1589). Launce describes the great lengths he has gone to in order to protect his dog, Crab, from having to endure punishment and cruelty – something most anyone reading or watching the play can understand precisely because so many of us have personal experience interacting with dogs. But while the Crab material stand outs (in

part because no other Shakespeare play features a canine character on stage), it seems to me that Shakespeare is every bit as interested (if not more interested) in the so-called lower life forms.

b) "Lower" life forms: Insects and Worms

In *Titus Andronicus*, another of Shakespeare's earliest plays, the title character makes much of a simple fly and imagines the fly's familial relationships (IV.i.60). Importantly, Titus is willing to discriminate against the insect only because his brother observes that the creature is black like their hated enemy, Aaron the Moor (not on account of the fly being a lowly insect). To disregard such a moment because Titus is mad (or feigning madness) misses the point; Shakespeare makes use of some shared aspect(s) of existence to create intriguing and powerful images before our eyes. Similarly, in Henry IV Part II, when the ailing king laments the fact that bees – who generate "virtuous" sweetness in their hives – are often "murdered for [their] pains" (IV.iii.203-6), the topic and verb choice are not meant to come across as lighthearted (and, as Gaunt famously said in *Richard II*, "the tongues of dying men / enforce attention" since their words "are seldom spent in vain" (II.i.5-7)). Of course, the analogy between bees and human society is commonplace and goes back to antiquity, but Shakespeare chooses to use charged words that suggest these creatures are more than mere things and, indeed, there may be some ethical problems worth unraveling in terms of how we interact with them. In the final installment of his second tetralogy, Shakespeare describes at length all of apiarian society, culminating with the "poor...porters crowding in / their heavy burdens at [a] narrow gate" while "the sad-eyed justice" must order the execution of a "lazy yawning drone" (Lii.200-4). Clearly, Shakespeare is not content merely to observe that human and bee societies must both enforce order for the sake of achieving stability. While that is an important and driving component

behind the inclusion of such discussions, Shakespeare invariably emphasizes the complexity, kinship, vitality, virtue (and its counterpart, vice) in entities we are otherwise prone to overlook or ignore entirely. And as it turns out, Shakespeare was not so far off the mark.

We know now that insects have up to a million nerve cells and, despite their tiny sizes, are "capable of extraordinary cognitive feats" (Sacks). A 2014 University of Oxford study shows that fruit flies do not merely act impulsively, but rather use "a decision process...that bears the behavioral signature of evidence accumulation" (in other words, they think before they act) (Dasgupta 901). Bees are experts in recognizing "different colors, smells, and geometric shapes...as well as systematic transformations" of these factors (Sacks). They also remember locations, paths, and can communicate such information to their fellow bees (Sacks). Perhaps most astonishingly, certain species of wasps are able to "learn and recognize the faces of other wasps" (this ability was previously thought to exist only in mammals) (Sacks). As neurologist Oliver Sacks astutely observes, "we often think of insets as tiny automata – robots with everything built-in and programmed – but it is increasingly evident that insects can remember, learn, think, and communicate in quite rich and unexpected ways" (Sacks).

But what about worms – those unassuming and largely hidden invertebrates that so captured Shakespeare (most famously of course in *Hamlet*, but similar sentiments are expressed in *Timon of Athens* and *Antony and Cleopatra*)? Randall Martin convincingly argues that by focusing on worms as "essential creatures of geologic labor", *Hamlet* anticipates Darwin's indepth studies of worms and perhaps even challenges human exceptionalism (Procházka 40). Darwin's main premise in *The Formation of Vegetable Mould through the Action of Worms* (1881) was the "immense power of worms…to till the soil and change the face of the earth" (Sacks). But he was also fascinated simply by the habits of worms (e.g., their astonishing

sensitivity to vibrations, which helps them to avoid predators) (Sacks). Darwin observed that worms were able to modify their behavior depending on circumstances and stimuli: "When a worm is suddenly illuminated and dashes like a rabbit into its burrow...we are at first led to look at the action as a reflex one...But the different effect which a light produced on different occasions, and especially the fact that a worm when in any way employed and in the intervals of such employment, whatever set of muscles and ganglia may then have been brought into play, is often regardless of light, are opposed to the view of the sudden withdrawal being a simple reflex action. With the higher animals, when close attention to some object leads to the disregard of the impressions which other objects must be producing on them, we attribute this to their attention being then absorbed; and attention implies the presence of a mind" (Vegetable Mould 7).

c) Jellyfish and Radial Symmetry

Before turning to plants, I want to touch on one more "primitive" or lower-order animal that I think offers a particularly useful case study in the types of biases we humans employ when considering other organisms. Although Louis Agassiz demonstrated in the mid nineteenth century that the *Bougainvillea* jellyfish has a substantial nervous system, and by the turn of the century George Romanes revealed that "jellyfish employed both autonomous, local mechanisms and centrally coordinated activities through the circular brain that ran along the margins of the bell", most of us even today likely regard jellyfish as passive ephemera (some of which can harm a person unlucky enough to come into contact with their trailing tentacles) (Sacks). But, as Sacks explains, "jellyfish are hardly passive...[They] can change direction and depth" and many exhibit "fishing" behaviors based on "gravity-sensing balance organs" (Sacks). They even employ "escape strategies" when threated by predators (Sacks). Perhaps most astonishing are

the box jellyfish, which have developed "image-forming eyes, not so different from our own" (Sacks). Paleontologist and evolutionary biologist Tim Flannery sums up the matter of the box jellyfish, saying "they have brains, which are capable of learning, memory, and guiding complex behaviors" (Flannery). I single out jellyfish because these creatures so aptly illustrate how a top-to-bottom approach does not work (largely because it is uniquely non-inclusive). Jellyfish are radially symmetrical (whereas mammals are bilaterally symmetrical with a "preferred direction of movement") and Sacks notes that this has probably contributed to our disinclination to regard jellyfish as little more than gelatinous blobs being swept around by ocean currents (Sacks).

As I describe in chapter five, the idea that life can be structured such that it emanates radially (i.e., in all directions) is what vegetation actually does (i.e., from a seed's germination, offshoots may emerge in any direction). Indeed, a radial vantage point is something that I am particularly interested in exploring through this project. In other words, how do we escape from projecting our own notion of what is "right" (top-to-bottom, head-to-foot) and instead think about how life systems can be organized differently? Plants provide appealing examples because even though we understand they are rooted in the ground, we consider this fact in relation to how they are deficient (immobile) while maintaining a sense that they are structured vertically (foliage at the top of a tree or a bloom at the end of a stem) (Sacks). But like the jellyfish whose body emanates in all directions, so too does a plant grow and extend like radii from an origin; what's more, the substance at the bottom is more important than what is at the top – hence why pruning does not harm vegetation).

d) Plants, Mold, and Fungi

As with jellyfish, worms, flies, bees, etc., it turns out we are frequently wrong in our assumptions about these other organisms that do not possess a vertebral column. Darwin suspected as much, hence why he wrote a "series of botanical books, culminating in *The Power and Movement in Plants* (1880)" (Sacks). Of particular interest to Darwin was the demonstration that "there was 'plant electricity' as well as 'animal electricity'" – the former moving at a much slower rate but real nonetheless (Sacks). Darwin still (and not surprisingly) framed the matter in terms of how plants compare to animals – e.g., he described *Drosera* (commonly known as sundews) as a "most sagacious animal" (Letters 322). Of course, the problem is that plants do not necessarily compare favorably when measured against the standards set forth by "higher" animals. Even so, recent discoveries have shown just how complex and adaptive plant life is.

As Kat McGowan explains in "Listen to the Plants", when an insect starts chewing on a leaf, "the plant responds by synthesizing its own defense chemicals in an attempt to drive away the insect. It also releases a chemical plume into the air...[and] other plants respond to these alerts by producing their own chemical weapons" to repel the insects (McGowan). Alas, for almost as long as humans have been on this planet, we have had no idea this adaptive mechanism was happening since we were unable to detect these "chemical communiqués" (the one exception is the smell of freshly cut grass, which is actually a warning the plant emits) (McGowan). The first scientific evidence that plants could share information with other plants came from a 1983 study on willow trees (McGowan). A zoologist studying the effects of caterpillar attacks on trees made a rather startling discovery: the trees were responding "to signals generated by attacked trees...[and] since no evidence was found for root connections between attacked and control willows, the message may be transferred through airborne

pheromonal substances" (Hedin 55). We now know that plants can make at least "thousands of volatile compounds and just one emission may blend more than two hundred different chemicals" (McGowan).

To return to the issue of plant electricity, this particular phenomenon has attracted researchers (like Darwin) since the eighteenth century (Volkov v). One well-known type of experiment that illustrates plant electricity involves anesthetizing plants with ether or chloroform so that the electrical impulses are essentially shut down (Anaesthetics 472). Often the plant that goes under the proverbial knife in such experiments is *Mimosa pudica* – an herb commonly referred to (appropriately enough) as the sensitive plant (Anaesthetics 472). The result is that a plant which instantly and visibly recoils at physical prodding in its normal (i.e., non-paralyzed) state, will cease to move after being exposed to and submerged in ether (Grohmann 51). Under the effects of anesthesia, the leaves become oblivious to all stimuli (Anaesthetics 472). At the other extreme of the sensory spectrum, we find that injured plants transmit electrical signals throughout their body (not unlike the way an animal would react when exposed to pain). Although the *Mimosa* represents an especially famous example, and one that has generated considerable interest (including a rumor that one particularly "touchy" plant in Kew Gardens experienced a nervous breakdown by shedding all its leaves after being touched one too many times) – there is still much left to learn about vegetal physiological mechanisms (Grohmann 51; Nervous Plants 651).⁵ As Alexander Volkov writes in *Plant Electrophysiology: Signaling and* Responses:

⁵ For some additional context, in the seventeenth century, Robert Hooke became one of the first scientists to investigate the movements of *Mimosa pudica* after Charles II specifically requested to know the reason why "sensitive plants stir and contract themselves" (Crisp 67; Uglow 234). Jumping to the nineteenth century, the leading German botanist, Julius von Sachs argued that the "slow speed of the [plant's] electrical signals…and the lack of nervous tissue proved that the electricity was unimportant" (Nervous Plants 651). As a consequence, scholarly interest in "plant electrophysiology…fizzled out" during that era (Nervous Plants 651).

The identification...of bioelectrochemical mechanisms for electrical signal transduction in plants mark[s] a significant step forward in understanding this underexplored area of plant physiology. Although plant mechanical and chemical sensing and corresponding responses are well known, membrane electrical potential changes in plant cells and the possible involvement of electrophysiology in transduction mediation of these senseresponse patterns represents a new dimension of plant tissue and whole organism integrative communication. Plants continually gather information about their environment. Environmental changes elicit various biological responses. The cells, tissues, and organs of plants possess the ability to become excited under the influence of certain environmental factors. Plants synchronize their normal biological functions with their responses to the environment. The synchronization of internal functions, based on external events, is linked with the phenomenon of excitability in plant cells. The conduction of bioelectrochemical excitation is a fundamental property of living organisms. (Volkov v)

While many of us may find it almost unthinkable that plants could react visibly to irritating stimuli (one might even go so far as to use the word "pain" but for a plant's lack of nervous tissue), equally stunning are studies showing that slime molds may have ways of remembering previously taken pathways "without any memory cells...to accomplish such navigations" (Pettman). For instance, in "Intelligence: Maze-solving by an amoeboid organism" (published in *Nature*) and "Smart behavior of true slime mold in a labyrinth" (*Research in Microbiology*), Toshiyuki Nakagaki discusses how the slime mold *Physarum polycephalum* was able to adjust its path so as to "maximize its foraging efficiency" by changing its shape in a maze to cover "the shortest distance between...the food sources" (Maze-Solving 470). Nakagaki observes that the unicellular organism's "maze-solving behavior" may be "akin to primitive intelligence" (Smart Behavior 767). Increasingly, it seems that "decision making" or "non-intentional thought" may occur "not only in the nervous systems and brains of animals, but more widely: on a cellular or sub-cellular level, in viruses, bacteria, and unicellular microbes" (Shaviro 1). To be clear, in the case of slime molds, we are no longer dealing with plants, but it is worth noting that while this

organism is now classified as part of the supergroup Amoebozoa, slime molds were previously thought to be fungi, which in turn were originally considered part of the kingdom *Plantae*. Such confusion between boundaries reveals the degree to which all life is interconnected. And though fungi are now in their own separate taxonomic kingdom, fungi and plants work together in surprising ways. Scientists have recently claimed that "trees use fungi as a communication to warn neighbors of aphid attacks, not unlike an organic internet" (Pettman).

e) Plants and their place in history: Past and Future

But should we really be surprised by any of these mechanisms? After all, we are dealing with some of the most evolutionary successful organisms in the history of the planet. Obviously, Shakespeare had no inkling that there are approximately 5×10^{30} (five million trillion trillion) bacteria on earth – let alone knowledge of their existence (Whitman 6578). But such unfathomable magnitude does lend new meaning to Hamlet's proclamation that "there are more things in heaven and earth...than are dreamt of in our philosophy" (I.v.168-9). As for plants – those organisms that Shakespeare knew well and took such interest in – their vitality and abundance bespeaks their own success story. Plants have existed for hundreds of millions of years and are found on every continent. Shakespeare naturally was not thinking in terms of geologic time, but we do know that according to Genesis, plants arguably hold a privileged status among all life forms. The common narrative is described in the first chapter of Genesis: "Then God said, Let the earth bud forth the bud of the herb, that seedeth seed, the fruitful tree, which beareth fruit according to his kind, which hath his seed in itself upon the earth: and it was so. And the earth brought forth the bud of the herb, that seedeth seed according to his kind, also the

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⁶ Both quarto versions say "in your philosophy" while the later folio uses "our."

tree that beareth fruit, which hath his seed in itself according to his kind" (Genesis 1:11-12). In this version, plants – which, incidentally, are not referred to as things – are the first organisms that God creates on earth. The second chapter in Genesis presents a conflicting account since we read that prior to the creation of man no plants had appeared on earth: "Every plant of the field, before it was in the earth, and every herb of the field, before it grew, for the Lord God had not caused it to rain upon the earth, neither was there a man to till the ground. But a mist went up from the earth, and watered all the earth. The Lord God also made the man of the dust of the ground, and breathed in his face breath of life, and the man was a living soul. And the Lord God planted a garden eastward in Eden, and there he put the man whom he had made. For out of the ground made the Lord God to grow every tree pleasant to the sight" (Genesis 2:5-9). An interpretation of both accounts might reasonably conclude that God does not simply place plants on earth, but rather gives the previously barren soil the tools needed to produce vegetation (which then propagates swiftly and in all directions). In any event, the standard reading that God was saving the best (i.e., man) for last does not necessarily pass muster on close examination. On the one hand, plants were here first and set the stage for all the other creatures that came after (and who require plants to survive); on the other hand, vegetative life is so prone to proliferation that it erupts from the ground without God's direct hand spurring its existence. Either version implies something many of us may already suspect when glancing at (or perhaps even contemplating) weeds sprouting from a concrete path: plants will be here long after we are gone. In The World Without Us, Alan Weisman's acclaimed environmental study about what would happen to the earth if mankind suddenly vanished, the author describes how even our grandest cities like New York (whose massive size would make Shakespeare's London seem like a quaint

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⁷ Unless otherwise noted, all scriptural passages are taken from the Geneva Bible – the English version that preceded the King James translation by half a century and the bible Shakespeare would have known and used.

hamlet) would quickly revert to an ecosystem where flora reigns supreme. The remaining vegetal inhabitants would have little need to worry about the havoc wreaked during our stay on earth because even the most poisonous manmade substances would be suppressed in time: "Over centuries, vegetation will take up decreasing levels of heavy metals, and will recycle, redeposit, and dilute them further. As plants die, decay, and lay down more soil cover, the industrial toxins will be buried deeper, and each succeeding crop of native seedlings will do better" (Weisman 31). As Weisman puts it, "on the day after humans disappear, nature takes over and immediately begins cleaning house – or houses, that is" (Weisman 15). Nature, it seems, is always already on the cusp of taking over.

Speciesism and Hierarchy

In recent years, a number of literary scholars have argued that Shakespeare's depictions of animal behavior reveal humanism's rediscovery of classical skepticism towards human exceptionalism (e.g., Montaigne's writings) – a skepticism that would be severely undermined in short order by Descartes' work. Though animals may present the most obvious objects of inquiry when considering Shakespeare's debt to classical and humanist skepticism, similar but broader observations have been made concerning the philosophical outlooks depicted in Shakespearean drama. For instance, in discussing *Hamlet's* metaphysical preoccupations, one critic writes that Shakespeare dramatizes the "philosophical disquietudes taken up by Descartes, but ultimately he will remain closer to the secular skepticism of Michel de Montaigne than to the essentialist individualism of Descartes" (Drew 51).

⁸ See Erica Fudge's Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England, Bruce Boehrer's Shakespeare among the Animals: Nature and Society in the Drama of Early Modern England, Andreas Höfele's Stage, Stake, and Scaffold: Humans and Animals in Shakespeare's Theatre, Keith Thomas's Man and the Natural World: Changing Attitudes in England, and Laurie Shannon's The Accommodated Animal: Cosmopolity in Shakespearean Locales.

It is no overstatement to say that many of the findings described in the previous section represent the polar opposite of Descartes' belief that animals are "so devoid of feelings that one could vivisect them without compunction, taking their cries as purely 'reflex' reactions of a quasi-mechanical kind" (Sacks). But though most individuals living in the twenty-first century would likely cringe at some of the experiments Descartes conducted in the seventeenth century, the conclusions he reached were far-reaching, with echoes from this line of thinking reverberating well into the modern era. Descartes' emphasis on stimulus-response reflexes and bodies as machines can be seen, for example, in the radical behaviorism of the twentieth century – a framework that denied "reality to what was not objectively demonstrable" and denied in particular the "inner processes between stimulus and response, deeming these as irrelevant...or beyond the reach of scientific study" (Sacks).

But if scientific advances throughout history have taught us nothing else, it is that we are consistently wrong in our assumptions and that we should not be arrogant in assuming we have mastered (or have mastery over) the complexity of life forms. When Jeremy Bentham claimed that the relevant question about animals was simply whether or not they can suffer, he touched upon a fundamental truth concerning the shared nature of primitive and advanced animals. As Romanes observed in the late nineteenth century, "wherever [nerve tissue] does occur its fundamental structure is very much the same, so that whether we meet with nerve tissue in a jellyfish, an oyster, an insect, a bird, or a man, we have no difficulty in recognizing its structural units as everywhere more or less similar" (Romanes 24).

Granted, Bentham and Romanes are exclusively discussing the animal kingdom and I confess there is no easy way to transition to plants. As I have indicated, we can plausibly say that plants may indeed suffer, but that observation alone is more likely to create rather than

resolve any ethical dilemmas. Does that then mean it is no longer moral to own furniture made of wood? Or does this simply mean that we as a species need to be more vigilant about resource management, and recognize that if we do destroy plant life (e.g., clearing forests), we have an obligation to replant and ensure that vegetation continues to thrive? There are no easy answers given that our mere existence accompanies the death of both plants and animals. Yet this does not mean we should resign ourselves to destruction and refuse to contemplate such questions, or search for ways to minimize our impacts on all living beings.

a) The Great Chain of Being

What I do believe provides a useful transition in terms of making the leap from animal to plant is the very concept of "lower life forms." When it comes to the food chain or any taxonomic scheme, certain organisms are invariably grouped together. Simply put, we are not going to regard a dolphin the same way we view a centipede scurrying on the ground. In Western philosophy, the notion of a universal *scala naturae* (chain or ladder of being) that ranked existences from the divine to the mundane held tremendous sway. Rocks were at the bottom, then plants, then animals (and so on), but divisions and hierarchies existed within each category (Bucholz 23). For instance, although insects were at the bottom of the animals, useful and attractive insects such as bees and ladybugs were at the top of the insect heap (Medieval Natural World 23). As for plants – firmly positioned underneath the animals – the hierarchy went from tallest (trees) to shortest (Bucholz 24). Even stones had to be ordered with precious jewels like diamonds at one end and drab sediment like granite at the other (Bucholz 24).

⁹ Please note that the now common phrase "the Great Chain of Being" (made even more popular and ubiquitous in no small part thanks to Arthur Lovejoy's seminal work on the history of the idea) was "largely an invention of eighteenth century writers" (Bucholz 393).

I shall discuss the propensity for creating subdivisions in greater detail in chapters two and four, but I want to lay some of the groundwork here for the discussions that follow. While the idea of weighing the relative merits between a beetle and a grasshopper for the sake of ordering them might seem comical, this is how human culture has long operated. The elements that contributed to a sweeping conception of ranking organisms can be traced to ancient Greek philosophy and to Aristotle in particular who "conceived that zoological forms could be arranged on a hierarchical scale, reflecting degrees of perfection" (Bynum 4). Aristotle regarded plants as "defective animals" and, indeed, since antiquity "plants have mostly been considered in terms of lack or privation: they lack eyes, reason, speech, history, desires, etc." (Pettman).

But even when plants are used in positive sense, the results are frequently metaphors that a) pertain to human behavior and b) get the nature of plants all wrong. Consider what Plato – Aristotle's teacher – says in his *Timaeus*: "We are a plant not of an earthly but of a heavenly growth...for the divine power suspend[s] the head and root of us from that place where the generation of the soul first began" (Jowett 777). In other words, Plato is encouraging his readers to visualize humans as creatures with "aerial roots extending into the sky" (Pettman). Marder persuasively argues that Western metaphysics commences "with the inversion of the earthly perspective of the plant, a deracination of human beings from their material foundations" (Vegetal 471). For Plato, Aristotle, and many who followed, it mattered not that dirt is a nourishing substance; the idea that the further our distance from the ground, the better, became firmly entrenched.

Although we typically associate the Great Chain of Being with Christian theology and European medieval and Renaissance society, its influence on later scientific endeavors is a

¹⁰ The *scala naturae* derives in large part from Aristotle's *History of Animals* where he is concerned with studying creatures, classification, and hierarchical orderings.

testament to the scheme's staying power in the collective consciousness. In *Elements of Geology* (1851), Charles Lyell uses the *scala naturae* as a "metaphor to describe elements absent from the layers of a geological column, and in the process unwittingly initiates the mythic evolutionary quest for the 'missing link'" (Lightman 2). From a broader perspective (i.e., the concern with ordering life), biologists are still working on classifying animals, with some arguing for *x* kingdom and others claiming *x* should not be treated as such (and some preferring to abandon the "kingdom" label altogether). Granted, scientists today are not couching these sorts of discussions in terms of simplistic "better than or worse than" rhetoric; taxonomy, of course, concerns shared characteristics and evolutionary relationships.

b) Speciesism's link to the scala naturae

But while the idea of rankings organisms no longer seems like an overt or salient feature of modern society, the consequences of a hierarchical worldview persist in subtle ways, namely the promotion and propagation of speciesism – i.e., the assumption of mankind's superiority coupled with discrimination against other organisms based purely on the fact that they do not belong to one's own species. Building upon Bentham's arguments in favor of the equal consideration of interests, Peter Singer did much to popularize the concept of speciesism in *Animal Liberation* (1975). Revisiting the subject in his next book, *Practical Ethics* (and again in subsequent editions of *Animal Liberation*), he writes: "Racists violate the principle of equality by giving greater weight to the interests of members of their own race when there is a clash between their interests and the interests of those of another race. Sexists violate the principle of equality by favouring the interests of their own sex. Similarly, speciesists allow the interests of

¹¹ The term was coined a few years earlier by Richard Ryder, a member of the Oxford Group, which consisted of intellectuals interested in the emerging concept of animal rights. In *Animal Liberation*, see in particular chapters five and six: "Man's Dominion: A Short History of Speciesism" and "Speciesism Today."

their own species to override the greater interests of members of other species. The pattern is identical in each case" (Practical Ethics 58; Animal Liberation 9). More recently, Marc Bekoff has done an admirable job highlighting the link between speciesism and the *scala naturae*: "Speciesism results in animals being classified hierarchically as 'lower' and 'higher', with humans on the top rung of the ladder. This anthropocentric view...leads humans to ignore the welfare of animals" (Bekoff 26). Terry Tempest Williams put the matter perhaps most eloquently: "To regard any animal as something lesser than we are, not equal to our own vitality and adaptation as a species, is to begin a deadly descent into the dark abyss of arrogance where cruelty is nurtured in the corners of certitude. Daily acts of destruction and brutality are committed because we fail to see the dignity of [the] Other" (Williams 127).

Singer (philosopher), Bekoff (evolutionary biologist), and Williams (writer/conservationist) are not merely dealing with abstract ideas, but rather are trying to explain the largely hidden (but fundamental) motivation behind the harms that humanity inflicts upon other creatures. For instance, in detailing a fraction of the horrors that animals in factory farms and laboratories endure, Matthew Scully astutely observes that "it is as if every animal, in our day, is falling a level in the order of creation – wildlife to the level of farm animals to be raised for slaughter, farm animals to the level of plants to be 'grown', and laboratory animals to the level of microbes or cell cultures one need not even treat as living, feeling beings at all" (Scully 381). The problem with hierarchies is that they foster the assumption that these structures are correct and unchanging – as if they were part of some natural law handed down from above. The reality is that we can (knowingly or unknowingly) shift the pieces around and that we devalue the beings we have placed on (or relegated to, rather) certain rungs.

When Pettman observed that the rise of "the posthumanities" represents an attempt to expose or deconstruct "anthropocentrism", I would argue that one could replace anthropocentrism with speciesism and the effect would be the same. In fact, the latter may offer a more accurate way of revealing what is at stake in these scholarly pursuits. After all, this is not simply a question of decentering the human, or rearranging the ladder, but rather a question of whether such a model is even useful at all. Focusing on the plants and ground is one way to remedy the hierarchical mindset that has so plagued our species. By reevaluating what lies at the extremity, we may be inclined to rethink our beliefs about everything else (and how we interact with and/or depend on other existences). Plants in particular exemplify a modus operandi that is "radically different from the sovereign human approach, in which the self inhabits the foreground of existence, acting in instrumental and objective ways on a passive background of mere things" (Pettman). While humans do not necessarily need to regard plants as role models (to do so could lead us again into a better than/worse than mentality), this project does seek to correct the age-old assumption that we are superior to other life forms by emphasizing vegetation's unique strength and vitality. As Marder explains, recognizing the inherent value, intelligence, and adaptability of plants might engender "a drastically different comportment toward the environment, which will no longer be perceived as a collection of natural resources and raw materials managed, more or less efficiently, by human beings" (Plant-Thinking 31).

Counter-Traditions in the Renaissance: Leonardo's Influence

Although I single out Montaigne in the previous section as indicative of a specific strain of skepticism towards human superiority, Montaigne was certainly not alone in standing outside the prevailing hierarchical (later Cartesian) model that dominated theological, scientific, and

philosophical thought. Montaigne's work (and, as I hope to suggest, Shakespeare's as well) can be understood as part of a counter-tradition that emerged in the late middle ages and the Renaissance – one that emphasized a more holistic "conception of experience" – with no less a champion than "the Renaissance man himself", Leonardo da Vinci (1452-1519) (Bernstein 264; Spencer 190). As Fritjof Capra explains in *The Science of Leonardo*, from the beginning of "Western philosophy and science, there has been a tension between mechanism and holism" (Capra 168). While Descartes in particular did much to promulgate the mechanistic paradigm, Leonardo took a different path by following in the "tradition of Pythagoras" and remaining "deeply aware of the fundamental interconnectedness of all phenomena and of the interdependence and mutual generation of all parts of an organic whole" (Capra 168; 257). Capra summarizes the issue quite cleverly when he observes that "although [Leonardo] was a mechanical genius who designed countless machines, his science was not mechanistic" (Capra 257).

a) Animals and Humans

Examining the great artist's work further, we find that while it may be true that Leonardo was "the first great humanitarian", his philosophical bent led him to be concerned with suffering well beyond humanity's plights (Spencer 192). Like Pythagoras, Leonardo abhorred the cruelty towards nonhuman animals that he perceived to exist in all aspects of society. In *The Heretic's Feast*, Colin Spencer reverently notes that "before Montaigne and roughly contemporary with both Erasmus and More [this] giant among men passionately denounced the slaughter of animals and loathed meat-eating" (as evidenced, for example, in the following graphic exclamation: "Oh! How foul a thing, that we should see the tongue of one animal in the guts of another!")

(Spencer 190; King 201).¹² Leonardo's writings repeatedly "reveal his outrage at the mistreatment of animals" (e.g., the gruesome and barbaric nature of certain animal traps), but he also put words into action – as Vasari's famous anecdote goes – by purchasing caged birds and releasing them into the air (King 201). Centuries before modern-day activists like Singer drew the comparison between our treatment of nonhuman animals and slavery, Leonardo observed the following of "asses which are beaten": "O neglectful nature, wherefore art thou so partial, becoming to some of thy children a tender and benignant mother, [and] to others a most cruel and ruthless stepmother? I see thy children given into slavery to others without ever receiving any benefit, and in lieu of any reward for the services they have done for them they are repaid by the severest punishments, and they constantly spend their lives in the service of their oppressor" (Notebooks 271).

It would appear that Leonardo's views on humanity's treatment of animals in particular engendered the same type of revulsion at man's arrogance that Montaigne would later articulate and which likely left a strong impression on Shakespeare (an issue I discuss in detail in chapters five and six). In Leonardo's bitter observation that "our life is made by the death of others" (importantly for this project's broader aims, his very next sentence reads that even "in dead matter insensible life remains"), we cannot help but see resemblances to the themes Montaigne would later develop – most notably in "Of Cruelty" (Literary Works 131):

I could hardly be perswaded before I had seene it, that the world could have afforded so...savage-minded men, that for the onely pleasure of murther would...hacke other members in pieces...to invent unused tortures and unheard-of torments: to devise new and unknowne deaths, and that in cold blood, without any former enmitie or quarrell, or without any gaine or profit...they may enjoy

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¹² For at least part of his life, Leonardo likely followed a strict vegetarian diet (King 200). His own shopping lists provide strong evidence on this point – e.g., "kidney beans, white and red maize, millet, buckwheat, peas, grapes, mushrooms, fruit, and bran" (King 200). Amazingly however, only one biography on Leonardo discusses his vegetarianism (Spencer 190).

the pleasing spectacle of...horror-moving yellings, deep fetcht groanes, and lamentable voyces of a dying and drooping man. For that is the extremest point whereunto the crueltie of man may attaine... 'That one man should kill another, neither being angrie nor afeard, but onely to looke on.' As for me, *I could never so much as endure, without remorse or griefe, to see a poore, sillie, and innocent beast pursued and killed, which is harmlesse and void of defence, and of whom we receive no offence at all...I seldom take any beast alive but I give him his libertie. Pythagoras was wont to buy fishes of fishers, and birds of fowlers to set them free againe. [emphasis added] (Of Cruelty)*

Evidently, Leonardo, Pythagoras, and Montaigne enjoyed the same pastime of giving animals their "liberty." But while such gestures may come across as quaint to some individuals, they undeniably illustrate a refusal to be complicit in what these men regarded as humanity's darker proclivities (e.g., oppressing others). One scholar puts the matter bluntly, writing that "Leonardo, one of the great humanists, actually had a fair amount of disgust for man himself" (Marcus 24). Spencer offers a more tempered view by concluding that Leonardo's disposition "allowed him to make observations on the rest of humanity with a degree of detachment" (Spencer 192).

b) Plants and Rocks

But if Leonardo analyzed humans with detachment, the same cannot be said of his interest in studying other existences. As his declaration that "in dead matter insensible life remains" indicates, "nature as a whole was alive and animated for Leonardo" (Capra 258).

Accordingly, Leonardo sought a "coherent, unifying picture of natural phenomena" – one that

¹³ Amusingly enough, unusual parallels exist between Leonardo and the title character of *Timon of Athens*. As I discuss in chapter two, Timon – who begins the play as a great humanitarian – soon develops a strong disgust towards his fellow man. But while Leonardo and the fictional Timon are both "inclined to misanthropy", the precise nature of their misanthropy is quite similar (Müntz 38). For instance, Leonardo's contempt for money ("Money, dirt! Oh, poverty of man! Of how many things do you become the slave for the sake of money!") sounds remarkably like Timon's ranting in the woods after he finds a gold stockpile in the dirt, which he promptly terms "this yellow slave" (IV.iii.34) (Müntz 38).

proved "radically different" than the scientific pursuits of Galileo, Descartes, and Newton (Capra xvii). And while Leonardo's popularity has never truly declined, appreciation for his scientific works has grown tremendously in recent decades. As Capra explains: "Only in the twentieth century did the limits of Newtonian science become fully apparent, and the mechanistic Cartesian worldview begin to give way to a holistic and ecological view not unlike that developed by Leonardo da Vinci. With the rise of systemic thinking and its emphasis on networks, complexity, and patterns of organization, we can now more fully appreciate the power of Leonardo's science and its relevance for our modern era" (Capra 169).

Of course, in order to arrive at such a lofty conclusion, it helps to examine the specifics in Leonardo's work:

Even the most cursory glance at the landscapes in Leonardo's great paintings, or the studies of rocks and water, shows that Leonardo perceived enormous and vigorous life not only in the effects of nature – clouds, torrents, and shadows and light – but in matter itself, in the very stones and pebbles, making us recall those Pre-Socratic philosophers who saw the spirit in everything. It is as if Leonardo had dissected nature itself, and drawn back an outer skin to show us the circulation of sap or spirit beneath the rocks. It is this oneness with all life, felt so intensely, which makes Leonardo so astonishing as a man and an artist. (Spencer 192)

Put simply, Leonardo was endlessly fascinated with all forms of existence and sought to render the vitality of even – or perhaps especially – the humblest stone and plant. Yet given the extent to which Leonardo is remembered in our popular consciousness for extraordinary works depicting humans (e.g., the *Vitruvian Man* and the *Mona Lisa*), as well as momentous events in Christianity (e.g., *The Last Supper*), it is easy to forget how remarkably attuned to the natural world his paintings and drawings truly are.

Leonardo's preoccupation with the so-called lower orders is perhaps most visible in his meticulous notebook sketches that so wonderfully meld art and science. Always the

"consummate observer of nature", Leonardo's "curiosity led him to capture natural objects not only beautifully, but accurately as well" (Pizzorusso 197). This approach held true for everything from the "structure of rock formations [and] fossils" to the "characteristics of water and air" (Pizzorusso 197). To return briefly to our era's newfound understanding of Leonardo's genius, a recent Guardian article leads with the statement that "Leonardo da Vinci was not just a great painter. He was also a brilliant geologist", and then proceeds to explain how he was centuries ahead of his time in correctly surmising that the earth was far older than what the bible suggests (Insights about Geology).

On the whole, Leonardo's studies and explorations (including actual journeys to observe mountains and rivers) allowed him to replicate even the most seemingly minute natural details in commissioned artworks. Indeed, "all of Leonardo's paintings and drawings reveal a remarkable fidelity to nature" (Pizzorusso 197). In her analysis of the Louvre's version of the *Virgin of the Rocks* (even the name that history ultimately bestowed upon the piece says a great deal about Leonardo's modus operandi), Ann Pizzorusso writes that the painting is "a geological tour de force because of the subtlety with which Leonardo represents a complicated geological formation" (Pizzorusso 197). Even the plants are positioned where they would actually grow (as opposed to placing them in a manner purely concerned with maximizing the aesthetic effect): "The sandstone would have decomposed sufficiently to allow roots to take hold where the plants are growing in both the foreground and background, and even at the top of the grotto. No plants are growing out of the diabase, however, since it is too hard and resistant to erosion to provide a suitable habitat for plant growth" (Pizzorusso 197-8).

Like many other scholars, Pizzorusso concludes that Leonardo's observations on geology and vegetation are "far more accurate than that of Renaissance theorists who hypothesized and

discoursed rather than observed" (Pizzorusso 198). Capra makes a similar claim when he writes that Leonardo's "flowers, herbs, and trees" consistently display a "vitality and grace that could only be achieved by a painter who had profound botanical and ecological knowledge" (Capra 177). Importantly, in an effort to achieve such realism and scientific accuracy, Leonardo broke away entirely from the "formal decorative plant motifs" that were so common in Renaissance artwork" (Capra 177). As we shall see in chapter two, Shakespeare toys with this notion of highly stylized and decorative motifs in order to critique the superficiality of human behavior.

Of course, Leonardo was not content merely to depict rocks and plants as tiny worlds unto themselves. Ever concerned with ideas of interdependence and kinship, he elegantly extends knowledge of one organism to his understanding of another. On that note, I would be remiss not to mention Leonardo's picture of a fetus in utero, which is accompanied by several "sketches that liken the womb to the embryo sac of a flower, picturing the peeled-off layers of the uterine membranes in an arrangement of flower petals" (Capra 260). The deliberate association between a human fetus and a botanical seed provides perhaps the best example of Leonardo's profound "respect for all forms of life" – an admiration that ran counter to the usual insistence on ranking organisms (Capra 260; Gilson). But I also end with this particular famous image because, as I outline in the next section, Shakespeare too is extremely interested in drawing comparisons between human reproduction and plant biology.

Shakespearean Ecology

Having traversed some of the space between ancient Greek philosophy and modern animal rights, I want to resume the subject of how Shakespeare's work helps us make sense of humanity's place within the earth's ecosystems. As previously indicated, one of this project's

overarching contentions is that Shakespearean drama – written and performed at the cusp of modernity – reveals a deep skepticism of Elizabethan era hierarchical orderings of creation. In each of the plays explored, different categories (e.g., mammalian, human, vegetal, geologic) are being negotiated and the richness of Shakespeare's language (particularly with respect to vegetation) frequently underscores shared biotic properties.

Ben Jonson's prophetic tribute to Shakespeare in the First Folio – "he was not of an age, but for all time" – rings true on a seemingly infinite number of levels. In an effort to show how certain environmental themes foreshadow contemporary concerns, Steven Mentz persuasively argues that *Antony and Cleopatra* revolves around fantasies of destruction, and that looming threats of sinking cities and catastrophic floods (e.g., "let Rome in Tiber melt", "melt Egypt into Nile", "the higher Nilus swells, the more it promises") speak to the obligations we have to help our fellow man (more relevant today than ever before with rising sea levels and "superstorms") (Mentz). But while critics like Mentz are interested in the watery worlds that appear in plays like *Antony and Cleopatra*, *The Comedy of Errors*, *Twelfth Night*, *Pericles*, and *The Tempest*, the dirt that necessarily exists in any earthbound work – and replete with generative qualities (specifically when mixed with water) – offers uncharted terrain worth exploring in any of Shakespeare's works.

Martin Heidegger's claim that "the stone is worldless, the animal is poor in world, [and] man is world-forming" presents a continuation of the Aristotelian hierarchical framework — which, as I have already suggested, should come as no surprise given the Great Chain of Being's lasting influence (Heidegger 185). But I also include Heidegger's formulation because I am struck by how closely this idea that the human is "world-forming" resembles Harold Bloom's claim that Shakespeare invented the human (i.e., created human nature as we know it): "More

even than all the other Shakespearean prodigies – Rosalind, Shylock, Iago, Lear, Macbeth, Cleopatra – Falstaff and Hamlet are the invention of the human, the inauguration of personality as we have come to recognize it' (Invention 4). Bloom's thesis is that "Shakespeare's great achievement was the creation of characters so varied and so real that they laid out all the possibilities for human personality" (Rackin 592).

I am not going to be so bold as to argue that Shakespeare invented the nonhuman, but suffice it to say, his oeuvre goes a long way towards showing not simply that such a category exists, but that it matters – not just to us, but for its own sake (and that perhaps stones and animals can create worlds of their own). Bloom's admiration for Falstaff and Hamlet in particular – as the best examples, in his view, of the creation of personality – is extremely fitting for the purposes of this discussion as evidenced by the following passages:

Falstaff: Men of all sorts take a pride to gird at me. The brain of this foolish-compounded clay man, is not able to invent anything that tends to laughter more than I invent, or is invented on me... I do here walk before thee like a sow that hath overwhelmed all her litter but one. If the Prince put thee into my service for any other reason than to set me off, why then, I have no judgment. Thou whoreson mandrake, thou art fitter to be worn in my cap than to wait at my heels. I was never manned with an agate till now. [emphasis added] (I.ii.5-14)

Hamlet: What a piece of work is a man! How noble in reason! How infinite in faculties! In form and moving how express and admirable! In action how like an angel! In apprehension how like a god! The beauty of the world, the paragon of animals! And yet to me what is this quintessence of dust? (II.ii.293-98)

These lines, spoken by two of Shakespeare's most beloved characters, perfectly illustrate the playwright's propensity for weakening the supposedly clear-cut divisions among various existences (and with particular emphasis on our connection to dirt and stones). In the first example, Falstaff compares man to clay (relying on the biblical account of the first human as

built from this substance), then to an animal (sow), next to a plant (a mandrake, which incidentally was thought to resemble a human), and finally to a stone (agate). These are merely the first few lines that Falstaff speaks in the play, but this wonderfully inventive rant – peppered with amusing and vibrant images – demonstrates Shakespeare's skill at exhausting the wealth of information about nature at his disposal (leaving no stone unturned, so to speak).

In the second example, Hamlet covers the entire chain of being – from the highest orders composed of angels and divinities to the lowest geologic stratum. He declares humans to be the "paragon of animals" before deciding seconds later that our species is actually the "quintessence of dust." Amazingly, Shakespeare manages to compress the notion of hierarchical instability into a mere dozen or so words. But above all, these passages (like countless others) confirm that any one entity is not "a world by itself", as the wicked and dull Cloten confidently proclaims in *Cymbeline* (III.i.12). Persons, animals, plants, stones, objects, and places are all interdependent. When Donne wrote that "no man is an i[s]land", he – like Shakespeare in *Cymbeline* – was referring specifically to social connections, but the broader lesson that can be gleaned from such sayings is that interconnectedness defines existence (and thus we are more closely aligned with other organisms than we realize).

Thought it may seem clichéd at this point, Bloom's observation that Shakespeare "has become the first universal author, replacing the Bible in the secularized consciousness" bears repeating (Invention 3). As I alluded to at the beginning of this introductory chapter, Shakespeare's influence continues to be profound and monumental – in large part because the corpus of work remains accessible and provides insight into a period where many recognizable features of our own world are starting to take shape (from the earliest signs of industrialization to our modern vernacular). The establishment of Shakespeare gardens around the world provides

but one indication of the playwright's legacy, but it also shows the degree to which that legacy may be a product of Shakespeare's reverence for nature – or "Nature" with a capital N, as when Lear cries "hear, Nature! Hear, dear goddess, hear!" (Liv.252). In *Ecology and Environment in European Drama*, Downing Cless rightly notes that Shakespeare does not understand nature as "a privately owned resource for commodity production, or only a retreat for elites" (Cless 117). Rather, Shakespeare's limitless fascination with natural details provides "evidence of a strong ecological sensibility" (Arons 386).

a) People as Plants in The Winter's Tale

In the chapters that follow, I offer a kaleidoscopic view of several plays by examining a range of distinct but related subjects that would be of interest to ecocritical studies. Not by chance, the first chapter – "People as Plants in The Winter's Tale" – presents, in certain respects, the most anthropocentric perspective (i.e., we begin by merely dipping our toes into a posthuman approach). The characters draw upon plant biology not purely out of a deep respect for plants, but in order to appropriate vegetal traits and apply them to their own lives and society – thereby creating a different kind of Shakespeare garden where humans are the living beings to be cultivated. Importantly, we are not dealing with the literal exploitation of plants as resources, but even so, the play explores in great detail how humans utilize plants for their own benefit. Put simply, the characters operate under the assumption that their anxieties and suspicions can be allayed via their own version of plant-thinking (i.e., what is it like to exist and flourish as plants do?). More specifically, the first chapter examines the ways in which Shakespeare pays special attention to the kinship between humans and plants and argues that plant reproduction becomes the model from what is desirable in human reproduction. A significant portion of the discussion

focuses on Mamillius' enigmatic role as a means to set the stage for a consideration of how Shakespeare works to supplant the mammalian system in *The Winter's Tale*, as well as in several of the others plays under consideration. This chapter also introduces the idea that Shakespeare's concern with the vitality of all organic material serves as a precursor to hylozoism's revival in the mid seventeenth century (the theory – rooted in ancient Greek philosophy – that all matter is endowed with life).

b) Timon of Ashes

Timon of Athens is a radically different play from The Winter's Tale; indeed, I would posit that Timon is Shakespeare's most radical work given its intensely misanthropic outlook and the contempt for authority that pervades the text. "Timon of Ashes" posits that the events that unfold largely stem from a relatively straightforward premise: humans are wretched creatures, and as a consequence, should be toppled from their seemingly comfortable and secure place at the top of the existential hierarchy. While The Winter's Tale hints at the idea that there are useful models beyond our species, Timon vehemently champions the argument that if one accepts that humans are flawed by nature (a pessimistic outlook to be sure, but one that is difficult to dispute), then the scala naturae should be turned upside down (the opposite of Plato's vision of our roots in the sky). This reversal is achieved largely through Shakespeare's careful and deliberate portrayal of the title character's evolution from man to beast to plant to dirt. In that sense, the play reverses the sequence proposed by Thomas Browne, and one can think of the protagonist as progressing from Homo sapiens to Homo ferus (or Homo sylvestris) and finally to Homo humus. Not surprisingly, we find a world where sensation is downplayed in favor of

achieving an eternal form of existence, in this case by entering into the "life cycle" of geologic strata (a theme revisited in my analysis of *The Tempest*).

c) Undoing the Unnatural in Macbeth

The play that forms the dissertation's middle portion (sandwiched between two other plays on either side) ironically represents the apex in terms of how vegetation can be depicted in an exceedingly positive light. I say "ironically" because *Macbeth* is, of course, a tragic and brutal tale led by two depraved protagonists whose immorality is almost incomprehensible. It is never clear what motivates Macbeth and Lady Macbeth to take such drastic measures other than blind ambition – a disturbing prospect in and of itself. What is clear, however, is that these two figures are firmly aligned with blood, milk, and the mammalian reproductive process more broadly – while simultaneously degrading and/or threatening nature at every turn. Not surprisingly, then, *Macbeth* is the play where Shakespeare seems most intent on exploring the possibility of creating a fictive world where vegetation and the soil can take an active role in rebelling against man. For all the battles and disputes among different Scottish factions, the war that ultimately matters the most is between nature and man. Shakespeare's language throughout Macbeth makes it abundantly clear that nature must be victorious, but the memorable ending where Birnam wood joins Malcom's forces (the branches and soldiers are literally joined together, creating a vision of *Homo arboris*) represents an act of reconciliation. Although warfare has devastated this land, Shakespeare suggests that nature and man can work together to defeat a tyrant. In that sense, *Macbeth* is arguably the most optimistic play under consideration since, as I argue, it promotes a regenerative land ethic and shows how humans can live with and besides nature.

d) "Jove's stout oak": Trees and Power in The Tempest "Of his bones are coral made": The Ocean's Organic Remains in The Tempest

The final two plays examined both make a strong case against the exploitation of resources and against treating organisms as part of a static scala naturae. Not coincidentally, the final chapters on *The Tempest* and *As You Like It* focus considerably on Shakespeare's debt to Ovid's Metamorphoses (e.g., Pythagoras' philosophy) and to Montaigne in crafting a compassionate vision of man's relationship to other life forms. The first chapter on *The Tempest* analyzes how trees confer authority by structuring discourses of power, as well as conceptual and existential hierarchies. In addition to delving into how Christian theology and anxieties about deforestation inform the play's treatment of trees, this chapter explicitly questions the tendency to subdivide categories within the Great Chain of Being. I then turn to the ground beneath the waves as a site of regeneration and salvation. As with *Timon*, *The Tempest* reveals Shakespeare's interest in spontaneous generation as an alternative mode of reproduction, and, in doing so, makes a fairly humble request of the reader: regard dirt as the life-giving and lifesustaining substance that it is since this is where life starts and ends. Building upon the first chapter on *The Tempest*, "The Ocean's Organic Remains" explores the link between vegetation and specific marine organisms to argue that the initial tendencies of characters to operate under the assumption that plants and the soil from which they sprout are ranked according to a formulaic scheme conflicts with the cyclical view of existence that comes to forefront.

e) Love, Liberty, and the Pursuit of Game in As You Like It

In analyzing *As You Like It*, I turn to a play that is (in my estimation) as deeply skeptical of human aspiration as *Timon of Athens* is. This "green world" comedy also provides the

clearest articulation in the Shakespearean canon of the rights of nonhuman animals, primarily through the discussions of deer as the native denizens of the land onto which Duke Senior and his men have trespassed (a related concern expressed in the play is how closely animal societies resemble our own). Although, at first glance, As You Like It may appear to be nothing more than a cheerful romance, various types of skepticism and cynicism percolate through the discourse. For starters, the characters' actions ultimately suggest that mankind may be unable to coexist peacefully with other animals (though there never seems to be any question that this is a goal worth striving for). But there is also considerable cynicism about love as evidenced by the play's depictions of the silly games lovers play ("game" is a word with considerable resonance in the text) and statements outright ridiculing the emotion or those who have fallen victim to its effects. I do not mean to suggest that Shakespeare is suggesting true love does not exist, but it is worth acknowledging that anyone who sees or reads the play is likely left with numerous questions about how love actually works. Does Oliver really fall instantly in love with Celia? Did Orlando truly not know it was Rosalind in disguise the whole time? Can Phoebe actually change her tune about Silvius so quickly? Why does Silvius want to take Phoebe back after the shabby way she treated him? Why is Touchstone so worried that a mate will cheat on him? On that note, what evidence is there that he loves Audrey? Although we are dealing with fictional characters, the play's events raise important concerns about compatibility and the nature of affection (and not merely of a romantic kind). Reading As You Like It as a conventional romantic comedy that presents a standard take on love would likely leave one confused and disappointed. I would suggest that the play is best understood as offering a satirical take on human behavior. In essence, As You Like It continuously ponders whether humans are destined to falter and fail. The play poses the question on an individual level (e.g., whether spouses and

mates can live up to certain ideals and expectations), but also on a social/collective level (again by examining how we interact with others – in this case, nonhumans). Inevitably, it seems, the problems associated with exploiting and objectifying others as things to be hunted will ensure that our lofty aspirations (e.g., living in harmony and in an environmentally conscious way) come crashing down.

f) Organization and Structure

In terms of this project's overall organization, essentially I am starting and ending with human weakness, albeit in two different senses (perceived weaknesses in human biology vs. moral failings). Given the order of the chapters, I should note that I am not convinced that the (imperfect) chronology of Shakespeare's plays ultimately matters here since my point is not that Shakespeare, in his career as a writer, is building towards some kind of epiphany about nature or man's place in it. Rather, as I try to suggest, he is remarkably consistent in his treatment of the "lower" orders in the scala naturae. That said, I think the easiest way to perceive this pattern is to structure arguments in a parabolic manner that emphasizes the extent to which certain key themes reflect or mirror one another across the plays under consideration. Thus, Macbeth – with the rosiest (i.e., most optimistic) view of man's interactions with nature – represents the vertex along the elliptical trajectory. Moving outward from that point, the chapters immediately surrounding it are the ones most concerned explicitly with the soil, spontaneous generation, and the extreme materiality of the self. To use an analogy from a similarly shaped mathematical function (a bell curve), moving one more standard deviation outward, we find the two most "human-centered" plays, but I use the term somewhat sardonically since these are chapters most concerned with mankind's inadequacies.

Continuing with this notion of curvature, my aim in terms of the chapter organization is also to illustrate how Shakespeare gradually bends the scala naturae (i.e., ladder of being) out of shape. Destabilization begins by examining a play (*The Winter's Tale*) that rather pointedly asks, what if another form of existence (one that happens to be near the bottom of the ladder) might be preferable to our own in certain respects? With the desire to transform humans into plants well established, we can then shift to a play (*Timon*) that outright turns the ladder upside down. Moving on to *Macbeth*, despite the title character's threats to dislodge rocks and the literal quakes that occur, the play's depiction of the natural world is far from earth-shattering. Yet this is precisely the point – we should expect nothing less than for Shakespeare to associate goodness with vegetation and the land itself while, at the same time, highlighting the limitations of human/mammalian biology. Finally, in exploring *The Tempest*, we move towards not merely flipping the ladder, but doing away with a vertical linear model altogether by bending the chain into a circular shape. As You Like It provides a coda of sorts by exploring further iterations of what it means to be grounded (e.g., coming back down to earth, remaining humble) and reiterating just how invested Shakespeare is in literary and philosophical works that question man's superiority. I purposefully end with the two plays that – I would argue – most clearly show how Shakespeare's writings speak to contemporary environmental concerns (e.g., deforestation, resource management, exploitation of animals). Importantly though, these plays also demonstrate that these concerns are not uniquely modern after all, and that early modern writers like Shakespeare understood the necessity of creating a framework for how to interact with the world around us.

Chapter 1 People as Plants in *The Winter's Tale*

Introduction

In *Troilus and Cressida* (c. 1602), Ulysses states that "one touch of nature makes the whole world kin" (III.iii.169). This theme comes to fruition almost a decade later in *The Winter's Tale* (c. 1611), where Shakespeare explores not only the relationships between men and women or mankind and animals, but of all living things and the earth in general, with special attention to the kinship between humans and plants. The overarching contention of this chapter is that plant reproduction becomes the model for what is desirable in human reproduction.

Moreover, seemingly separate aspects of the play, such as the anxiety over hybrids/bastards and the animation of Hermoine's statue, enlist theories current in the Renaissance about inanimate matter being invested with life. Shakespeare gleans considerable inspiration from these ideas in order to abjure an anthropocentric view of the world and transition from "bosom" to "blossom." The overall effect is essentially the converse of Ruskin's pathetic fallacy, i.e., bestowing human emotions, thoughts, and sensations on nature. *The Winter's Tale* instead treats people as plants in all stages of life, whether as callow seeds, burgeoning flowers, or as decaying organic matter in the soil.

I would be remiss not to address early modern views regarding the natural world in order to situate *The Winter's Tale* in the proper context. Part of what makes the play's use of vegetation a fertile line of inquiry is that Shakespeare is writing on the cusp of the founding of modern botany, which stagnated until sixteenth century herbalists made a concerted effort to classify plants (Maeterlinck xiii). Although there were fewer than twenty titles on botany and horticulture in the sixteenth century, at least a hundred new texts were published in the seventeenth century (Thomas 225). However, the thirst for information in Tudor and Stuart

England did little to chip away at the longstanding view that the world had been created for mankind and that other species were subordinate to his needs (Thomas 17). Man's desire to tame nature is evident in the commercial gardening that formed an integral feature of many early European cities and spurred economic growth (Conan 183). At the same time, landscape gardening became a favorite pastime of the nobility, and, consequently, a passion for flower cultivation spread through the population, reaching a peak with the tulip speculative frenzy of the 1630s (Thomas 192). This affinity for plants, however, was belied by the tremendous deforestation that occurred between 1500 and 1700 (Thomas 193). The Elizabethan poet Michael Drayton wrote nostalgically of "when this whole country's face was forestry" and the state intervened directly in the sixteenth century with the first documented instances of government sanctioned tree planting (Thomas 193, 199). Unsurprisingly, a change in social consciousness accompanied the change in the wilderness from a threatening to a threatened locale (Marienstras 16). Plants acquired greater emotional significance and the renewed interest in the Aristotelian notion of the "vegetative soul" prompted philosophers and scientists to ponder the reproductive and growth cycles of entities in the natural world (Thomas 192; Smith 51; Amico 53).

Mamillius and the Mammalian

In the first act of *The Winter's Tale*, Leontes wonders whether his only son, Mamillius, is indeed his son since he suspects his wife, Hermione, of committing adultery with his friend Polixenes. The discourse is rife with hints that Mamillius is not sufficiently similar to his father in terms of physical appearance (with the implication that this spurred Leontes' mistrust). Leontes asks the child point-blank, "art thou my boy?" (I.ii.118), but comments such as "I am

like you, they say" (I.ii.208), "they say [Mamillius] is a copy" (I.ii.122), and "they say we are / almost as like as eggs" (I.ii.129-30) appear suspicious given that we never discover exactly who "they" are. Instead of presenting authoritative evidence, these statements sound like hearsay or gossip. In light of Leontes' doubt, his observation that Mamillius is a sprig needing foliage and "shoots...to be full" (I.ii.128-9) like his father seems more like an invective outlining key differences between the two rather than, as Stanley Cavell suggests, proof that Leontes projects himself onto his son and identifies with him (Cavell 194). When his wife catches him off-guard, Leontes pretends that he was merely "looking on the lines of [his] boy's face" (I.ii.155) and adds, "I did recoil twenty-three years, and saw myself...in my green velvet coat...how like...I then was to this kernel, this squash" (I.ii.153-60). This falsehood expresses a latent desire to transform offspring into plants because, in doing so, Leontes stands a greater chance of extracting a clone of himself. Moreover, the "lines" on Mamillius' face (or lack thereof, since "lines" suggest "wrinkles") can be contrasted with a tree's growth rings, which present a reliable indicator of the organism's age to a degree of certainty that is not possible from gazing at a human body. These rings – which can number in the hundreds – confer a unique status upon ancient (by human standards) trees, which in the early modern period (as is still true today) translated into a sense of respect and awe for these living monuments to history (Thomas 217).

Because Leontes is lying about his true preoccupation (i.e., adultery), it follows that the pretext's content is likewise suspect; in other words, Leontes believes he is nothing like this kernel or peapod. This interpretation is confirmed by his verb choice, e.g., when he asks Polixenes "are you so fond of your young prince as we do *seem* to be of ours?" [emphasis added] (I.ii.164). Similarly, the statement "he's apparent to my heart" (I.ii.177) omits the title "heir" (as in heir apparent) to underscore a modifier that implies seeming. Polixenes confidently replies

that he is very fond of his son, calling the young prince "my parasite" (I.ii.168). The only potentially desirable parasite that a human body can serve as host to is a fetus growing inside the womb, which is literally a parasite because it lives inside the mother's body and subsists on her food while producing no nutrients in return. Of course, one benefit of this symbiotic relationship is that the female is assured that the organism came from within her. Thus, Polixenes' unusual hyperbole signals that he is as positive of his son's parentage as if he had been a woman with a child in utero.

Mamillius' very name conjoins the child with his mother and, more broadly, mammalian reproduction by evoking the word "mammary" (from the Latin mamma for breast or udder). Indeed, Shakespeare seems intent on cementing the connection between Leontes' son and this part of the female anatomy: "I am glad you did not nurse him...yet you have too much blood in him" (II.i.56-7). Leontes' anxiety over contamination, phrased through the discourse of mixing bodily fluids, is palpable; he makes it clear that it would have been much worse if the child had suckled at the mother's breast – an otherwise normal and biological act given that mammals feed their young via milk secreted by the mammary glands. 14 The significance of bodily fluids to early modern theories regarding human health cannot be underestimated; as Mary Lindemann explains in *Medicine and Society in Early Modern Europe*, "the human body was held to be a seething mass of fluids rather than an assemblage of discrete organs or cells" (Lindemann 12). More specifically, in Elizabethan culture, the human body was popularly viewed as a semiporous container filled with various liquids, including the oft-mentioned humors (e.g., blood, phlegm, black bile, and yellow bile) (Kern 8; Lindemann 12). Plants offered a key solution to the threats posed by unwanted liquids as evidenced in the popular herbals, which would typically

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¹⁴By "normal", I do not mean to suggest that it was common for an aristocratic woman, let alone a queen, to nurse her young. Rather, I simply mean that breastfeeding constitutes a normal stage of childhood development (regardless of who provides the milk).

feature categories such as "purging" to detail their curative properties (Thomas 53). *The Winter's Tale*, like so many of Shakespeare's plays, reveals a keen interest in expelling excess and noxious fluids because doing so supposedly rid the body of ailments, e.g., "purge him of that humour" (II.iii.37), "purge melancholy and air himself" (IV.iv.768). What is surprising, however, is that the foul liquid to be removed is frequently blood, as when Polixenes tells his son that he refuses to "hold thee of our blood" (IV.iv.434). But whether figured as a form of sustenance or as a toxin (or, in the case of Mamillius, both), there is little doubt that bodily fluids are a powerful biological force that defines many aspects of human life. In terms of reproduction, the role of menstrual blood vexed early scientists and thinkers such as Descartes since it complicated the traditional view of women as a mere receptacle for semen by pointing to a female counterpart of the male's testicles (Smith 68).

Plant life stands outside this reproductive framework; trees and flowers do not nurse their young and do not transmit blood. Towards the end of the seventeenth century, there were some efforts to describe plants in terms of mammalian anatomy. Nehemiah Grew (1641-1712), author of *The Anatomy of Plants*, affirmed that "every plant hath bowels" and "hath those parts which are answerable to lungs" in addition to a "uterus" where the "foetus" (i.e., seed) gestates (McColley 126). Yet, despite changing scientific views, proponents of the type of theories Grew espoused recognized the limits to ascribing animal characteristics to plants. In his 1672 report to the Royal Society on plant circulation and animation, Martin Lister concedes that plants have "no uniting veins" and "no pulsation" (McColley 127). It is precisely because of the absence of blood and milk that plants provide (to put it crudely) a less messy mode of generation. Plants cannot contaminate their young in the way that Leontes fears a female contaminated Mamillius; nor can one parent overpower the other in terms of the appearance of the progeny. The link

between purity and vegetation was largely accepted in Shakespeare's day. While meat consumption was, of course, the norm, the animals eaten were invariably herbivores because carnivorous beasts and scavengers were deemed unclean (Thomas 54). This sentiment likely had biblical origins since man's prelapsarian existence did not entail eating flesh (Renaissance Beasts 72).

In Leontes' world, which is dominated by a single sin, his son's skin is literally sullied; he immediately asks Mamillius, "what hast smutched thy nose?" (I.ii.121), as though his mother's alleged sexual transgression had manifested itself on his face. Not only is Mamillius closely aligned with femininity and the differences between parent and child, Mamillius himself actively discerns external markings. When speaking to the attendant ladies, he observes, "your brows are blacker...too much hair there, but in a semicircle / or a half-moon, made with pen" (II.i.8-11). When another lady asks Mamillius who taught him about these finer points, he replies, "I learned it out of women's faces...what color are your eyebrows...I have seen a lady's nose that has been blue, but not her eyebrows" (II.i.12-4). Considering the meager number of lines the poor lad has in the play, it is worth analyzing why Shakespeare chooses to focus on such seemingly trivial details. In Mamillius' main scene, he converses with women who lack names and are known simply as "first lady" and "second lady." Their vague labels implore readers to regard them as a homogenous group, and, yet, Mamillius insists on noticing the minutiae that distinguish human beings from one another. His cutting and forward remarks are surprising not merely because of his young age, but because, in daily conversation, individuals scarcely detect the differences his shrewd eye picks up. In general, inquiring about the shade of a person's eyebrows would be absurd because such slight gradations in color are not considered a salient feature worth mentioning.

Mamillius is a problematic figure in *The Winter's Tale* because Shakespeare could easily have brought him back to life as he does with Hermione; thus, his death invariably appears needlessly cruel, and, depending on the performance or reading, the prince appears either callously forgotten, or his spirit hangs like a heavy cloud over the proceedings. Mamillius' fate is sealed not when he decides that a "sad tale's best for winter" (II.i.25), thereby aligning himself with the wrong season that loses in the winter versus spring debate. Rather, Mamillius must be eliminated because he embodies the human mode of sexual reproduction, which the play rejects and works to supplant. Under this interpretation, the references to eggs assume greater significance, e.g., "we are...as like as eggs" (I.ii.131) and "will you take eggs for money" (I.ii.161). Despite being fully ambulatory, Leontes' son is the parasitical fetus in the womb par excellence: "To see his nobleness! Conceiving the dishonor of his mother / he straight declined, drooped, took it deeply" (II.iii.12). Like an embryo with an umbilical cord, Mamillius' fate is tied to the mother, i.e., the host. As Hermione's health declines, so does his own, inducing a frightening twist on the prevailing notion of the woman as an insignificant vessel for the male's genetic material. Considering the nature of the anxiety that spurs the action, it is perhaps inevitable that a thoroughly feminized (and therefore unbalanced) version of human sexuality should result. In this respect, *The Winter's Tale* presents a departure from other Shakespearean depictions of the forest/wilderness as "the locale for the male's...confrontation with the female" (Shakespearean Wild 24). Here, the abundance of vegetation offers an alternative to reproduction that verges on the asexual.

Stock and Scion

Leontes' basic wish is to behold a "copy out of mine" (I.ii.122) because such a reflection would provide constant comfort. Thus, throughout the play, considerable weight is placed on superficial appearance (i.e., one's countenance) since this is the most obvious mark of a carbon copy. For want of genetic tests and because of the primacy of the male seed, Renaissance doctors emphasized the resemblance between fathers and children (Smith 49). Realizing the best way to allay the king's fears, Paulina presents his newborn daughter and states she is a "copy of the father: eye, nose, lip...forehead...the pretty dimples of his chin and cheek smiles; the very mold and frame of hand, nail, finger" (II.iii.98-101). The problem, however, is that an infant, born only a few hours before, does not resemble an adult. It is preposterous to think that all of the features mentioned will manifest themselves so rapidly (if at all). The choice of "mold" is intended to persuade on multiple fronts since the word denotes a uniform blanket of fungus that materializes an old food, an exact replica from a cast, and garden soil rich in organic matter.

That a child's appearance should be different (or, worse, wholly unique) from his parents is at the root of the play's problem. More broadly, "changed complexions" signal a threat and Polixenes worries that his external shape has been "changed too" (Lii.383). Perceiving the king's hostility, Polixenes is forced "to consider what is breeding / that changes thus [Leontes'] manner" (Lii.375-6). This is the first instance in the play where Shakespeare yokes breeding and change – two concepts that are closely related since breeding yields progeny that differ, whether slightly or drastically, from the generations that came before. But it is not inevitable that procreation should follow this course. Many organisms produce offspring that, for all intents and purposes, appear identical to the parents and, in so doing, exert a mastery (a kind of quality control) over their descendants that remains absent from mankind's imperfect mating process,

which is more akin to a lottery in terms of how the child will look. This pattern occurs most frequently in the kingdom Plantae. Although the modern study of biology has revealed that plant sexuality is highly complex and different species reproduce via radically different means, simply put, one expects a dandelion seed to develop into a mature dandelion, which, to the human eye, is essentially the same as its kin, i.e., the other dandelions among the grass. It is important to clarify that while Elizabethans frequently employed several names to identify a type of plant (e.g., ivy was also known as catsfoot, alehoof, Gill go by the ground, Gill creep by the ground, tun hoof, and haymaids on account of regional dialects), these names applied on an *inter*, rather than *intra*, species level (Thomas 83). This distinction was well-established by Thomas Aquinas in his explanation of the *scala naturae* of lower versus higher life forms: "The goodness of the species transcends...the individual...and the multiplication of species is a greater addition to...the universe" (Fromm 20).

By the standards the characters set forth, plants come closest to perfecting the biological process whereby new individuals are produced. But, for individuals eager to find copies, the possibility that "nature will betray its folly" (I.ii.151) can be unsettling:

Perdita: Sir, the year growing ancient,
Not yet on summer's death, nor on the birth
Of trembling winter, the fairest flowers o' the season
Are our carnations and streaked gillyvors,
Which some call nature's bastards: of that kind
Our rustic garden's barren; and I care not
To get slips of them.

Polixenes: Wherefore, gentle maiden, Do you neglect them?

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¹⁵ In making this observation about and from the human perspective, it is not my intention to excuse our habitual or ingrained blindness to salient differences in other existences (merely to point out that this propensity exists and colors our vision of the world). As Michael Marder astutely notes in "Vegetal anti-metaphysics: Learning from plants", "the bewildering diversity of vegetation is reduced…to the conceptual unity 'plant' in a signature gesture of metaphysical violence seeking to eliminate differences, for instance, between a raspberry bush and moss, a mayflower and a palm tree" (Vegetal 469).

Perdita: For I have heard it said There is an art which in their piedness shares With great creating nature.

Polixenes: Say there be;
Yet nature is made better by no mean
But nature makes that mean: so, over that art
Which you say adds to nature, is an art
That nature makes. You see, sweet maid, we marry
A gentler scion to the wildest stock,
And make conceive a bark of baser kind
By bud of nobler race: this is an art
Which does mend nature, change it rather, but
The art itself is nature.

Perdita: So it is.

Polixenes: Then make your garden rich in gillyvors,

And do not call them bastards. (IV.iv.79-98)

The "art" that Perdita refers to, as Polixenes understands it, is grafting, where the tissues of one plant are fused with the tissues of another, resulting in viable crossbreeds that are a copy of neither "parent", i.e., the stock and scion (Fig. 1). This is especially true of variegated flowers with streaks and specks of colors. "Gillyvors" probably refers to carnations, but can also serve as a general term for scented garden flowers (Hunt 18). If the former is Shakespeare's intention, then his inexact knowledge of horticulture must be forgiven since, as one critic points out, "grafting is not used on carnations" (Scholl 176). Whether or not these gillyvors are actually artificially created is irrelevant to Perdita's argument. The motley petals could result from natural cross-pollination or a virus attacking the plant (Egan 129). Perdita's point is simply that, by virtue of appearance alone, these "bastards" pose a threat; they obscure their pedigree, upset

¹⁶ The subheading of this section is purposefully meant to evoke both human and plant reproduction. Stock refers to a) the stem from which cuttings are taken, and b) a line of descent (e.g., race, family, or ethnic group), while scion means both a) a shoot or twig for planting, and b) a family's descendant or heir.

the typical pattern in plant reproduction, and – perhaps worst of all – look as though they stem from outside interference and thus do not constitute a naturally occurring phenomenon.



Figure 1. Seventeenth century watercolor illustrations

Polixenes is, of course, being hypocritical when he defends the illegitimate flowers since he outright rejects the idea of his noble son marrying a commoner. Nevertheless, his homily calls attention to a separate type of reproduction – one that relies on mere touch, almost like contagion (indeed, references to disease and infection are prevalent in the play). Similarly, when Polixenes' son, the aptly named Florizel, tells his beloved, "these your unusual weeds...do give a life; no shepherdess, but Flora" (IV.iv.1-2), he rejects the animal kingdom in favor of the botanic realm. The wild weeds, with their propensity to emerge and multiply in virtually any tract of dirt, are figured as the stronger emblem of life and vitality.

"The seeds within"

Naturally, the animal kingdom does have a place in *The Winter's Tale*, with the most notorious instance of animals impinging on the action being the "exit, pursued by a bear" stage

direction in Act III. The blunt phrasing no doubt bewilders and amuses many readers on account of its sheer inanity. But though it may appear to be a random inclusion, the reason why the individual being pursued by a bear, Antigonus, must die is no mystery. One hardly needs to look further than his name: anti-, meaning against or opposed to, and the latter half likely stems from gonos or -gony, meaning seed. Someone who is anti seeds stands little chance in a play that relishes in vegetation. Antigonus' role in the narrative is straightforward enough: his job is to carry Leontes' infant daughter to Bohemia. With this task completed, his expendability becomes apparent. Before he dies, Antigonus declares that Perdita "should here be laid either for life, or death, upon the earth of its right father. Blossom, speed thee well!" (III.iii.45). Because Antigonus is the mobile agent who transports the seed, he cannot be a plant himself. Roots, as Maurice Maeterlinck cheerlessly writes in *The Intelligence of Flowers*, condemn plants to "immobility from birth to death" (Maeterlinck 2). Of course, their "intelligence" lies in their ability to adapt and proliferate regardless. Perdita survives because Antigonus is akin to an animal in the woods with burs and stickers attached to its fur – a common method of pollination and seed dispersal. Oblivious to the botanical structure, Antigonus' misguided solution is that kites, ravens, wolves, or bears will nurse Perdita (II.iii.185). Thus, as staunchly part of the animal kingdom, he appropriately dies by the hands (or, rather, the paws) of a bear. It is no coincidence that Shakespeare follows this tragicomic moment with the introduction of the shepherd, who muses on his animals being hunted by other animals.¹⁷

The "right father" to whom Perdita is entrusted could refer to Polixenes, or Antigonus could literally be speaking about the earth, which seems more probable since blossoms require fertile soil to grow and flourish. Although humans are certainly vulnerable to external forces,

¹⁷ Some of the ethical repercussions of predation – whether in the wild between animals or from humans hunting other creatures – will be discussed in the chapters on *Timon of Athens* and *As You Like It*, respectively.

plants – by virtue of existing outdoors and sans shelter – are almost entirely at the mercy of the environment. Indeed, in addition to the focus on dirt, *The Winter's Tale* contains more occurrences of the words "climate" and "weather" than any other Shakespearean play including, amazingly enough, *The Tempest*, or green world plays like *As You Like It* and *A Midsummer Night's Dream*. When discussing this "problem play", Gabriel Egan notes Shakespeare's obvious concern with "how the weather affects biological nature" (Egan 125). However, he does not take this observation to its logical conclusion by narrowing the broad term to the specific component that is most susceptible to inclement temperatures, drought, and darkness: plants. In fact, one might wish to narrow the matter further to seeds since these ripened ovules in particular are "entrusted to the randomness of chance and the externality of its medium (the earth)", maintaining an "ineliminable possibility of being wasted, spread, or spent for nothing" (Vegetal 487).

For a delicate "blossom", the death penalty that Leontes issues (with phrasing that foreshadows the bastard flowers scene) could prove alarmingly effective:

Leontes: We enjoin thee,
As thou art liege-man to us, that thou carry
This female bastard hence and that thou bear it
To some remote and desert place quite out
Of our dominions, and that there thou leave it,
Without more mercy, to its own protection
And favour of the climate. As by strange fortune
It came to us; I do in justice charge thee,
On thy soul's peril and thy body's torture,
That thou commend it strangely to some place
Where chance may nurse or end it. [emphasis added]
(II.iii.173-83)

From Leontes' threat, it becomes clear that he regards the baby – this "it" unworthy even of a gender-specific pronoun – as something whose fate is utterly determined by "chance" (i.e., a passive organism). And while Leontes is unwilling at this juncture to regard his second-born

child along vegetative lines (at least consciously), his rhetoric does correspond to the traditional negative view of plants in Western philosophy as passive and deficient life forms (Vegetal 477). Michael Marder elaborates upon this supposed passivity in "Vegetal anti-metaphysics: Learning from plants", explaining that the "imperfection of the plant is attributed to its incapacity to determine itself; in other words, it is due to the plant's rootedness outside of itself, in the eternal element on which it depends" (Vegetal 476). Marder attempts to advocate for "the ethics of plants" by disavowing the human-oriented perspective and reframing vegetal life thusly: "If a vegetal being is to be at all, it must remain an integral part of the milieu wherein it grows. Its relation to the elements is not domineering: the receptivity of the flower and of the leaf is expressed in how they turn their widest surfaces to the sun, while the root imbibes everything it encounters in the dark recesses of the soil in which it is anchored, be it nutrients or poisonous substances" (Vegetal 477). For the purposes of this discussion, I would simply add that Leontes' confidence in the validity and success of his plan reveals the extent to which the character – whose madness and paranoia has reached the boiling point – operates under a warped conception of how external elements affect the world around us. Clearly, all life forms are at the mercy of nature (and humans are no exception, as evidenced by the fearful grandeur of the elements in King Lear). But plants deserve a considerable credit in their sheer capacity and will to survive. After all, in certain crucial respects, these organisms are much hardier than us – something that has become abundantly clear from the extreme weather events that climate change has engendered in recent years. The 2013-14 "polar vortex" brought record low temperatures to much of the United States, but while humans cannot survive long outside in such conditions (eventually succumbing to hypothermia), plants can and do withstand these climatic conditions.

Even acknowledging the special adaptability of plants, we know that this barren land without water does not bode well for a sapling. Indeed, Leontes' description ostensibly explains why the soil, which is typically figured as part of "mother earth", is instead characterized more like a father who lacks a womb. Yet Shakespeare refuses to provide a facile correspondence regarding the earth's fertility since Bohemia is, in fact, marked by verdure and pastoral landscapes. The implication is that feminine and masculine characterizations of the earth's soil are equally fruitful – an idea rendered explicitly in folklore regarding the mandrake. John Gerard's *Herball or Generall Historie of Plantes* (1596) offers a curious account of what happens to the flowering plant in dirt that is infused with gender/sex: "matter that hath fallen from a [male] dead body hath given it the shape of a man; and the matter of a woman the substance of a female plant" (Fig. 2) (Seager 196). Evidently, the presence of sex chromosomes (excuse the post-enlightenment phrasing) engenders an unambiguous male/female distinction, but, without this impetus, the physical forms – sprouted from untouched soil – yield a uniform crop. ¹⁸

While the default treatment of the physical environment is, as Lawrence Buell rightly notes, an artistic backdrop "ancillary to the main event", *The Winter's Tale's* narrative structure – with its blatant switch from winter (tragedy) to spring (comedy/romance) – leaves little doubt that Shakespeare intends to juxtapose the "dead and rotten" (III.iii.80) with "the freshest things" (IV.i.13) (Kerridge 32). The place where these diametrically opposed categories meet is in the dirt, where organic matter decomposes and, in the process, fertilizes the soil and gives birth to new organisms. As a symbol of both life and death, it is fitting that, for much of the play,

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¹⁸ Individuals living in the medieval and Renaissance periods could not have foreseen the ways in which such legends and superstitions would anticipate modern scientific discoveries: "The sexuality of plants is so complex that it is regulated by hormones – for instance, soy beans contain large quantities of phytoestrogens, similar to the human estrogen – or that the introduction of mammalian sex hormones into plants induces flowering and affects the ratio of female to male flowers" (Vegetal 486).

Shakespeare blurs the distinction between two uses of dirt: "beds" (i.e., patches of soil where plants grow) and "graves" (plots of dirt where bodies lie). This division of what is essentially the same substance reflects the discord and rifts among the dramatis personae. On one level, these terms pertaining to regeneration and putrefaction exist at opposite ends of the spectrum. Yet, the site of intersection is analogous to the womb-tomb duality that Freud discusses in "The Uncanny" (Leitch 947). The logic Paulina uses to save the infant touches upon the latent fear of reentering one's first home and the danger of incarceration: "This child was prisoner to the womb and is / by law and process of great nature thence / freed, and enfranchised; not a party to / the anger of the King" (II.ii.58-61). The urgency of the situation heightens with the possibility that the infant will be abandoned on some inhospitable land. While the "close earth wombs" (IV.iv.494) – i.e., functions like an incubator – the earth can also push living creatures into oblivion through interment: "Let Nature crush the sides of the earth together / and mar the seeds within" (IV.iv.481-2). This vision of utter annihilation sheds light on Perdita's unease about burying bodies. As she strews flowers over the guests, Florizel asks, "what, like a corse?" (IV.iv129). Perdita curiously replies, "not like a corse; or if, not to be buried" (IV.iv.131). Usually, corpses are buried several feet below the ground and, while individuals may wish for departed loved ones to rise from the dirt like a phoenix from the ashes, conferring bodies to the earth serves as proof that the human is dead and gone.

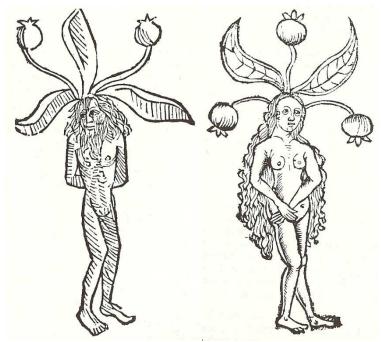


Figure 2. Illustrations of male and female mandrake roots, Hortus Sanitatis, Mainz 1491

Organisms that do literally rise from the earth are plants, which wither and "die" as the winter nears, only to be reborn in the spring. Upon realizing his horrible mistake and forced to contend with the guilt over his wife and son's deaths, Leontes proclaims, "one grave shall be for both...and tears shed there shall be my recreation" (III.ii.234-8). His pronouncement marks the beginning of the transition necessary to restore happiness to Sicilia. In death, Hermione, who previously figures herself as a tree, is no longer denied the "childbed privilege" of being with the "first fruits of [her] body" (III.ii.95,101). Naturally, she employs a metaphor in line with her innocence and one that explicitly favors plant reproduction. Leontes finally learns to accept his son and wife into the desirable plant kingdom by burying or planting the "kernel" (I.ii.159) with its tree and watering them daily with his tears in the hope that eventually something will grow. I would argue that, in fact, something does grow: the statue that comes to life after having been molded from the earth's clay represents the fulfillment of Leontes' wish. Regardless of how one interprets the play's conclusion, Shakespeare undeniably wants to explore the possibility that "art itself is nature" (IV.iii.97).

Omnis ars imitatio est naturae

The decades leading up to *The Winter's Tale* witnessed an intense interest in perfecting the art of copying nature (Meyers 25). Craftsmen such as the goldsmith Wenzel Jamnitzer (1508-1585) and the ceramicist Bernard Palissy (c.1510-c.1589) adorned their widely popular work with realistic plants and animals, which were often created through a method known as life-casting that involved pouring plaster over actual organisms (Fig. 3) (Meyers 25). Palissy utilized an especially wide palette of colors in those ceramics that featured sculptural effects because, as he explains in *Discours admirables*, in nature, the "ability of an organism to generate its own color bespeaks its dynamism" (Amico 116; Shell 21). Palissy used plant life in particular to illustrate the link between color and life, writing, "observe the seeds when they are thrown into the ground: they have but a single color: coming into growth and maturity they then take on various colors...even in a single flower" (Shell 21). Shakespeare captures this sense of a full blossoming during the play's climax when the carefully planted and developed seed/human analogy matures into a sculpture coming to life.



Figure 3. Dish with a coiled snake, attributed to Palissy, mid sixteenth century. Image courtesy of the Getty Museum's Open Content Program.

Shakespeare does not let the audience forget that paint is an essential part of the finished product. Paulina warns, "the statue is but newly fixed, the colour's not dry" (V.iii.47-9) and "the ruddiness upon her lip is wet; you'll mar it if you kiss it" (V.iii.81-2). The lines, spoken like a meticulous artist, are reminiscent of Palissy's own grievances concerning the difficulty in controlling the firing of the glazes, which fuse at different temperatures (Amico 86). As modern readers, we tend to visualize statues as objects consisting of a solid pale hue, not realizing their present condition is the result of centuries of erosion. Even in seventeenth century England, statues were still colored with a heavy coat of paint (Sokol 57). The attention to Hermione's pigmentation presents a clear departure from the Pygmalion myth where the sculptor carves a "wench of ivory" (X.300). Moreover, the fact that the statue owes its existence to Paulina's patronage once again complicates the Aristotelian view – implicit in the Pygmalion myth – of women as formless matter upon which men can imprint a shape (Shakespearean Wild 25).

Although Pygmalion is the most famous story of a statue coming to life, it would be myopic to assume that it therefore provides the primary inspiration for a play concerned with complex problems pertaining to kinship. The miraculous resolution of *The Winter's Tale* bears important similarities to another tale in Ovid's *Metamorphoses*: the creation myth of Deucalion, who casts Gaia's "bones" (i.e., stones) back into the earth and repopulates the world as each rock is transformed into a human being. When Polixenes becomes enraged by his son's clandestine marriage proposal to a shepherd's daughter, he threatens to "bar thee from succession / not hold thee of our blood, no not our kin / far than Deucalion off" (IV.iv.433-5). The implications of this fleeting reference are far-reaching because to trace relations back to Deucalion is to locate the point before life became human, when, as Ovid writes, the world was "silent like a wildernesse" (I.409) (Egan 131).

By invoking this tale about earth "turned to flesh" (I.486), Shakespeare subtly introduces an alternative to the Christian account of creation. However, this is not as radical of a position as might initially appear when placed in the context of longstanding spontaneous generation debates that came to a head in the seventeenth century (Shell 16). As William Harvey (1578-1651) explains in *De generatione animalium*, animate creatures "are generated from putrefying earth or plants" (Harris 2). Harvey was certainly not the only one who entertained the possibility that plants were the key to unlocking this mystery. According to Raphael Holinshed's *Chronicles* (1587), "if you cut a turffe, and laie it with the grasse downewards, vpon the earth, in such sort as the water may touch it as it passeth by, you shall have a brood of eels" (Egan 111).

The lengthy flower list that Perdita improvises while preparing for the festival is more than an attempt to convey their symbolic uses. Lines like "desire to breed by me. Here's flowers for you...the marigold that goes to bed wi' th' sun and with him rises" (IV.iv.103-5), coupled with the discussion on horticulture (e.g., "conceive a bark"), attend to the reproductive processes of plants and, more broadly, their life cycles. *The Winter's Tale's* concern with organic matter portends the theological concept that came to be called Hylozoism in the late 1600s – the theory that matter is endowed with life. Hylozoism (like spontaneous generation) is rooted in ancient Greek philosophy and, appropriately enough, in trees since the Greek word for both matter and wood or forest is "hyle" or "hyla" (McColley 111). In early Christian writing, "hyle" refers to non-divine matter and carries a negative connotation perhaps, as Diane McColley explains, because of paganism's association with wooden idols and groves (McColley 110). Of course, the influence of pagan rituals was never fully eradicated, as evidenced by the "Green Man" sculptures common in churches throughout Europe, which likely represent spring and the cycle of growth (Fig. 4). Paracelsus (1493-1541), who was integral to hylozoism's revival, writes that

"it is opposed to all true philosophy to say that flowers lack their own eternity. They may perish and die here, but they will reappear in the restitution of all things" (McColley 114). In a sense, this mystical view is simply a more elaborate version of the story of Proserpina that Perdita alludes to (IV.iv.116); the basic idea regarding perpetual and seasonal rebirth remains the same.



Figure 4. Medieval Green Man from a cathedral in Nottinghamshire.

Conclusion

There is something utopian about conceiving the natural world as a regenerative wilderness where blossoms always return (Fromm 292). But one does not need to couch a utopian vision of earthly existence in purely romantic terms that emphasize "the conventional ascription of innocence to vegetal life", the aesthetic beauty of plants, or their ability to bloom each spring (Vegetal 482). To return back to the soil again, as Michael Marder describes in *Plant-Thinking: A Philosophy of Vegetal Life*, even an organism's death portends a kind of resurrection and reincarnation so long as roots beneath the surface merely continue to function:

In a peculiar mediation between the living and the dead, caressing the dead with its roots and obtaining nourishment from them, the plant makes them live again. Vegetal afterlife, facilitated by the passage, the processing of the dead (including the decomposing parts of the plants themselves), through the roots to the stem and on to the flower, is a non-mystified and material "resurrection", an opportunity for mortal remains to break free from the darkness of the earth. Thanks to the plant, fixed in place by its roots, dead plants, animals, and humans are unmoored from their "resting places"; they travel or migrate...Unlike the crypt, supposed to keep (though it never lives up to its mission) its inhabitant in place, surrounded by inorganic matter, the grave covered by a flowerbed is always already opened, exceeding the domain of the earth and blurring the boundaries between life and death. (Plant-Thinking 67)

Ideally, according to Perdita, the flowerbed would not be tainted by inserting a "dibble in earth" (IV.iv.100). This tool used for making holes to plant seeds signifies the phallus and thus revisits the objections to human reproduction established in the first act. From the play's beginning, it is clear that mixing bodily fluids is dangerous. Leontes claims that "to mingle friendship far is mingling bloods" when expressing anxiety over who might become his kin (I.ii.109). Hence, procreation in the typical sense must be downplayed in favor of breeding that, depending on one's vantage point, seems to defy the laws of nature (at least where humans are concerned). As *The Winter's Tale* nears its end, characters comment on the remarkable similarities between parent and child:

Leontes: Your mother was most true to wedlock, prince; For she did print your royal father off Conceiving you. Were I but twenty-one Your father's image is so hit in you, His very air, that I should call you brother As I did him, and speak of something wildly By us preformed before. (V.i.124-30)

A joyous finale derives from extreme homogeneity, so that, at last, the *dramatis personae* appear like flowers in a garden, with very little differences among them, as evidenced by the confusing repetition in the clown's speech:

Clown: So you have; but I was a gentleman born before my father; for the king's son took me by the hand, and called me brother; and then the two kings called my father brother; and then the prince my brother and the princess my sister called my father father. (V.ii.148-52)

Now that the shepherd and his son appear in "the blossoms of their fortune" (V.ii.134), they are described as "gentlemen born." At first glance, such a characterization seems patently false since the biological parents are not aristocrats. The fallacy, however, is interpreting the statement within the confines of consanguineous relationships. A king and a commoner may not be brothers by blood, but their kinship can be established within the wider context of the relatedness of all living things (Egan 131). As such, a more accurate label would be "gentlemen reborn" because Perdita's adoptive father and brother are born anew outside the system of human reproduction. Only then can they safely join a royal family tree based on "nobleness" defined by "nature...above breeding" (V.ii.40).

The previous repetition of Perdita being "none of your flesh and blood" (IV.iv.693, 696) works to establish a different type of descent by stripping the body of traits that are essential for membership in *Homo sapiens*. In the passage above, Shakespeare produces a dizzying effect not unlike that of Giuseppe Arcimboldo's (1527-1593) famous painting of (by strange coincidence) the King of Bohemia, Rudolf II, made entirely of fruits, vegetables, flowers, and roots – a striking image that seems to suggest even those who are high born belong to the natural world that binds all things (Fig. 5).



Figure 5. Giuseppe Arcimboldo, Vertumnus, c. 1590

The play's conclusion sheds new light on Perdita's initial objection to streaked carnations. That Shakespeare singles out a flower with a name that derives from "coronation" and the Latin word *corona* for "crown" is no coincidence (Bray 88). It is crucial that humans refrain from breeding these ornamentals not, as some have assumed, because the multihued flowers resemble painted harlots (Dolan 228; Dusinberre 69; Kermode 245). Indeed, in *The Winter's Tale* paint is a good thing. Rather, as luxuries or frivolous curiosities to be featured in a garden, they symbolize hierarchy and are entrenched in a class system – hence the reason why Polixenes (but no one else) vehemently comes to the defense of this "bud of nobler race" (IV.iv.95) (Gessert 292).

Although the idea of grafting two plants together is treated with skepticism, and mixing bodily fluids is considered outright detrimental, organisms are able to merge freely in the soil since what occurs beneath the earth's surface is largely beyond man's control. According to the shepherd, he "thought to fill his grave in quiet...to die upon the bed my father died / to lie close

by his honest bones" (IV.iv.458-60). One could argue that the image of the father and son's bones intermingling is incestuous, particularly since their decaying corpses fertilize the soil and pave the way for new living things. However, the broader message seems to be that, through putrefaction, all former living things become indistinguishable, so that their bones are equally likely to yield a human being, a tree, or even both (Fig. 6).



Figure 6. The Tree of Political Hierarchy, Diego de Valades, Rhetorica Christiana, 1579

What ultimately matters is that the grave "must...give way" (V.i.97) for Perdita to "bless the bed of majesty again" (V.i.33) now that she has been "lifted...from the earth" (V.ii.81) – a vertical movement reminiscent of a flower growing taller and towards the sky. Similarly, it is no coincidence that, in the final scene, as Hermione's statue begins to stir, Paulina tells Leontes, "I'll fill your grave up" (V.iii.101). Harmony is achieved only once the division of soil, i.e., the life-giving and nutrient rich incubator, ceases to exist. Paulina's remark indicates that these cavities in the earth have been effaced by literally adding dirt and creating a bed for plants to grow, thereby transforming their country into "the most peerless piece of earth...that e'er the sun shone bright on" (V.i.93-4).

Chapter 2 Timon of Ashes

Introduction

In his *Religio Medici*, Sir Thomas Browne writes, "to call our selves a Microcosme, or little world, I thought it onely a pleasant trope of Rhetorick, till my neare judgment...told me there was a reall truth therein. For first we are a rude mass...next we live the life of plants, the life of animals, the life of men, and at last the life of spirits" (Browne 66-7). This blurring of the boundaries between life forms, coupled with a disavowal of the notion that humans exist apart from other life forms, is what I wish to explore in Shakespeare's oft-overlooked tragedy, *Timon of Athens*. More specifically, this chapter argues that, in terms of how Timon describes himself (or is described by others), we see a clear progression from man to beast to plant to dirt. One can also think of the protagonist as evolving from *Homo sapiens* to *Homo ferus* (or *Homo sylvestris*) and finally to *Homo humus*. I use the genus designation in jest but also somewhat ironically since the play abjures an anthropocentric view of the world and decenters the notion of the human. But if the play essentially reverses the type of sequence proposed by Browne, the reason behind this reversal is straightforward enough: Timon explicitly aims to position himself

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¹⁹ *Timon* has received comparatively little attention in ecocritical scholarship. There are a few (mostly passing) references to the play in some of the book-length studies that have thus far utilized an ecocritical methodology to examine the Shakespearean canon and/or early modern literature (e.g., *Green Shakespeare*, *Ecocriticism and Shakespeare*, *Ecocriticism and Early Modern English Literature*, and *The Indistinct Human*).

²⁰ In making this claim, I use Bruce Boehrer's thoughtful definition of absolute anthropocentrism – namely the belief that "human beings are radically...different from all other life[forms]; that this difference renders humankind superior to the rest of earthly creation; and that this superiority, in turn, designates the natural world as an exploitable resource" (Among the Animals 6). Boehrer also defines what he terms "relative anthropocentrism", but since this deals with discrimination against different groups within the human race, the theory is not pertinent to this investigation.

as "Misanthropos" (IV.iii.52).²¹ Yet hating mankind proves insufficient for Timon and his anger eventually leads to a rejection of the mammalian system as a whole.

Given the play's intensely misanthropic outlook and the contempt for authority that pervades the text, *Timon* may well be Shakespeare's most radical work. Indeed, this chapter posits that the events that unfold largely stem from a relatively simple premise: humans are wretched creatures, and as a consequence, should be toppled from their seemingly comfortable and secure place at the top of the existential hierarchy. In order to illustrate the mechanisms behind this premise, I examine the ways in which *Timon* inverts hierarchical orderings of creation – namely the scala naturae or the Great Chain of Being. Put differently, Timon vehemently champions the argument that if one accepts that humans are flawed by nature (a pessimistic outlook to be sure, but one that is difficult to dispute), then the scala naturae should be turned upside down. Moreover, this very inversion sheds light on the significance behind the play's curious emphasis on "roots" throughout the discourse. As I discuss in the introductory chapter, Plato's claim that humans "are a plant not of an earthly but of a heavenly growth" with roots suspended above expresses the desirability of distancing ourselves from the ground (while ignoring dirt's nourishing qualities) (Jowett 777). Timon renounces this view not merely through Shakespeare's careful and deliberate portrayal of the title character's evolution, but by creating a world where sensation is downplayed in favor of achieving an eternal form of existence, in this case by entering into the "life cycle" of geologic strata.

Before delving into the text, I would be remiss not to mention Frederick Waage's "Shakespeare Unearth'd" considering how few scholarly works have explicitly scrutinized *Timon's* relationship to the earth and dirt. Waage rightly notes that Timon is "the Shakespearean"

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²¹ Browne's sentence foreshadows Ernst Haeckel's now discredited biogenetic law/recapitulation theory (often referred to as "ontogeny recapitulates phylogeny"), which posited that, as an embryo develops, it passes through "stages represented by adult organisms of more primitive species" (Kampis 14).

protagonist who gets closest to the earth" (Waage 158). However, his broader claim regarding the character's development does not go far enough: "His flight from Athens could be experienced in one sense as an anti-pastoral return...to the land...[and] inside the earth – in a cave lacking the amenities of Belarius' cave in *Cymbeline* or Friar Lawrence's cell in *Romeo and Juliet*. Living there, Timon has put himself on the lowest rung of the economic ladder" (Waage 158). These are fair points, but Waage unknowingly arrives at the heart of the matter in the phrase "inside the earth." After all, the cave in question is not the stopping point; rather, as I hope to illustrate, the play is driving towards Timon's return to the earth in the form of the dust or ashes that compose the earth's strata. Moreover, Timon does not "put himself" merely on the "lowest rung of the economic ladder"; his actions are more ambitious in scope (i.e., not limited to the Athenian socio-political realm) as he shifts his existence onto the lowest rung of the entire ladder of being.

The Nature of Art (and what it says about man)

Timon opens with a conversation between a poet and a painter, both of whom are eager to secure Timon's patronage by creating works of art that highlight his positive attributes. But their obvious tendency towards flattery is perhaps not as problematic as their view of the relationship between art and nature. Of the painter's portrait, the poet remarks that "it tutors nature" and is "livelier than life" (I.i.37-8). This estimation offers a stark departure from the platonic theory of forms. In Book X of the *The Republic*, Socrates famously explains how artwork is an imitation of a copy and is thus several times removed from the true form: "The reason [the art of imitation] can make everything is that it grasps just a little of each thing – and only an image at that." (Book X, Bychkov 56).

Approximately two millennia later, the art critic John Ruskin offered a more tempered and nuanced view of the problem that artists face when depicting individual organisms in *The Stones of Venice*. He focuses on the myriad obstacles that present themselves (and across media) when attempting to represent an olive tree in a manner that would make it instantly recognizable to a viewer:

Supposing a modern artist to address himself to the rendering of this [olive] tree...he will probably draw accurately the twisting of the branches, but yet this will hardly distinguish the tree from an oak; he will also render the colour and intricacy of the foliage, but this will only confuse the idea of an oak with that of a willow. The fruit, and the peculiar grace of the leaves at the extremities, and the fibrous structure of the stems, will all be too minute to be rendered consistently...but, above all, the rounded and monotonous form of the head of the tree will be at variance with his idea of "composition." He will assuredly disguise or break it, and the main points of the olive-tree will all at last remain untold.

Now observe, the old Byzantine mosaicist begins his work at enormous disadvantage. It is to be some one hundred and fifty feet above the eye, in a dark cupola; executed not with free touches of the pencil, but with square pieces of glass...were he to draw the leaves of their natural size, they would be so small that their forms would be invisible in the darkness; and were he to draw them so large that their shape might be seen, they would look like laurel instead of olive...The whole power and honour of the olive is in its fruit; and, unless that be represented, nothing is represented. But if the berries were coloured black of green, they would be totally invisible; if of any other colour, utterly unnatural, and violence would be done to the whole composition. (Ruskin 177-78)

Of course, the flipside of this argument, and something that Ruskin deals with as well, is the possibility that an artist can create a symbolic likeness far more replete in "olive tree-ness" than any photograph would be. The reason for this was perhaps best articulated by Nietzsche (and then again by Wittgenstein, using the same leaf example), who argues against the platonic viewpoint in "On Truth and Lying in a Non-Moral Sense" (Kober 9). According to Nietzsche, what we often consider to be shared and original "primal forms" actually come about through

erasure, i.e., by the "perception of similarities" and "masking the dissimilarities" (Sluga 81; Hass 110):

Each word immediately becomes a concept, not by virtue of the fact that it is intended to serve as a memory of the unique, utterly individualized, primary experience to which it owes its existence, but because at the same time it must fit countless other, more or less similar cases...Every concept comes into being by making equivalent that which is non-equivalent. Just as it is certain that no leaf is ever exactly the same as any other leaf, it is equally certain that the concept "leaf" is formed by dropping these individual differences arbitrarily, by forgetting those features which differentiate one thing from another. (Leitch 877)

Both Nietzsche and Wittgenstein complicate a situation that Plato renders in black and white by acknowledging a) (as Nietzsche puts it) "that the concept...gives rise to the notion that something other than leaves exists in nature, something which would be 'leaf', a primal form, from which all leaves were...drawn", or b) (as Wittgenstein writes) "there is a tendency rooted in our usual forms of expression, to think that the man who has learnt to understand...the term "leaf", has thereby come to possess a kind of general picture of a leaf...like a visual image, but one which only contains what is common to all leaves" (Leitch 877; Wittgenstein 17).

To be sure, paintings can certainly be realistic and splendid works of art, but it seems doubtful that a two-dimensional depiction could appear truer or "livelier to life" than the actual three-dimensional object or person. And yet – as Nietzsche and Wittgenstein suggest – that which objectively exists in reality (e.g., a brown decaying leaf hanging on a branch) might not appear as genuine and expressive to the human mind as the abstract symbols and imagined mental pictures we regularly create (and which arguably help to construct and impart meaning).

Timon's opening captures the tension between nature and artifice quite vividly by peppering the discussion among the painter, poet, and jeweler with words pertaining to both subjects. (I use "artifice" in the now largely obsolete sense of craftsmanship and art, but the

contemporary meanings of deception and cunning must not be overlooked (see, for example, Shakespeare's word choice in the painter's observation that his work offers a "pretty mocking of the life" (Li.35)) Timon, for instance, is a tree from which "gum...oozes" (the sap being their artwork) and poetry is likened to a fire that grows from a flint's spark (Li.22). Using language that seems to evoke Plato, they compliment each other on their ability to create "good form[s]" (Li.18) (which again, present a "pretty mocking"). In a sense, such comparisons make the "tutors nature"/"livelier than life" remarks appear all the more ironic considering that early modern depictions of plants and geological formations were usually little more than "stylized representations" and formal "decorative motifs" rather than naturalistic representations of the thing itself (Shirley 162-4; Capra 177).²²

But once Timon arrives on the scene, he provides a curious assessment of the painting that aptly solves the paradox of how a flat image can truly capture the essence of man: "The painting is almost the natural man / for since dishonor traffics with man's nature, / he is but outside; these penciled figures are / even such as they give out" (I.i.161-4). Timon's remark that humans are inherently superficial seems wholly out-of-place since he ostensibly believes in the inherent goodness of man and assumes everyone is as generous as he is (I.ii.95). But here we have an early indication that, on some level, Timon realizes that man is hollow at the core with no real substance to be grasped. At a minimum, Timon's observation offers one possible solution to the dilemma that Plato, Ruskin, and countless other artists, critics, and philosophers have grappled with for millennia – sometimes the artifice is what is most real.

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²² A notable exception in Renaissance art – as discussed in the introduction – is Leonardo da Vinci's work. For a discussion on the high degree of scientific accuracy in his rendering of natural details see Ann Pizzorusso's "Leonardo's Geology: The Authenticity of the 'Virgin of the Rocks.'"

Nature's Bounty

On the most fundamental level, *Timon* is a play centered on the problem of being too bountiful (i.e., bounty as in a rich harvest) and, more specifically, what happens when the bounty runs dry. That "bounty" and variants of the word (e.g., "bounteous", "bountiful", "bountifully", and "bounties") are repeated *ad nauseam* throughout the play should come as no surprise since the title character is a bottomless well of resources. The precise nature of these resources is worth noting since they fall into a handful of categories: minerals/gemstones, rocks, food, drink, metals (e.g., "jewels", "stones", "meat", "wine", "gold", money/coins, respectively). One might wish to add water to the list since, as Apemantus points out, Timon "weep[s] to make [men] drink" (I.ii.101). Evidently, there is no part of Timon that the flatterers around him will not eagerly devour.

Simply put, Timon is the medium that yields resources to humans, whether it be food or minerals. In agriculture, when farmers continuously till the same plot of ground to reap the same crop, the soil will eventually yield poorer quality produce and/or be depleted of nutrients. This concept was certainly not foreign in the early modern period; John Smith complained of Virginia's "overworn fields" due to the tobacco demand (Armstrong 115). The same principle of sustainability holds true for other resources. Prospectors who tirelessly extract valuable minerals and gemstones from the same mine will reach a point when the well runs dry, so to speak. In Timon's case, it is only fitting that he would be capable of yielding both rocks and diamonds. As one Athenian Lord puts it, "one day he gives us diamonds, next day stones" (III.vii.108).

The Athenian Lord's comment captures the exploitative mentality that pervades the play.

But the intense interest in Timon's resources hardly seems far removed from the common or default attitude towards all that the natural world supposedly has to offer. Though the

exploitation of natural resources (as a condition of human existence) is not unique to any one society or age, it is worth noting that Elizabethan and Jacobean era writings on the flora, fauna, and geology of a given locale (e.g., the wildly popular herbals or tracts about the New World) emphasized the value of plants, minerals, and animals as commodities and/or as objects meant to abet mankind (Armstrong 85; Shirley 134). Although I do not mean to suggest that Timon's attitude is radically different than that of the other characters (he too enjoys hunting and gemstones), even at an early stage, he believes that society operates according to a sustainable model – a closed-circuit economy where goods and resources are continuously transferred among all parties (and where resources never run out).

Man's Best Friend(s): A Cynical View of Social Bonds

The infamous dinner party where Timon serves boiling water with rocks marks Timon's descent into a rage-filled madness that is brought on by the loss of his fortune and the fact that his friends abandon him in his hour of need. Once Timon realizes that his creditors are not going to stop demanding that he repay the money that he borrowed, he implores them to "cut my heart in sums...tell out my blood...five thousand drops pays that" (III.iv.90-4).²³ This seemingly hyperbolic image of blood being counted drop by drop and a body torn apart is perhaps not so far removed (and indeed foreshadows) the fragmentation and degeneration that will occur in terms of how Timon regards his own body. Of course, Timon's statement also underscores the unfortunate reality that Apemantus discerns from the very beginning: The flatterers are nothing

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²³ Those familiar with *The Merchant of Venice* will likely perceive eerie parallels between Timon's reproach and so much of the comedy's rhetoric concerning precision in portioning out some quantity of a person's flesh and blood – e.g., "The Jew shall have my flesh, blood, bones and all, / ere thou shalt lose for me one drop of blood." (IV.i.11-12), "Take thou thy pound of flesh; / but, in the cutting it, if thou dost shed / one drop of Christian blood, thy lands and goods / are, by the laws of Venice, confiscate" (IV.i.303-6).

more than scavengers and parasites ("what a number of men eats Timon" (I.ii.37)). Indeed, in Apemantus' eyes, the relationship between Timon and the men who flatter him is perhaps best characterized as an outright predator/prey dynamic: "It grieves me to see so many dip their meat in one man's blood" (I.ii.39).

Though Apemantus is hardly a scavenger or predator, he is constantly described as one particular carnivore: a dog. ²⁴ References to dogs and wolves abound in the discourse, usually serving as insults (e.g., "take thy beagles with thee" (IV.iii.175), "affable wolves" (III.vii.86)), but canines are also discussed in relation to actual hunting trips (I.ii.184). As Todd Borlik observes, it is no coincidence that Timon's "tragic tailspin" begins after he returns from a hunting expedition given that he has shifted from predator to prey (Borlik 179). There are any number of possible explanations regarding why canines should figure so prominently in the discourse, but all suggest an equivalence, or at least some form of close association or kinship, between humans and dogs. This is hardly surprising given the latter's status as "man's best friend." In his discussion on "privileged species", Keith Thomas notes that even in the early modern period dogs were "the creature which came nearest to man" (Fig. 7) (Thomas 106).



Figure 7. Half man, half dog from the *Hortus Sanitatis*.

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²⁴ Please note that dogs are not obligate carnivores as they do not depend on animal-specific protein and nutrients for their survival. I use the term "carnivore" only in the sense that canines (who belong to the order *Carnivora*) can and do eat flesh.

The dog imagery is of course also meant to evoke Cynic philosophy (Apemantus himself is a Cynic) – a school whose name derives from the Greek words for dog and dog-like (Dogs' Tales 4). From a broader perspective, dogs, like humans, are intensely social creatures who prefer to live in groups and (like humans again) possess a keen awareness of hierarchical structures. But hierarchy need not be limited to the level of the canine's pack; Thomas explains that dogs also "differed in status [as] their owners did" (Thomas 106).²⁵

Given that canines represent hierarchy, the dog imagery (and the specific use of "dog" as an insult) fits extremely well in a play where the protagonist eventually rails against the social aspects of mankind. When Timon says, "henceforth hated be / of Timon man and all humanity!" (III.vii.96-7), the distinction between "man" and "humanity" might seem unnecessary. However, one way to interpret Timon's proclamation would be that the former stands for what we now would term the biological classification (*Homo sapiens*), while "humanity" encompasses a broader notion involving civilization and society. After all, unlike "man", humanity can signify all of the graces that supposedly compose our better nature. But it is precisely those positive qualities and customs (which allow society to function) that Timon wholeheartedly rejects. Francois Laroque notes that Timon "renounces festivity" when faced with the "harsh truth", but his antipathy towards society extends far beyond social gatherings (Laroque 261): "Piety and fear, / religion to the gods, peace, justice, truth, / domestic awe, night rest, and neighborhood, / instruction, manners, mysteries, and trades, / degrees, observances, customs, and laws / decline to your confounding contraries, / and let confusion live!" (IV.i.15-21).

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²⁵ Launce's ill-behaved (though winsome) dog, Crab, in *The Two Gentleman of Verona* is an example of this point.

Sexual Reproduction vs. Spontaneous Generation

Aside from social customs, the other major aspect of human life that Timon comes to despise is sexuality. *Timon*, of course, does not deal with the realm of romance and love, but rather focuses on the seedy underbelly of human sexuality. To say that the protagonist seems fixated on sex would be quite the understatement. One of the most interesting examples is the ostensibly unnecessary exchange between Timon and two prostitutes. The scene serves no clear purpose other than to allow Timon to attack individuals who, on account of their profession, function as symbols of sex and lust. Accordingly, Timon is, at times, shockingly frank with his insults. He refers disparagingly to ejaculation (IV.iii.272), and tells the prostitutes to "hold up, you sluts, your aprons mountant" (IV.iii.134) (with an obvious pun on sexual mounting). When Timon wishes that the prostitutes' "activity may defeat and quell / the source of all erection" (IV.iii.162), he is referring not just to sexual erection, but to advancement in the social hierarchy.

For a self-proclaimed misanthrope, ridiculing the very act (i.e., sexual intercourse) that is central to human biology and fuels the propagation of the species makes perfect sense. Once Timon adopts his new persona – announcing, "I am Misanthropos, and hate mankind" (IV.iii.52) – there is no ambiguity about his position. The only uncertainty is whether he can find a viable alternative to mankind. Initially, Timon looks to the animal kingdom for comfort: "For thy part, I do wish thou wert a dog / that I might love thee something" (IV.iii.53-4). He firmly believes that in the woods, "he shall find / the unkindest beast more kinder than mankind", thus allowing "his hate [to] grow" (IV.i.35-40). And yet the language of human sexuality proves difficult to relinquish entirely. After Timon escapes to the forest, he speaks of the earth as our "common mother" whose "womb unmeasurable and infinite breast teems...all" (IV.iii.178). Timon further asks: "from forth thy plenteous bosom, one poor root. / Ensear thy fertile and conceptious

womb; let it no more bring out ingrateful man. / Go great with tigers, dragons, wolves, and bears; teem with new monsters" (IV.iii.186-90). On the one hand, Timon adheres to the "early modern topos of earth as sentient and nurturing mother" (McColley 51). His focus on wombs and breasts arguably indicates that, at least at this early stage of the transition from aristocratic society to a world of isolation in the woods, Timon cannot avoid thinking in terms of mammalian reproduction. And yet – as the image of a dried up womb suggests – his statements reveal that a new mindset is, in fact, taking "root" (as evidenced in part by his simple request that the earth grant him "one poor root").

Jeanne Addison Roberts singles out the "conceptious womb" line to argue that Timon is "Shakespeare's most relentlessly male play", but she overlooks what comes immediately after "ingrateful man" (Shakespearean Wild 50). Timon does not envision a barren earth or a world populated merely by men; rather, he initially favors the generation of tigers, wolves, bears, and other creatures over human beings (but, as the repetition of [great/grate] suggests, there exists a stronger connection between these "great...monsters" and "ingrateful man" than he initially realizes). In short, he hopes that animals will rise from the earth and supplant man's place in the hierarchy. This desire for creatures to emerge or sprout from the soil is a reference to spontaneous generation – the idea that life can "arise within inanimate material by a completely natural process, one that recurs whenever conditions are right" (Harris 2). With a certain reverence Timon says, "O blessed breeding sun, draw from the earth / rotten humidity" (IV.iii.1-2). Indeed, Timon seems quite taken with this form of reproduction/genesis precisely because it conveniently omits human interference. What is more, spontaneous reproduction ensures that animals will lack kinship ties. In his *History of Animals*, Aristotle explains that some creatures "spring from parent animals according to their kind, whilst others grow spontaneously and not

from kindred stock" (Book V). Centuries later, William Harvey in his *De generatione* animalium revisits the same theme, writing "even the creatures that arise spontaneously are called automatic, not because they spring from putrefaction, but because they have their origin from accident, the spontaneous act of nature...proceeding from parents unlike themselves" (Harvey 170).²⁶ Later in the text, Harvey provides a more in-depth account of what it means for life to arise spontaneously (while citing Aristotle):

Another class of animals has a generative fluid fortuitously, as it were, and without any distinction of sex; the origin of such animals is spontaneous. But "as some things are made by art, and some depend on accident, health for example", so also some semen of animals is not produced by the act of an individual agent, as in the case of a man engendered by a man; but in some sort univocally, as in those instances where the rudiments and matter, produced by accident, are susceptible of taking on the same motions as seminal matter, as in "animals which do not proceed from coitus, but arise spontaneously, and have such an origin as insects which engender worms." For as mechanics perform some operations with their unaided hands, and others not without the assistance of particular tools; and as the more excellent and varied and curious works of art require a greater variety in the form and size of the tools to bring them to perfection, inasmuch as a greater number of motions and a larger amount of subordinate means are required to bring more worthy labours to a successful issue – art imitating nature here as everywhere else, so also does nature make use of a larger number and variety of forced and instruments as necessary to the procreation of the more perfect animals. For the sun, or Heaven, or whatever name is used to designate that which is understood as the common generator or parent of all animated things, engenders some of themselves, by accident, without an instrument, as it were. [emphasis added] (Harvey 308)

²⁶ Though Harvey is well known for coining the phrase "ex ova omnia" (all [life] from eggs) – and this was indeed his overarching contention in *De generatione animalium* – as the excerpt above indicates, he did concede that some life generated spontaneously. Further to this point, Thomas Huxley disputed the myth that Harvey was the first to reject spontaneous generation: "It is commonly counted among the many merits of our great countryman, Harvey, that he was the first to declare the opposite of fact to venerable authority in this, as in other matters; but I can discover no justification for this widespread notion. After careful search through the "Exercitationes de Generatione", the most that appears clear to me is, that Harvey believed all animals and plants to spring from what he terms a 'primordium vegetale', a phrase which may nowadays be rendered 'a vegetative germ'" (Meyer 45).

I find it interesting that even though Harvey is by no means a champion of the theory of spontaneous generation, he seems to fall back on rhetoric that describes this particular process as the summation of some grand artistic scheme geared towards creating "more perfect animals." Like Timon, he too speaks reverently of the sun, "the common generator or parent of all animated things." Of course, a word like "parent" is virtually absent from Timon's vocabulary; the only exception is when he rails outside the city walls, imploring Athenian children to disobey their parents and succumb to "filth" by losing their virginity ("Do it in your parents' eyes!") (IV.i.6-8). As in the exchange with the prostitutes, Timon's disgust with sexuality rears its ugly head. Thus, for a man seeking to cut ties with his own species, a world marked by spontaneous generation presents an ideal or perhaps even utopian vision of how the world can work (i.e., free from the perceived "general filths" of human procreation (IV.i.6)).

The Great Chain of Being

In his opening soliloquy upon emerging naked from his cave (clothes would naturally serve as a reminder of the civilized world), Timon repeats the word "nature" several times before apostrophizing the planet, stating "Earth, yield me roots" (IV.iii.23). Essentially, from the moment Timon steps foot in his new milieu Shakespeare emphasizes the power of the sun and soil as the driving forces behind life. If the rhetoric pertaining to the sun's power seems reminiscent of photosynthesis to modern readers, it is likely because Timon proceeds to repeat the word "root" numerous times. The stage directions routinely indicate that Timon is digging in the dirt and, not surprisingly, he keeps turning up roots ("O, a root!" (IV.iii.193)). As the word "root" appears with greater frequency in the discourse, the focus on animals dissipates. I would suggest that Timon keeps dwelling on roots precisely because this is the part of the plant that is

found in the dirt. In other words, it is as if Timon were trying to reach into the soil – not necessarily because of a death drive towards self-destruction, but because Timon's character is moving towards a recognition of that which he always was: the medium that yields resources to humans. Thus, the initially well-off Timon comes to represent metaphorically the earth that is rich in natural reserves (and once again becomes "full of gold" (V.i.iv)).

Timon's newfound obsession with roots coincides with the arrival of his old acquaintance, Apemantus. As with other ambiguous characters in Shakespeare's plays (e.g., Autolycus in *The Winter's Tale*), Apemantus' role is never entirely clear. Is he Timon's foil or possibly even his foe? Is he his friend? Or is Apemantus best understood as a kind of teacher? Certainly not all of these categories are mutually exclusive, but there is something to be said for the notion that Apemantus is guiding Timon towards a new sense of his place in the world and serves as a catalyst for a kind of metamorphosis or progression. Early in the play, Apemantus makes a curious remark that links reproduction with degeneration: "the strain of man's bred out into baboon and monkey" (I.i.251). The idea that man can devolve into lower life forms – or at a minimum that man's place in the hierarchy is not static – sheds light on Apemantus' commentary once he meets Timon in the forest.²⁷ When Apemantus first appears, he asks Timon pointedly, "will these mossed trees / that have outlived the eagle page thy heels / and skip when thou point'st out? Will the cold brook / candied with ice, caudle thy morning taste / to cure thy overnight's surfeit?" (IV.iii.223-7). In essence, Apemantus informs Timon – in no uncertain terms – that the natural world does not exist to do his bidding.

Apemantus words go a long way towards undermining the notion of the Great Chain of Being. This ladder-type model for life depends not only on the "sharp delineation between

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²⁷ His "baboon and monkey" remark is also likely a playful reference to his own name, which seems to suggest a creature who is part ape, part man, or an apelike man. In that sense, Apemantus' own name serves as a constant symbol of the blurring between life forms.

species" but between all categories of existence – e.g., stones, metals, minerals (Fig. 8) (Shakespearean Wild 108).

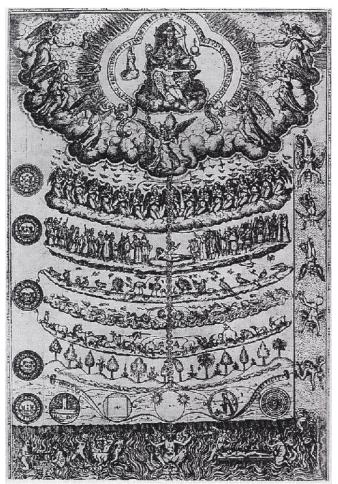


Figure 8. 1579 drawing of the Great Chain of Being from Rhetorica Christiana.

With a new sense of his place in the hierarchy of organic matter, Timon can now cease thinking of himself as man and instead become firmly rooted in the plant world. Timon remembers the flatterers that he once loved and says, "the mouths, the tongues, the eyes and hearts of men...that numberless upon me stuck, as leaves / do on the oak, have with one winter's brush / fell from their boughs and left me open, bare" (IV.iii.261-5). Evidently, this newfound recognition of himself as a tree engenders a complete rejection of the mammalian class:

Timon: What wouldst thou do with the world, Apemantus, if it lay in thy power?... Wouldst thou have thyself fall in the confusion of men and remain a beast with the beasts?...A beastly ambition...if

thou wert the lion, the fox would beguile thee. If thou wert the lamb, the fox would eat thee. If thou wert the fox, the lion would suspect thee when peradventure thou wert accused by the ass. If thou wert the ass, thy dullness would torment thee and still though lived'st but as a breakfast to the wolf...wert thou the unicorn, pride and wrath would found thee...wert thou a bear, thou wouldst be killed by the horse. Wert thou a horse, thou wouldst be seized by the leopard. Wert thou a leopard, thou were german to the lion, and the posts of thy kindred were jurors on thy life...what beast couldst thou be that were not subject to a beast? (IV.iii.319-38)

Timon effectively underscores the inherent aggression and hostility that seems to plague many of the creatures with which we are most familiar. Moreover, Timon's rant encourages his audience to conceive of these various mammals not as distinct creatures, but rather as organisms that are ultimately all related ("german") to one another. Timon essentially lumps them all into one group, deciding that beasts are also worthy of being despised. Amusingly enough, not even the legendary unicorn – which symbolized chastity and was frequently depicted in medieval and Renaissance art laying its head on the Virgin Mary's lap – is good enough for Timon (Grössinger 82). In this epiphanic moment, Timon realizes that the animal kingdom – replete with violence and treachery – is not so different from the world to which he used to belong. Roberts writes that this denunciation of the animals "ties the tone of *Coriolanus* to that of *Timon*" because both rely on conventional metaphors to attack mobs (Shakespearean Wild 93). Although Timon certainly despises "throngs of men" (IV.iii.21), his diatribe is not truly against a mob mentality; Timon's hatred is so profound that it operates at the individual level: Any one person or beast – acting completely alone and independently – is worthy of hate.

The View from the Ground

When Apemantus says to Timon, "the middle of humanity thou never knewest, but the extremity of both ends" (IV.iii.300), he seems to be urging Timon to speed along towards his

eventual destination – whatever this "extremity" may be. Indeed, Timon thinks of himself only briefly as a stately tall tree for he is far more interested in casting his eyes downward, telling the thieves he encounters in the forest, "behold, the earth hath roots / within this mile breaks forth a hundred springs...each bush lays her full mess before you" (IV.iii.410-4). To the poet and painter he asks, "how shall I requite you / can you eat roots and drink cold water?" (V.i.71-2). It is not entirely clear that Timon is being ironic when he tries to chase away Apemantus by throwing rocks at him, saying, "I am sorry I shall lose a stone by thee" (IV.iii.363). At this point, Timon's chief (if not only) comfort undoubtedly lies in the caves, forest, and ground – in short, the space apart from civilization.²⁸ He misses no opportunity to insult the visitors who come to disturb his peace of mind. When the thieves tell Timon they "cannot live on grass, on berries, [and] water", Timon sarcastically replies, "you must eat men" (IV.iii.410).²⁹

Timon is certainly not the first time Shakespeare has shown a curious fondness for these particular mineral substances – perhaps "fondness" is too strong a word, but there is precedent for characters finding comfort in the unlikeliest of places (granting new meaning to the idiom "between a rock and a hard place"):

Titus: Therefore I tell my sorrows to the stones; Who, though they cannot answer my distress, Yet in some sort they are better than the tribunes, For that they will not intercept my tale: When I do weep, they humbly at my feet Receive my tears and seem to weep with me; And, were they but attired in grave weeds,

²⁸ It should be noted that "forest" appears only once in the play: In act IV, Athens is described as a "forest of beasts." Although this detail may seem curious to modern readers who use the terms "woods" (which occurs frequently) and "forest" interchangeably, Shakespeare's use is perhaps in keeping with an early modern understanding of the forest as less of a wild, uninhabited locale, and more as a game preserve for the benefit of the monarch – i.e., a space that has been tamed and belongs to the civilized world.

²⁹ Of course, the most famous and explicit allusions to cannibalism in the Shakespearean canon include *Othello's* anthropophagi (from the Greek for "people-eater" and referring a mythical race of cannibals) and *The Tempest's* Caliban – a likely anagram of "canibal" in a play that, not coincidentally, draws from Montaigne's "On Cannibals." (However, Caliban, it should be noted, was quite content to subsist on and enjoy the island's berries.)

Rome could afford no tribune like to these. A stone is soft as wax, tribunes more hard than stones; A stone is silent, and offendeth not, And tribunes with their tongues doom men to death. (III.i.36-46)

From a thematic perspective, Titus' lines – which he utters after two of his sons have been captured and accused of murdering Bassianus – reveal at least one crucial similarity between the two tragedies: the treatment that one can expect to receive at the hands of his fellow man is harsh and unforgiving. In that sense, the literal hardness of stones cannot compare to the metaphorical hardness in a man's heart and to those "hard fate[s]" (as Alcibiades complains) that men inflict on their own kind (III.vi.73)

If anthropocentrism is understood to involve the exploitation of resources (as Bruce Boehrer contends), then I would argue that Timon's concern over losing a stone corresponds to his attitude about the gold that he discovers in the forest (Among the Animals 6). For Timon's transformation to be complete, it is essential that he should refuse this "gift" from the earth. The precious metal presents a golden opportunity for Timon to return to his former life in glory. Importantly, however, Timon can no longer comprehend gold as a resource to be used. Indeed, he appears unable to conceive of virtually anything as an exploitable resource and has no desire to mold the surrounding environment to suit his whims (Fig. 9):

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³⁰ See footnote 20.

³¹ Some points of clarification are necessary: Timon buries a portion of the gold that he finds (returning it to the earth) and keeps some, which he later gives to certain visitors. In that sense, he is using the gold – both to get rid of the unwelcome intruders and to incite greed and destruction à la Chaucer's "The Pardoner's Tale." Timon certainly has not forgotten that *other* humans covet gold. But when presented with the choice of roots versus gold, Timon chooses the former and never contemplates mining the earth to obtain more gold. On that note, I would argue that the play encourages readers to draw a distinction between use and abuse/exploitation.



Figure 9. A depiction of men using natural resources from the frontispiece to *A New Orchard and Garden* (1623), (Note that the fence is a product of the woods being contained/tamed).

As the lines about grass, berries, water, roots, bushes, etc. indicate, Timon does not consider his life in the forest to be somehow lacking. In this sense, and despite being a deeply pessimistic tragedy, *Timon* creates a "green world" that is distinct from the nightmarish landscapes of *Titus Andronicus* and *King Lear*. If Lear's heath, for example, constitutes a place of "fear and trembling", can the same truly be said of Timon's cave in the woods (Borlik 1)? As with Shakespeare's green world comedies, visitors keep popping in and out (e.g., Alcibiades enters with two prostitutes by his side), often simply to converse with Timon. Although it may be true, as Richard Marienstras claims, that the woods in Timon are "topographically ill-defined" (and a sense of disorientation can induce fear), this does not automatically imply that the forest is by nature "abstract" (Marienstras 15).³² The perceived lack of detail concerning Timon's physical surroundings is largely a product of the play's fascination with the ground itself. Shakespeare constantly directs our eyes downward and it is at this lower level or plane where his protagonist chooses to stay.

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³² Even in plays where Shakespeare does provide more information about the nature of the landscape, such details do not guarantee a clearer picture of the setting; for instance, in *The Tempest*, the characters cannot agree on whether the island is lush or barren, green or "tawny."

Death, Decay, and Becoming One with the Earth

The final stage of Timon's (or indeed anyone's) existence is death. *Timon* ends somewhat mysteriously since, unlike other tragedies where the audience beholds the corpse of the slain title character, we never see Timon's body. His "demise" raises more questions than it answers: is Timon dead? If so, who buried him? Did he procure his gravestone beforehand? Or did Timon escape? Even the title – "The Life of Timon" – suggests something uplifting, as though the tears that Neptune sheds on the plot of dirt that marks his grave could in fact reanimate Timon so he could rise from the soil (V.v.87). But even if one accepts that Timon is in fact buried underground, his decision to pass into oblivion does not, I would argue, support Jonathan Bate's estimation of the play as being about "the freedom to choose pain, to choose death, [and] to seek another world of whose existence we have no sure knowledge" (Bate 177). If anything, Timon's actions (post-financial ruin) are motivated by the desire to escape the pain that he feels most acutely when dealing with other human beings (who, incidentally, regard him like prey or a piece of meat).

As for the issue of entering into another existence of which he has no knowledge,

Timon's unsentimental view of death and decay suggests a certain expectation or sense of what

lies on the other side of life. One of the more noteworthy aspects of Timon's death is that the

audience is explicitly informed on several occasions that Timon is entombed by the edge of the

sea:

Timon: Then, Timon, presently prepare thy grave; Lie where the light foam of the sea may beat Thy gravestone daily. (IV.iii.370-2)

Soldier: My noble general, Timon is dead; Entombed upon the very hem o'th' sea. (V.i.66-7) Timon: Timon hath made his everlasting mansion Upon the beached verge of the salt flood; Who once a day with his embossed froth The turbulent surge shall cover. (V.ii.100-3)

This detail may seem trivial, but its curious inclusion (especially since Timon has heretofore been associated with the woods and caves) calls attention to the fact that Timon's resting place ensures that his body will be subjected to constant erosion. Ultimately, retreating into a cave was not enough; in Timon's ideal vision, he becomes part of the geologic strata as his body enters into the "life cycle" of dirt and rocks. Interestingly enough, Timon's various references to salt ("salt hours" (IV.iii.85), "salt tears" (IV.iii.433), "salt flood" (V.ii.101)) take on an added significance at this point given that salt is the ash-like precipitate that remains after water evaporates – a more extreme version of the rocks in water that Timon served at his banquet. Salt, of course, can extend the shelf life of something – in essence, keeping an object frozen in a state immune to decay, but this mineral also kills vitality as we know it. A worm or slug will instantly shrivel up and die if subjected to an onslaught of this compound; and while salt, as a seasoning, is a welcome addition at the dinner table, human (or indeed animal) wounds and sores become infinitely more painful upon exposure to this crystalline deposit.³³

When Timon announces that he is writing his epitaph (and is presumably preparing to depart from the world), he admits "but yet I love my country" (V.ii.76). Considering Timon's hatred for civilization (which has in no way abated), the most straightforward meaning would seem to be that Timon is simply espousing his love for the very land and countryside that has become his true home and refuge. It seems logical then, that his epitaph should specifically indicate that Timon does not want feet trampling over the dirt (V.v.78). After all, if his body does in fact lie in that plot of ground, then his decaying corpse literally becomes part of the soil –

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³³ The desire to use the ground as a means of existing eternally without decay is elaborated upon in chapter five.

an idea that Shakespeare uses to great effect in *Hamlet*. The "extremity", then, that Apemantus spoke of is arguably the extreme materiality of the self. In other words, Timon is not thinking of a potential afterlife in terms of his soul leaving his earthly body behind; instead, he remains focused on the earth as the site of himself (i.e., his "self") even in death.

Timon and Christianity

In *Hamlet*, the title character famously declares that human beings are the "paragon of animals" before deciding seconds later that our species is actually the "quintessence of dust" (II.ii.297-8). Shakespeare manages to compress the notion of hierarchical instability into a mere dozen or so words. *Timon of Athens*, however, expands the idea that Hamlet touches upon into a full-length play, thereby allowing the reader to perceive this implied metamorphosis at every step of the way. Andreas Höfele notes that "Hamlet's investment in human dust is a far cry from the lofty Christian disdain for the vanity of earthly excellence" (Höfele 165).³⁴ Without question, Timon reveals a similar position, but Shakespeare seems intent on taking this idea to its logical extreme. Though Hamlet ultimately cannot shake off his "nauseated vision of universal cannibalism", such anxieties are noticeably absent from *Timon* (Höfele 165).³⁵ The reason for this fundamental difference seems to be that Timon's existence becomes entirely defined by place; he is rooted to the earth in a way that characters like Hamlet are not. The result is that *Timon* puts forth what we might consider a more modern view of death insofar as the play

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³⁴ Höefele raises a valid point, but it should be noted that *Hamlet's* musings on worms and decomposition appear to borrow heavily from Luis de Granada's "Of Prayer and Meditation" – the earliest known English translation of which appeared in 1582 (Beauregard 87). For instance, in contemplating what happens after death, Granada describes the "infinite number of crawling wormes and fylthie maggottes" that feed upon the body (Procházka 40). Hamlet's thinly veiled contempt that so great a man as Alexander might now be "stopping a bunghole" or "beer barrel" (V.i.189,195) mirrors in tone Granada's revulsion that we should "merveill to see vnto how base a condition such a noble creature is now come" and that it is "a thinge to be wondered at, that so excellent a creature shall ende in the most dishonorable and lothsome thing in the worlde" (Procházka 40-1).

³⁵ If anything, *Timon* posits that the cannibalism exists among men in everyday human society.

presents a stark departure from "medieval Christian thinkers [who] considered human beings as merely visitors here on earth, as essentially spirits without place" (Hiltner 4).

Regarding the play's relationship to Christianity, numerous scholars have noted that *Timon's* infamous banquet – where Apemantus laments that "so many dip their meat in one man's blood" (I.ii.39) – is meant to evoke the Last Supper, and Matthew 26:23 in particular: "He that dippeth his hand with me in the dish, he shal betraye me" (Holdsworth 190). But the implication, as some have argued, that Timon is therefore a Christ-like figure who is similarly betrayed by his followers is, in my view, a bit heavy-handed. According to Julia Reinhard Lupton, "like Jesus, Timon finds himself abandoned by those he would redeem" (Thinking with Shakespeare 144). Alison Scott compares Jesus' "feeding of the multitude" to Timon's gift giving, while G. Wilson Knight offers the most glowing praise of all: "Timon is the totality of all, his love more rich and oceanic than all of theirs, all lift their lonely voices in his universal curse. Christ-like, he suffers that their pain may cease, and leaves the Shakespearian universe redeemed" (Scott 238; Knight 236).

The flatterers who reject Timon, however, are just that – flatterers and gadflies, not apostles or adherents. Moreover, the play as a whole makes it clear that these people are not guilty of some grave and singular transgression, but that ingratitude and selfishness are typical of human (if not animal) behavior. But perhaps most importantly, a Timon/Jesus equivalence does Timon a disservice because the play's relationship to the foundational text of Christianity is more complicated than a straightforward x = y correspondence. In that sense, I would cautiously agree with Rolf Soellner's estimation that "critics who have elevated Timon to Christ status have fallen prey to the paradoxical lure of his personality and misunderstood Shakespeare's dramatic

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³⁶ I do not mean to suggest that this is the correct view (see ethological studies suggesting evidence of altruism in the animal kingdom), but rather that this is one of the play's operating theories and accounts for much of *Timon's* bleakness and pessimism.

strategy" (Soellner 74). I say cautiously because a) I am not sure most readers would regard Timon's personality as alluring in any way and b) the counterevidence he cites is composed of fairly pedestrian examples – e.g., Timon displays "ordinary human foibles and prejudices", he does not possess a "Christ-like patience", and the "Christ parallels" are "partial analogues only" (Soellner 74). But I do think the second part of the statement – the sense that we should focus on the broader dramatic strategy at work, rather than individual details – is key.

I would argue that, on a macro level, *Timon* functions like a reverse biblical allegory. We begin with a protagonist who is astonishingly charitable; indeed, one might say almost godlike in his compassion and willingness to help others (in the immortal words of Alexander Pope, "to err is human, to forgive divine"). To be sure, deities across cultures have often been portrayed as vengeful or even petty at times, but my point is that the degree of Timon's initial compassion and generosity well exceeds the bounds of what is normally seen in human society. After he is completely ruined (not unlike the titular figure in the Book of Job), the story naturally shifts dramatically, but it does so in a way that seems to fly in the face of certain aspects of Christian orthodoxy – namely the fixation on a strict and immobile ordering of creation. The Christian angelic hierarchy (e.g., archangels, seraphim, cherubim) is one well-known example, having been explicated and developed by numerous theologians, e.g., Pseudo-Dionysius and Thomas Aquinas. The Ladder of Divine Ascent (scala paradisi) written by John Climacus in the seventh century, served as an important treatise for monasticism and explained how religious perfection could be attained after passing through thirty steps or rungs on the metaphorical ladder to paradise. Of course, the scala naturae (ladder of nature/Great Chain of Being) is perhaps the example par excellence of hierarchy in Christian theology.

In *Timon*, not only is the Great Chain of Being model flipped on its head, but the highest rungs (God and the angels directly below) are essentially taken out of the equation. This is not to say that Timon is an atheistic tragedy (clearly, references to the "gods" abound), but the reason that critics refer to *Timon* as a deeply pessimistic tragedy is, at least in part, due to the gods above being largely immune to any prayers or cries for help. To the extent that they do intervene in human affairs, it is mostly to toy with our emotions, hence why Timon – after finding the gold – begins wailing, "Ha, you gods! Why this? What this, you gods?" (IV.iii.31). The fact that we are dealing with ancient Greek gods somewhat complicates matters given that references to the "gods" continue throughout (albeit taking on darker tones as the action unfolds), but in terms of biblical allusions, *Timon's* language appears to be influenced less and less by scriptural passages as the play progresses. In his article on *Timon's* use of explicit biblical allusions, R.V. Holdsworth cites examples that appear almost exclusively in the first half of the play (the latest quotation coming from Act III, scene ii). My point is that this particular Shakespearean tragedy seems to be driving towards a conclusion that does not conform to Christian doctrine – i.e., there is no heaven/afterlife, only the expectation that your body will decay and remain on earth.

Conclusion

By disintegrating into the earth, Timon, in essence, becomes not just a kind of human loam, but the ground itself (that "rude mass" in Sir Thomas Browne's words). One might even go so far as to say that Timon creates not merely a different type of green world, but also a "gangrene world" given that his corpse is rotting underground.³⁷ But to understand the matter fully, we must consider the nature of the revenge that Timon hopes to enact upon mankind. As

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³⁷ While I wish I could claim to have invented the phrase "gangrene world", Professor Daniel Albright deserves full credit for this delightful pun.

with other Shakespearean plays, disease imagery is prevalent, and certainly illness forms an important part of Timon's revenge fantasies (e.g., prostitutes spreading venereal disease). Yet Timon also displays a keen interest (obsession rather) with injuries to the neck and throat area. He warns visitors in menacing fashion that if they should "speak", they will be hanged" (V.ii.16) and tells the thieves that only a boiling fever will permit them to "scape hanging" (IV.iii.424). To be sure, such references to hanging borrow from proverbial phrases, but Timon's statements belong to a larger pattern that permeates the play from start to finish. Shakespeare fixates on the throat/neck as a site of weakness in the human body that can be exploited by ensuring that a person cannot breathe. In Act I, Apemantus states that he fears those who would "spy [his] windpipe's dangerous notes" and that "men should drink with harness on their throats" (I.ii.48-50). When Timon is confronted with the men who have come to procure the debts that he owes, he is overcome with a feeling of suffocation, saying "give me breath" (II.ii.33).

The juxtaposition between humans suffering injury near the top of their body and the constant references to roots that are firmly entrenched below the soil should not go unnoticed. As living organisms, we lack the kind of safeguard that roots provide against injuries or trauma (i.e., hewn branches, pruned buds, and cut stems need not kill or even harm a plant). Eager to exploit man's vulnerability, Timon fantasizes about asphyxiation. He tells the prostitutes that they should "burn...up" whoever tries to "convert" them with "pious breath" and use "fire [to] predominate [their] smoke" (IV.iii.140-2). The phrase "burn him up" means to inflame, but also suggests choking (which is further corroborated by the use of "smoke"). Timon later tells the senators that they "have throats to answer" (V.ii.56-64). And yet, Timon offers the Athenians "some kindness", explaining that they can "stop affliction" by hanging themselves on the "tree

³⁸ In "Vegetal anti-metaphysics: Learning from plants", Michael Marder puts this issue in far more poetic terms: "As pruning paradoxically exemplifies, the more the plant loses, the more it grows. Proliferating from pure loss, plants offer themselves with unconditional generosity" (Vegetal 479).

which grows...in [his] close" (V.ii.90). Timon is not interested in beasts or other men ripping his enemies apart for he aligns himself with the bottom rungs of the *scala naturae*. Naturally, he will not be swayed by the senators' appeals that the "public body...play[s] the recanter, feeling in itself / a lack of Timon's aid" and "hath sense...of its own fail" (V.ii.29-33). Though such analogies are persuasive in *Coriolanus* (e.g., Menenius' speech about the "body's members rebell[ing] against the belly" (I.i.85)), rhetoric that draws an analogy between the state and human anatomy proves futile in *Timon*. Indeed, words that call attention to any form of nervous system (e.g., "feeling", "sense") only undermine the senators' cause.

Though Timon, of course, has no intention of returning to Athens, the city nevertheless remains in peril on account of Alcibiades' ire. As Timon's friend and fellow exile, Alcibiades becomes a kind of surrogate for Timon in terms of enacting revenge on Athens. Curiously enough, when Alcibiades' army approaches, a senator remarks that "dust" chokes the air (V.iii.16). It is of course fitting that the assault led by Timon's final champion should convey the sense that the enemies' bodies are being vanquished not by traditional battle wounds, but by something as seemingly innocuous as dirt particles constricting one's trachea. Alcibiades warns the Athenians that their "breathless wrong / shall sit and pant" and their short-winded ("pursy") insolence must similarly gasp for air (V.v.10-2). Of course, the tragedy of *Timon of Athens* is not that Athens will be destroyed; but the fantasy – however farfetched – that the smallest specks of organic material can overpower the "greatest" creatures underscores the play's themes and elucidates why Shakespeare chooses to depict a man who yearns to become part of the earth's soil.

Chapter 3 Undoing the Unnatural in *Macbeth*

Introduction

The Tragedy of Macbeth begins with one of the infamous weird sisters asking, "when shall we three meet again? / In thunder, lightning, or in rain?" (Li.1-2). The opening would likely encourage anyone wishing to analyze the play through an ecocritical lens to assume that the aspect of nature that will figure most prominently will be the weather. Although Macbeth and King Lear were probably written around the same time, the effects that these two great Shakespearean tragedies produce upon the reader are very different in certain respects. The fearful storm of the latter creates an experience akin to being in a hurricane (or "cataracts and hurricanoes" as Lear would say). When all is said and done in King Lear, we are simply left to assess the terrible damage. And, yet, there is a glimmer of hope that the worst has now passed and that the survivors can rebuild.

One might expect Shakespeare to continue in this vein, but the terrain in *Macbeth* does not come across like the dark and blustery heath of *King Lear*. In *Macbeth*, trees arguably take center stage. Even the place where Duncan's castle is located – Forres – evokes the word forest. Although *Macbeth* has not attracted the same level of attention that *King Lear* has within Shakespearean ecocriticism, a great deal has been written about the natural world in *Macbeth*. One of the more interesting arguments concerning the environment is Robert Pogue Harrison's position that there exists a "moral contrast between forest and heath" (Bruckner 209). The heath, of course, is where the witches meet and constitutes a "wasteland" of little value (Bruckner 209).

Certainly, there is ample evidence to support this view, but the dualism that I believe is ultimately more important to understanding the play's treatment of nature involves the systematic division between how benevolent and malevolent characters view nature. The former

perceive the world through green-tinted glasses and embody the prospect of a regenerative land-ethic. From start to finish, nature becomes a default lens through which to interpret the world as sustained metaphors involving vegetation and the soil pervade the discourse. For instance, early in the play, Banquo asks the witches to "look into the seeds of time / and say which grain will grow" (I.iii.56-7). He later wonders if he and Macbeth truly saw these hags or if they have "eaten on the insane root" (I.iii.82). Meanwhile, Duncan informs Macbeth "I have begun to plant thee, and will labour / to make thee full of growing" (I.iv.28-9). Even in the play's final moments, Malcolm describes what "would be planted newly" (V.xi.31). Yet Shakespeare is not content to associate the virtuous side with vegetation and leave the pattern at that. The converse – and what proves to be an equally strong undercurrent in the play – is that Macbeth and his wife are depicted as the chief representatives of mammalian biology.

Distinguishing between moral and corrupt characters will naturally seem like an overly simplistic interpretation of *Macbeth*, but analyzing the language that generates and sustains this rift is appropriate for a tragedy that invites readers to perceive the world through oppositions. The second utterance we hear speaks of the battle that has been "lost and won" (I.i.4) and the first scene ends with all of the witches remarking that "fair is foul and foul is fair" (I.i.12) – a line that Macbeth himself soon echoes. And after our title character hears the prophecies and starts hatching a plot in asides, Macbeth concludes "nothing is / but what is not" (I.iii.141-2).

As David Scott Kastan outlines in *Shakespeare After Theory*, literary criticism on *Macbeth's* insistent and inescapable contrasts has a long history, going back to William Hazlitt (Kastan 152). This chapter – though approaching the play from an ecocritical angle – offers another binary-centered reading of *Macbeth*, namely the natural against the unnatural or plant versus man. However, part of my aim is to illustrate how the construction of this difference

arises from binary phonological and semantic features. According to the Saussurean theory of language (and upon which the modern fields of linguistics and semiology are built), meaning is produced by difference: "Each linguistic term derives its value from its opposition to all the other terms" (Saussure 88).³⁹ To that end, I look closely at discrete units of language (e.g., morphemes) to identify binary distinctions that operate on a much smaller scale, and affect the text's meaning and treatment of nature from the ground up, so to speak. More broadly – but still relying on linguistic theory – I seek to apply the type of analysis that George Lakoff and Mark Johnson use in *Metaphors We Live By* to explore how, in this particular text, language pertaining to biological processes (e.g., mammalian reproduction) or to vegetation structures our basic understanding of Shakespeare's fictive world.

A Land Flowing with Milk and Blood

Macbeth and Lady Macbeth – as the play's villains – are the only major characters who remain conspicuously dissociated from plants. What is more, their worldview revolves around a warped conception of mammalian biology. Of course, given that we are dealing with two corrupt individuals who fall deeper and deeper into depravity, it is no surprise that their obsession with the mammalian should come across as similarly sick and depraved. The recurrence of fetuses in the discourse presents one of the strangest motifs in the play. In a sense, *Macbeth* (being a tragedy) offers a horrifying twist on the type of rhetoric that appears in *The Winter's Tale*. As discussed in the first chapter, Leontes worries that his son Mamillius has "too much" of his mother's "blood in him" (II.i.56) and expresses concern that the act of nursing from a woman's breast could have infected his son further. In a moment that is eerily reminiscent of Leontes'

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³⁹ How fitting that Saussure arrives at this conclusion via analogy to chess – an abstract representation of war that features a uniquely powerful queen.

remarks about his doomed son, Lady Macbeth worries that her husband "is too full of the milk of human kindness" (I.v.15). In general, Lady Macbeth seems terribly preoccupied with this particular bodily fluid. She later tells her husband that if she had a babe sucking milk from her breast, she would dash its brains out (again, not unlike Leontes' unconscionable order to murder an innocent infant).

Other critics have discerned the unexpected, but intriguing, parallels between these two plays. In *Shakespeare's Festive World*, Francois Laroque writes, "the Sicilian festivities amid which Hermoine, at Leontes' request, tries to detain Polixenes, soon turn sour and almost become an occasion for crime, as happens in *Macbeth*" (Laroque 18). The point that the action of *The Winter's Tale* can devolve into the kind of violence and bloodshed seen in *Macbeth* is well taken – and not simply because the early part of the play reads like a tragedy. While an undercurrent of anxieties about blood exists in *The Winter's Tale*, *Macbeth* renders the subject into a full-blown obsession.

As A. C. Bradley observes, *Macbeth* is a play of color – mostly red given the abundance of blood and indeed an exploration of the play's treatment of this most vital bodily fluid is essential to understanding how Shakespeare's portrayal of nature takes shape in this particular play (Bradley 308). Richard Marienstras writes that, "paradoxically enough, the image of blood has been the subject only of brief studies" because critics are content merely to conclude that "in this play blood is obsessively present" (Marienstras 87). Like Marienstras, I question whether the matter is indeed so simple and straightforward. He does a commendable job shedding light on how pervasive the blood motif is: "The signified 'blood' in the play is indicated by five different lexical forms: 'blood', 'to bleed', 'bloody', 'gore', and 'gory', which altogether appear about sixty times" (Marienstras 87). In addition to such explicit references, there are of course

numerous metaphorical references to blood and depictions of violent acts that directly or indirectly suggest blood loss.

Macbeth and Lady Macbeth both suffer from a severe case of seeing red – literally. The extent to which Lady Macbeth becomes obsessed with blood ("out, damned spot!") hardly needs mentioning. Her futile attempt to scrub her hands clean of imaginary bloodstains has proven to be one of the most enduring images of the play. But Macbeth is equally preoccupied with blood. At one point, he chillingly declares, "I am in blood / stepped in so far that, should I wade no more / returning were as tedious as go 'oer" (III.iv.135-7). The river of blood image that these lines conjure in our minds is astonishing; we are horrified by Macbeth's realization that it is easier to keep going than to turn back. As such, he has already decided that "blood will have blood" (III.iv.121).

As one might expect from a study on "seasonal entertainments" in Shakespeare, Laroque compares the blood in *Macbeth* to wine and explains that "murder becomes a Bacchic and sadistic feast", citing the moment where Lady Macbeth ensures that Duncan's guards become inebriated (Laroque 277). The analogy is clever, but overlooks the possibility that sometimes a drop of blood is just a drop of blood. (And the question then becomes what is the occasion for blood in *x* text?) The first words that are spoken in *Macbeth* after the very brief opening with the witches are "what bloody man is that?" (I.ii.1). Simply put, the blood imagery does not let up from this point onward. One could easily assume the ubiquitous bloodshed is to be expected in a tragedy that deals pointedly with war and combat. However, I would argue that the rhetoric involving blood is not so much a product of military exploits, but rather belongs to a much larger pattern centered on an intense interest in the human body, and, more specifically, on reproduction and birth. Despite the fact that so many of the utterances involving blood, wounds,

injury, and discomfort are spoken of by men, Shakespeare's word choices suggest pregnancy, childbirth, and parts of the female anatomy:

Captain: I am faint. My gashes cry for help.

Duncan: So well thy words become thee as they wounds. (I.ii.41-

2)

Macbeth: Kind gentlemen, your pains are registered. (I.iii.148)

Macbeth: The rest is labour which is not used for you. (I.iv.44)

Duncan: How you shall bid God yield us for your pains. (I.vi.13)

Macbeth: The death of each day's life, sore labour's bath. (II.ii.36)

Macbeth: His gashed stabs looked like a breach in nature. (II.iii.110)

Macbeth: Their daggers unmannerly breeched with gore. (II.iii.112)

Macbeth: The labour we delight in physics pain. (II.iii.46)

Lennox: Things have been strangely borne...so that I say he has borne all things well. (III.vi.3,17)

The above represents only a sample of pertinent utterances. 40 I have omitted several other instances that involve terms like labour, born, pain, deliver, due, gash (slang for vagina), and breach. Taken individually, lines like those in the examples above are not particularly suggestive - and indeed reading some of them as allusions to labor pains may seem far-fetched. However, certain phrasing does strike me as curiously feminine – take the first example with "faint" (a more ladylike behavior) and the verb "become" (as in, something that flatters one's physical appearance).

resonance.

⁴⁰ The OED's earliest citation of "breech" being used specifically in obstetrics comes from the mid-seventeenth century, so this meaning may not have been available in Shakespeare's lifetime. Still, given the incompleteness of the historical written record – coupled with the longstanding alternative definition of the term having to do with boyhood - I believe Shakespeare's use of the homophonous "breach" (as well as breech) may well hold a thematic

Of course, introducing gender and sex into a discussion of *Macbeth* is hardly implausible considering that the principal female character repeatedly calls the protagonist's manhood into question.

Lady Macbeth: When you durst do it, then you were a man. (I.vii.49)

Lady Macbeth (to Macbeth who has just seen the ghost): Are you a man? (III.iv.57)

The not so subtle implication is that if Macbeth is less than a man or not a man, he runs the risk of becoming a woman – a possibility corroborated by Lady Macbeth's remark about her husband being "too full of the milk of human kindness." As Richard Kerridge points out in his essay, "An Ecocritic's Macbeth", "for Macbeth to be full of milk makes him feminine" (Bruckner 203). When Banquo's ghost first appears, Macbeth naturally panics and though he attempts to put on a bold (if not altogether crazed) front, he inadvertently likens himself to a trembling baby girl while his wife tries to restore order to the situation (III.iv.104).

Without question, Macbeth's wife initially "calls the shots" in their relationship. But Lady Macbeth is not merely an ambitious or assertive woman, she seems keen to strip all aspects of femininity from herself: "I have given suck, and know / how tender 'tis to love the babe that milks me. / I would, while it was smiling in my face / have plucked my nipple from his boneless gums / and dashed the brains out" (I.vii.54-8). In *Ecocriticism and Shakespeare*, Simon Estok explains statements like this and her famous line about being "unsexed" as her desire to "seek deformity", which he contends is "not so odd if we understand that the individuality implied in deformity frees the subject from...conformity. It is, in a sense, potentially very empowering" (Estok 102). Estok's characterization of Lady Macbeth's unconscionable desires and behavior

strikes me as euphemistic, but her "empowerment" could potentially unsettle the conventional power balance that exists between men and women.

I would suggest that the rhetoric about pains, labor, etc. serves to fill the void left by Lady Macbeth's complete upending of the "natural" order with respect to gender roles. While she may not be interested in nursing an infant (and apparently would much rather actively harm said infant), her husband does have childrearing on the mind: "Bring forth men-children only / for thy undaunted mettle should compose / nothing but males" (I.vii.72-4). Truly, the only things she will "deliver" are bad intentions – such is the "greatness" that her husband is "due" (I.v.9), which he himself previously recognized as a "swelling act" (I.iii.128).

Lady Macbeth, on the other hand, in one breath yearns for spirits to "unsex" her (thus rendering her infertile) and "make thick [her] blood" – a possible reference to miscarriage (I.v.39-41). Moreover, she wants her milk to be taken for "gall" (i.e., bile). The image of milk morphing into something poisonous underscores the warped conception of mammalian biology at work. In other words, Lady Macbeth is clearly fixated on anatomy and reproduction; milk and fetus metaphors are one of the main ways she comprehends the world and what (she believes) needs to be done, but she cannot contemplate her own biological nature in a remotely normal fashion.

Part of the irony in Lady Macbeth's desire to transmute her blood is that such a transformation could accomplish the very opposite of "unsexing" (i.e., underscore her female biology/anatomy). In the early modern period, breast milk was believed to be "menstrual blood which had gone through a further stage of concoction in the body to transform it into milk" (Read 9). Some held that blood from the womb turned white "by the burning fires of maternal love, which also drew it upwards through the body until it reached the breasts" (Levack 132). As

Juan Luis Vives explains in *The Instruction of a Christian Woman* (first translation appeared circa 1529), "that wyse and lyberall mother of all thynge, Nature, all that bloudde, whiche went unto the nourishement of the childe, while it was in the mothers wombe, after that the chylde is borne, she sendeth it up unto the breastes, tourned into white mylke, to nourishe the chylde withall." Roughly a century later, Jacques Guillemeau observes in *Child-birth*, *or The Happy deliuerie of women* (1612) that "milk is nothing else but bloud whitened" and that because a pregnant woman's belly becomes "swolne, and puft vp with the aboundance of bloud (like a sponge that is full of water)", the excess fluid must eventually be "quitted and discharged" – a feat that is accomplished by moving this "aboundance of bloud, which would flow to their breasts" and converting it into milk.

I include these examples from Renaissance texts – one from a seminal pedagogical treatise with theological underpinnings and the other from an eminent surgeon's scientific work on obstetrics – to show not just the strong connection, but indeed the one-to-one correspondence between milk and blood that existed in Shakespeare's day. This very equivalence underscores the need to analyze *Macbeth's* milk/pregnancy/fetus imagery as part of the pervasive blood motif (rather than treating the former in isolation, as something that pertains to Lady Macbeth exclusively) and use such historical context to inform our understanding of the latter (i.e., the presence of blood is less a commentary on pure violence and combat, than an extension of the play's interest in physiology).

While Lady Macbeth's alarming thoughts about milk, infants, and "unsexing" are undeniably memorable, it is her husband who is inordinately fixated on the culmination of the process that creates new human life. "Born" and its variants are undoubtedly significant in this play and such terms appear with increasing frequency as the action unfolds. By the final act, the

audience is witnessing Macbeth rave and boast like a madman that he cannot be harmed by anyone "born of woman":

Macbeth: What's he

That was not born of woman? Such a one

Am I to fear, or none. (V.vii.2-4)

Macbeth (to young Siward): Thou wast born of woman, But swords I smile at...brandished by a man that's of a woman born. (V.vii.13-5)

Macbeth: Till Birnam Wood remove to Dunsinane I cannot taint with fear. What's the boy Malcolm? Was he not born of woman?...No man that's born of woman Shall e'er have power upon thee. (V.iii.2-7)

Macbeth (to Macduff): Thou loses *labour*... I bear a charmed life, which must not yield To one of woman *born*. [emphasis added] (V.x.9-13)

Macbeth's bravado derives from the second apparition – a "bloody child" – who appeared during his second visit to the witches, urging him to "be bloody, bold, and resolute...for none of woman born shall harm Macbeth" (IV.i.95-6). As the fourth quotation illustrates (note the fitting use of "labor"), Macbeth possesses too narrow a definition of childbirth – or more broadly, the lifegiving process. The obvious explanation of his misreading of the prophesy is that he can conceive (pun intended) only of vaginal birth. Perhaps less obvious (especially to modern readers) is the consideration that, before the advent of modern medicine, women who underwent a caesarian section routinely died during (or shortly after) childbirth (Bruckner 210). Thus, for someone like Macbeth, the paradox could be that Duncan was born of death.

A related concern – and, again, an issue that manifests itself during the second prophesy – is Macbeth's obsession with kinship and lineages. Incidentally, his wife too seems keenly aware of consanguineous relationships, refusing to murder Duncan because he "resembled [her] father as he slept" (II.ii.12-3). Macbeth decides to have Macduff's "wife, his babes, and all

unfortunate souls" in his family killed simply by virtue of belonging to "his line" (IV.i.168-9). When the eight kings appear followed by Banquo's ghost, Macbeth, alarmed, asks, "what, will the line stretch out to the crack of doom?" (IV.i.133). The blood that Macbeth notices on Banquo calls attention to his crime, but also emphasizes the bloodline that gives weight and significance to this pageant.

Kerridge homes in on Macbeth's bloody deeds and raises some thought-provoking points regarding their long-reaching implications: "Murder is an act entirely for the here and now of Macbeth's lifetime, violently sundering the relationship with future generations. That is the ecocritical significance of the play's emphasis on the Macbeth's childlessness. On the reading I am offering, the childlessness can stand for a loss of sense in relation to the future" (Bruckner 203). Certainly, the play exposes an uneasy relationship with time (which includes the future), as evidenced on a linguistic level by heavy reliance on the subjunctive mood and a proliferation of modal verbs. However, the problem is not that Macbeth has lost a sense of the future; indeed, his motivating drive is to ensure that the crown passes solely to his progeny. Thus, when reading *Macbeth*, I inevitably find myself wondering, "why does Macbeth care so much that Banquo's descendants will eventually become kings? He gets to be king now!" But the "here and now" is not good enough for Macbeth. In other words, one could easily make the counterargument to Kerridge's claim: Macbeth is insufficiently focused on the present and the murders represent a perverse attempt to control future time.

⁴¹ For Macbeth, there never seems to be a question that he will one day have children. Also, Lady Macbeth's pronouncement that she has "given suck and knows how tender 'tis to love the baby that milks" her, raises the possibility that she once gave birth.

The Root of Kings

Banquo's continuing existence becomes a thorn in Macbeth's side – an expression with particular resonance since Banquo symbolizes vegetative growth, whereas Macbeth is associated with corporeality. Given that Shakespeare likely designed *Macbeth* to flatter King James, who was thought to be a descendant of the historical Banquo, the fictional character's importance cannot be underestimated. Macbeth's desire to eliminate "the root...of many kings" (III.i.6) goes beyond squelching one plant or organism; his wicked plan is an assault on all of nature. Soon after Banquo and Fleance exit in Act II scene i, Macbeth says that "nature seems dead" (II.i.50). Later, one of the murderers tells Macbeth "safe in a ditch [Banquo] bides / with twenty trenched gashes on his head / the least a death to nature" (III.iv.25-7). In this statement, the object "nature" can be read as Banquo without altering the meaning.

Macbeth is sure that – once dead – Banquo (whom he describes as being in the earth) will hold no power over him because Banquo's "bones are marrowless" and his "blood is cold" (III.iv.92-3). For Macbeth, the earth is a site of death and life is defined narrowly by tissues and liquids (see Lady Macbeth's interest in milk and bile); the soil's generative properties and the vegetative structures of plants never enter into the equation. Shakespeare does not allow his title character to partake of the rhetoric that everyone else employs. When early in the play, Duncan tells Macbeth "I have begun to plant thee, and will labour / to make thee full of growing" (Liv.28-9), he puts forth an alternative vision of birth, regeneration, and life itself. Banquo picks up on the commonsense premise that a seed can lead to a "harvest" and make someone "full of growing." Macbeth and Lady Macbeth, on the other hand, aim to outsmart nature by nipping problems in the bud:

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⁴² Even if one assumes there is no connection between this utterance and Banquo and Fleance's presence, Macbeth's curious phrasing nevertheless suggests an "assault on nature" modus operandi.

Macbeth: Thou know'st that Banquo and his Fleance lives.

Lady Macbeth: But in them nature's copy's not eterne. (III.ii.38-9)

Etymologically speaking, "copy" comes from the Latin *copia*, meaning abundance. As Gabriel Egan explains in *Green Shakespeare*, "the branching out of reproduction is virtually eternal, leading inexorably to the son of Banquo on the English throne when the play was first performed" (Egan 85). While the image of eternal abundance or branching out (as in a family tree) would appeal to any monarch, Lady Macbeth's reply underscores her firm conviction that one can permanently inhibit vegetative growth.

Banquo's first line in the play is "how far is't called to Forres" (I.iii.37) (again, evoking forests); an instant later he notices the weird sisters. As the chief representatives of the supernatural, the witches exist on a plane beyond the ordinary realm of nature. However, Banquo describes these hags using adjectives that seem more fitting of plants: "what are these / so withered, and so wild" (I.iii.37-8). He then asks them, to "look into the seeds of time / and say which grain will grow" (i.iii.56-7). The witches do not remain on the scene very long; after they leave, Banquo remarks, "the earth hath bubbles, as the water has / and these are of them. Wither are they vanished?" Macbeth's answer is telling: "into the air...melted as breath into the wind" (I.iii.77-80). I suspect many readers assume that Macbeth's version of the event is correct – i.e., they simply vanished into thin air (literally). But Banquo's initial assessment that these women belong to the swampy bog suggests they dissolve back into the earth (something Macbeth's use of the verb "melted" corroborates). Regardless of which account is correct,

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⁴³ For a unique perspective on the witches' role, see Randall Martin's "Mortal Engines and Blasted Heaths: Thresholds of Catastrophic Ecologies in Macbeth." Martin argues that the weird sisters' purpose in the play is to stage a kind of eco-critique: "By materializing war's rampant destruction of the earth and its derangement of human subjectivities, they perform nature's third-party protest against the deforming ecologies of gunpowder-enhanced warfare, which serves as one of Shakespeare's tropes for environmental dangers in early modernity" (Martin 6-7).

Macbeth's dissociation from the land is clear; indeed, he appears disgusted with "this blasted heath." In general, Macbeth is far more likely to refer to the air and heavens – an effective trope to encapsulate his quick rise and boundless ambition.

Of Monsters and Men

In the previous chapter, I argued that the protagonist in *Timon of Athens* denigrates the mammalian system in an effort to replace it with something preferable. Macbeth and Lady Macbeth's actions and rhetoric, however, propose no substitution whatsoever. This unproductive quality is hardly surprising considering they both represent a dead end (literally since they will remain "fruitless" while "the seeds of Banquo" will become kings (III.i.71)). One could easily make a case that Macbeth and his wife live up to the most famous line in the play since they themselves are ultimately nothing more than "sound and fury, signifying nothing" (V.v.27). But I would argue that the fundamental problem is not that they are nothing, but that they are unnatural.

The prevalence of the "un-" prefix in this play (e.g., "unsex") serves as a subtle, but constant, linguistic reminder that Macbeth and his wife are meant to be understood as fundamentally unnatural beings. As the doctor later explains, Lady Macbeth's behavior must be the result of "a great perturbation in nature" (V.i.8) because "unnatural deeds do breed unnatural troubles" (V.i.61). But even before Lady Macbeth loses her mind, her warped mindset leads her to fantasize simultaneously about being "unsexed" while also imagining luring a "babe" into a false state of comfort with her "milk" (I.vii.55). Macbeth at least seems cognizant of his unnaturalness when he asks, "why do I yield to that suggestion / whose horrid image doth unfix my hair / and make my seated heart knock at my ribs / against the use of nature?" (I.iii.133-6).

In "Defining Nature Through Monstrosity in Othello and Macbeth", Georgia Brown writes that she was "struck by the frequent references to monstrosity [in *Othello* and *Macbeth*] and wanted to explain why monstrosity should be so interesting to Shakespeare in these particular plays" (Hallock 55). With references to strange creatures like the Anthropophagi and scenes where Othello appears possessed and/or beastlike – e.g., falling into a trance/seizure, foaming at the mouth, alluding to a physical pain (sprouting horns) around his temples – it is no wonder that critics feel compelled to discuss the monstrous in *Othello*. However, *Macbeth* contains remarkably few direct or indirect references to monsters. The words "monstrous" and "monster" each appear just once in the play, as contrasted with over a dozen times in *Othello* (for comparison, *Troilus and Cressida* and *A Midsummer Night's Dream* contain six and seven references, respectively). And only one of those instances explicitly refers to Macbeth: Macduff threatens to display Macbeth's decapitated head on a pole in the fashion of their "rarer monsters" (V.viii.29).

Ambroise Paré explains in his 1573 treatise, *On Monsters and Marvels*, that "monsters are things that appear outside the course of nature (and are usually signs of some forthcoming misfortune), such as a child who is born with one arm, another who will have two heads, and additional members above the ordinary" (Fig. 10) (Paré, Preface). I would argue that while the witches perhaps fit into this notion of the monstrous (as supernatural beings who "appear outside the course of nature" and who also happen to represent "signs of...forthcoming misfortune"), Macbeth and Lady Macbeth do not. To be sure, these villains are unnatural but Brown erroneously assumes that the term is synonymous with monstrous: "One way of defining nature is to look at its opposite and to study what is unnatural and monstrous" (Hallock 55). She further

adds that "monsters and the precise nature of the unnatural are very difficult to pin down" (Hallock 56).



Figure 10. Depiction of a "monstrous child" in *The Works of that Famous Chirurgeon Ambrose Parey, Translated out of Latin, and Compared with the French* (1634)

My broader point is that an early modern conception of monsters would appear narrow and rigid by contemporary standards. We now have a tendency to ascribe "monstrousness" to any kind of villainous and unethical behavior. But of course, with the vast majority of people living in the modern era no longer believing in the existence of fantastical monsters (see the sea monsters that cartographers regularly included in medieval and Renaissance maps), the linguistic meaning was bound to change and expand. As the OED notes, the meaning of "monster" was originally something that was part animal and part human, or a creature that combines elements of two or more life forms. The emphasis was on physical ugliness, disfigurement, and the grotesque – hence, why Shakespeare uses variants of the word monster a staggering 45 times in

The Tempest (mostly to portray Caliban's appearance). The mistake modern critics run the risk of making when reading *Macbeth* is assuming that we can define what precisely is "unnatural" about the play's leading man and lady by conflating the term with our modern sense of monsters being needlessly cruel and wicked.

None of this is to argue that Macbeth and Lady Macbeth do not engage in heinous acts. As John F. Danby explains in *Shakespeare's Doctrine of Nature*, "the root of machiavellism lies in the wrong choice. Macbeth is clearly aware of the great frame of nature he is violating...He recognizes the unnaturalness of his deed" (Danby 165). (One might note that monsters rarely have a choice in their monstrosity.) Macbeth and Lady Macbeth's thirst for power (and capacity to execute their stratagems) is perhaps a problem that is all too human (that is to say, familiar to our species). In "Timon of Ashes", I touched upon the difficulty of defining "nature" – in general a nebulous concept that can encompass anything. However, my sense is that *Macbeth* attempts to narrow the scope by emphasizing the extent to which Macbeth and Lady Macbeth's worldview positions itself as literally anti or against the earth, plants, and land (i.e., "nature" in this play). Thus, part of the solution to their villainy is that nature itself must take a stand against these enemies that have been explicitly marked as "unnatural."

Macbeth vs. Nature

Throughout *Macbeth*, there are constant rumblings from the earth – some metaphorical and some literal. Lennox's observation that "the earth was feverous and did shake" (II.iii.56) when he arrived at the castle on the night of Duncan's murder may seem like a straightforward instance of the pathetic fallacy (which typically deals with climate), but the play takes this tactic

to the extreme by depicting plants and rocks as animate beings. ⁴⁴ As Macbeth prepares to murder Duncan, he tells the earth: "Thou sure and firm-set earth / hear not my steps which way they walk, for fear / thy very stones prate of my whereabout" (II.i.56-8). After seeing Banquo's ghost, Macbeth says "stones have been known to move, and trees to speak" (III.iv.122). And, of course, the marching trees represent the coup de grâce in this struggle between what is natural and unnatural. ⁴⁵

The full theatrical effect of the final fateful battle in *Macbeth* is notable not merely because of the choreographed fighting. The moments leading up to the assault on the castle are crucial in that they force audience members to behold the "moving grove." In *A Midsummer Night's Dream*, when Peter Quince says "this green plot shall be our stage [and] this hawthorn-brake our tiring-house" (III.i.2), he is, as Jeffrey Theis notes, "ostensibly point[ing] to an open forest" while actually "gesturing towards a real platform stage and a tiring-house" (Theis 35). Like in so many of Shakespeare's plays, imagination is key (e.g., the Chorus famously implores the audience at the beginning of *Henry V* to "think when we talk of horses, that you see them / printing their proud hoofs in the receiving earth; / for 'tis your thoughts that now must deck our kings"). But in *Macbeth*, the blurring of the "distinction between sylvan and theatrical space" occurs on a more profound and literal level (Theis 35). For the play to work, the company must use more than a few prop trees scattered in the background. The forest becomes real because the actors must hold branches. The First Folio stage directions indicate that "Malcolme, Seyward,

⁴⁴ Additionally, Lennox's claim is corroborated by other characters.

⁴⁵ For similar claims regarding a kind of vegetative victory and nature enacting revenge against a tyrant, see John F. Danby's *Shakespeare's Doctrine of Nature*, Robert Pogue Harrison's *Forests: The Shadow of Civilization*, and Francois Laroque's *Shakespeare's Festive World*. According to Harrison, "the moving forest of Birnam comes to symbolize the forces of natural law mobilizing its justice against the moral wasteland of Macbeth's nature" (Harrison 104).

Macduffe, and their Army" enter "with Boughes." Soldiers marching onto the stage holding nothing would simply be too great of an imaginative leap.

Macbeth must be threatened with literal branches in retaliation for the fact that this tyrant found no shortage of inventive ways to threaten nature. Readers once again encounter strange rhetoric pertaining to stones and trees when he demands that the witches tell him more:

Macbeth: I conjure you, by that which you profess, However you come to know it, answer me: Though you untie the winds and let them fight Against the churches; though the yeasty waves Confound and swallow navigation up; Though bladed corn be lodged and trees blown down; Though castles topple on their warders' heads; Though palaces and pyramids do slope Their heads to their foundations; though the treasure Of nature's germens tumble all together, Even till destruction sicken; answer me To what I ask you. (IV.i.66-77)

Macbeth is utterly indifferent to the complete destruction of the natural world; he cares not whether trees blow down, rocks bend, or "germens" (i.e., the seeds from which all nature grows) are crushed and rendered infertile. (Again, we see a strange echo to a line from *The Winter's Tale*: "Let nature crush the sides of the earth together and mar the seeds within!") Kerridge is correct that the phrase "nature's germens" is "especially suggestive in ecocritical terms" since germens can refer to the "seed-producing organs or ovaries in a plant" (Bruckner 208). By this point in the plot, it comes as no surprise that Macbeth would denigrate an alternate mode of reproduction that forms the basis for plant life.

For all Macbeth's brutal force and reckless overconfidence, he cannot defy the laws of nature and cause enormous rocks to "slope." But the witches know just how to play into his brashness. When the weird sisters inform Macbeth that "none of woman born shall harm" him, they are clearly toying with someone who comprehends the world only through conventional

mammalian terms (IV.i.96). Although Macduff was delivered via caesarian section, it would be difficult to argue that a woman played no role in "bearing" the child. Thus, perhaps we must look elsewhere to ascertain fully the meaning of the witches' prophesy. If one does interpret the play's conclusion as indicative of nature rising up against a tyrant, then it makes sense to observe that trees are not "of woman born." This is not to say that branches of Birnam wood are literally responsible for Macbeth's death, but rather that Macbeth's myopia ensures that he cannot see the forest for the trees, as the expression goes. When the apparition of a child wearing a crown appears "with a tree in his hand", Macbeth – on account of his shortsighted obsession with kingship – takes issue with the former detail, but makes no mention of the branch. It is no wonder then that Macbeth cannot possibly fathom what the apparition means when it states, "Macbeth shall never vanquished be until / great Birnam Wood to high Dunsinane Hill / shall come against him" (IV.i.108-10). In Macbeth's view, no one can "impress the forest [or] bid the tree [to] unfix his earth-bound root" (IV.i.110-12), so the matter warrants no further consideration. But even something as simple as the use of the male possessive pronoun implies there are broader forces at work.

Macbeth regards trees as harmless and useless precisely because they are fixed to the ground. This attitude, in turn, highlights an underlying belief that immobility and restraint are inherently negative. Again, Shakespeare seems to be engaging with the presumed imperfection and deficiency of plants (as previously discussed in chapter one). In revisiting this theme anew, we should consider how – as Marder writes –"vegetative intake of nutrients and exposure to sunlight are taken to be symbolic of a passive mode of living that does not pursue any objectives whatsoever" (Marder immediately goes on to detail recent studies that have revealed "highly selective adaptational responses" to dispute this longstanding belief (Plant Intelligence 1)).

Although plants are rooted in the ground and thus limited in space and reach, it is hard to deny the evolutionary success of the kingdom Plantae – a kingdom that has managed to "cover the earth without either dominating or conquering it" (Vegetal 475). In considering the weird sisters' riddling prophecies, Macbeth would be wise to take note of such non-domineering existences that hold the key to lasting growth and proliferation.

Of course, if Macbeth and Lady Macbeth showed any kind of restraint, they would cease trying to eliminate anything that stands in their way. These wild desires to unfix, undo, unsex, unbend, unman, unmake, untie, etc. illustrate perfectly Macduff's observation that "boundless intemperance / in nature is a tyranny" and "hath been the untimely emptying of the happy throne" (IV.iii.67-9). Indeed, *Macbeth* reveals the ways in which an antagonist who fails to respect (or even grasp) certain laws of nature can swiftly be "undone."

Understanding "un"

I wish to return now to the seeming ubiquity of "un" words in *Macbeth*. Considering that *Macbeth* is one of Shakespeare's shortest plays, I would contend that their phonetic effect is indeed palpable and that, to the attuned ear, the "un" sound reverberates throughout the tragedy. Incidentally, as significant as terms pertaining to blood are in this play, "un-" words appear with even greater frequency. The following is a list of the most relevant "un—" prefix words in the order they appear in the discourse (an asterisk denotes that a term is repeated more than once):

unseamed, *unfix, unaccompanied, *undone, unsex, unmake, unguarded, undaunted, unusual, unprepared, unbend, unattended, unprovokes, unruly, unwiped, unmannerly, undivulged, unfelt, *unnatural, unbecoming, unlineal, unsafe, unkindness, unmanned, unreal, unfold, untie, *unknown, unfix, unfortunate, unsanctified, *untimely, unjust, universal, unity, untitled, unspeak, unknown, unwelcome, unlock, undone, unnatural, unnatural, unrough, unsure, undone, unbattered, undeeded, untimely, unshrinking

I have purposefully excluded words like "uncle", variants of "understand", and the preposition "under", but there are certain other "un—" words (e.g., "unto", "until") that share a familiar etymology with the above examples of this common prefix.

Although English speakers scarcely realize the distinction in everyday *parole*, two different un- prefixes exist. The first expresses negation and essentially means "not" or the "opposite of." The second has to do with reversal or deprivation. Consider the word "unlockable", which can denote contradictory meanings depending on the context: a) not able to be locked or b) able to be unlocked. I provide this linguistic background to illustrate how productive this particular affix is in word formation. The employment of the "un-" prefix has become virtually unrestricted in the English language; this prefix knows no boundaries or restraint. Accordingly, I would suggest that the morpheme's frequent appearance in the discourse corresponds to Macbeth's own lack of restraint. Furthermore, Shakespeare's employment of "un-" words vastly increases as the play nears its conclusion. What began as a trickle becomes a linguistic downpour (or perhaps "barrage" might be more appropriate given the martial finale). Not coincidentally, the man who once hesitated to take someone's life, vows to kill everyone he sees by the end (V.viii.2).

Richard Marienstras writes that killing "for the sake of killing" becomes Macbeth's "nature" and that this leads to a "mechanical inevitability" in his actions (Marienstras 77-8).

Recent ecocritical work on *Macbeth* builds upon this premise, taking the notion of "mechanical" behavior even further and arguing that the play (despite its eleventh century setting) stages a sharp critique of increasingly industrialized warfare. For instance, in "Mortal Engines and Blasted Heaths: Thresholds of Catastrophic Ecologies in Macbeth", Randall Martin introduces historical context regarding technological advances to argue that "Macbeth's dehumanization is

related to Shakespeare's wider perception that gunpowder-enhanced militarization was denaturing social and natural environments" (Martin 2). Like Marienstras, Martin singles out Macbeth's mechanical tendencies, identifying him as a "martial cyborg" given lines like the description of Macbeth as "valour's minion" (Lii.19) since minion also denotes a small cannon (Martin 1). I daresay many people would agree with such assessments, but I am not sure that it ultimately matters whether we classify the protagonist as robotic or mechanical in his maniacal tendencies. The point is that whatever Macbeth proves to be, it is something that becomes defined by what he is not. Like the prefix, he implies a negation or reversal (e.g., standing in opposition to the natural). The play as a whole operates on the principle espoused by linguists and literary theorists alike – the meaning of x comes into shape only by comprehending what x is not. x

The "un" morpheme need not to be tied exclusively to words with a negative connotation (though such words certainly abound in the discourse). Yes, the sound can serve as a prefix denoting some kind of reversal or deprivation, but it can also form the first part of the prefix uni-, meaning one. When Malcolm (who will ultimately restore rightful rule) pretends to be a tyrant who would "pour the sweet milk of concord into hell / uproar the universal peace [and] confound all unity on earth" (IV.iii.98-101), he gives himself away by using "un" words that are not about *un*doing, but rather call attention to the unity of all living things. His true beliefs could not be further from Macbeth's disregard for nature: "I think our country...weeps...bleeds, and each new day a gash is added to her wounds" (IV.iii.41). Not only is Malcolm's "slipup" the only time the "un" phoneme is used in a demonstrably positive sense, but his use of "milk" echoes Lady Macbeth's rhetoric; in other words, to play the villain in this tragedy, one must pay lip

⁴⁶ Inspired by Saussure's groundbreaking work, Derrida developed his theory of *difference*.

service – or at least allude – to mammalian biology. Macduff, meanwhile, keeps to the vegetal script when he worriedly suggests that Malcolm's "avarice sticks deeper, grows with more pernicious root" (IV.iii.86).

I confess, then, that to include "universal" and "unity" in the previous chronological vocabulary list (where the two naturally appear in quick succession) was somewhat misleading. However, it is important to note that these are the only two "uni-" words in a play otherwise dominated by the negative connotations generally inherent to the "un-" morpheme. Malcolm, as the individual who will restore legitimacy to the crown, naturally has the privilege of speaking the final words in the play, but he also has the privilege of being the only character to break from the overarching "un-" pattern.

Conclusion

At the end of the play, and as reality starts to sink in, we catch glimpses of Macbeth ostensibly coming to terms with the fact that he is no greater than the natural world around him – in fact, he is as much a part of nature as the plants and rocks he previously scorned. He admits that "the yellow leaf...which should accompany old age" he "must not look to have" (V.iii.23-7) and, interestingly enough, inquires as to "what rhubarb, cyme, or purgative drug would scour these English hence?" (V.iii.58). His plan to use certain plants to dispose of the English almost seems comical as it evokes an image of plants (the trees of Birnam wood) fighting plants (herbs). But this is all too little too late as Malcolm, Macduff, and their followers well know. Lennox, viewing the world through a vegetative lens, remarks they will "dew the sovereign flower" as they "march towards Birnam" (V.ii.30). And Malcolm, who will restore the family tree, orders every soldier to "hew him down a bough / and bear't before him...[to] shadow the numbers of

our host" (V.iv.4-6). Of course, to Macbeth's eye, the striking sight of trees advancing forward will seem like hybrid tree-man creatures who have come to reclaim their land. To return to a proto-cyborgian reading of the play, I find such analysis persuasive, but from a different angle: If it is fair to say that Macbeth becomes a machine-like man, then surely one can argue that the play offsets that type of liminal being by explicitly creating another. Whereas *Timon of Athens* presents man metamorphosing into *Homo humus*, *Macbeth* presents a vision on stage that looks like *Homo arboris*.

But why should the side that triumphs over evil maim trees at all? In other words, why should axing branches symbolize the restoration of natural order? Surely an ecocritical reading of *Macbeth* should be able to account for what no doubt seems like needless destruction to many readers. For those who view the play's ending as a return to peacetime agriculture and cultivation after wartime devastation, Malcolm's command would appear to be in line with a sustainable use model (Martin 3). Malcolm's wish is not to chop down whole trees, after all; rather, he seeks to utilize the branches so that the army may obscure their numbers. It hardly bears repeating that felling shoots from a stem or trunk poses no threat to plant. (While chopping off part of a human would result in blood gushing everywhere, no such violence can be said to be inflicted upon trees.) Less obvious, however, is the way in which cutting can promote conservation.

In *An Environmental History of Medieval Europe*, Richard Hoffman explains the technique of coppicing, which he describes as "most unfamiliar to moderns" and especially to North Americans: "It takes advantage of the fact that most broadleaf species will sprout from a stump. You can cut the tree and have it too, for it sprouts again. From those shoots (called 'spring' in England) will come a continual crop of rods, poles, or logs" (Fig. 11) (Hoffmann

184). This woodland practice gained considerable importance during the Middle Ages and Renaissance on account of deforestation coupled with the increasing demand for timber that accompanied population growth (Hoffmann 186). Shakespeare's own knowledge of coppicing is evident in *Love's Labour's Lost* where the forester says to the princess, "hereby, upon the edge of yonder coppice / a stand where you may make the fairest shoot" (IV.i.9-10). I would posit that the phrasing of Birnam wood as "a moving grove" recalls this forester's practice as well. Not only does "grove" imply sustainable husbandry (since the word typically refers to an orchard planted for cultivating some resource), but the adjective captures the outward movement laterally over time of coppiced trees. Moreover, as young shoots proliferate after each coppicing cycle, the new growths resemble a grove sprouting from the original base.

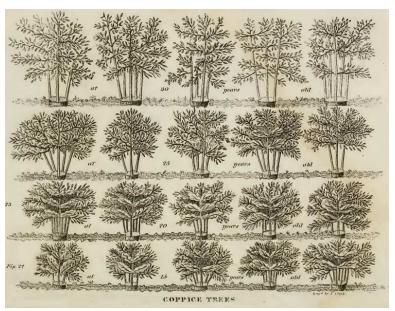


Figure 11. An engraving from Robert Monteath's *The Forester's Guide and Profitable Planter* (1824) showing growth at 15, 20, 25 and 30 years following coppicing.

In his study of the medieval landscape of Essex, Oliver Rackham describes how coppice stools can reach both an immense age and size: "an ash that would normally have a lifespan of 200 years can live and be healthy for more than a millennium if coppiced, [with] its stump, or 'stool', spreading in rings that are as much as 18 feet across" (Ehrenfeld 160). In short, a

regularly coppiced tree – i.e., a tree where humans actively intervene by cutting its wood – can defy the ravages of time (e.g., that "yellow leaf...of old age") and remain perpetually young.

Once this "moving grove" of verdant "leafy screens" comes near, Macbeth imagines himself as a bear tied to a "stake" ("They have tied me to a stake. I cannot fly / but bear-like I must fight the course" (V.ii.1-2)) — an interesting choice considering a mighty animal is hindered and subdued by a single piece of wood holding him back. To be sure, a human must do the actual tying, but this scenario is analogous to the men and branches that combine to form a more powerful whole.

The notion of the earth as a living organism proves crucial to restoring order. Hence, in the play's final speech, Malcolm states that there is "more to do / which would be planted newly with the time" (V.xi.30-1). His final insult directed at Macbeth is also entirely fitting, calling him "this dead butcher" (V.xi.35) – a phrase that captures not just his proclivity to kill, but his close connection to blood. Although Macbeth does go out in a blaze of glory, one would be hard-pressed to argue that most readers feel pity for him in his final moments. Unlike with the traditional Aristotelian model of a tragic hero, it is not clear that Macbeth has a single tragic flaw or that he experiences a moment of recognition. Naturally, Macbeth realizes that the witches' prophesies have come to pass, but there is no moment of recognition as to his own true character. Upon hearing that the woods have begun to move, he simply says: "I 'gin to be aweary of the sun, / and wish *th'estate o'th' world* were now *un*done" [emphasis added] (V.v.47-8). At first glance, his remark almost sounds poignant, but, upon closer inspection, it becomes painfully clear that Macbeth will fight against nature until his last breath.

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⁴⁷ Macbeth's displeasure with the sun – the primary energy source for plants – is another pertinent (though hardly surprising) feature of these lines.

Chapter 4 "Jove's stout oak": Trees and Power in *The Tempest*

Introduction

In this chapter, I examine the exploitation of natural resources in *The Tempest* in order to reassess Prospero's source of power. More specifically, I focus on the problematic relationship that various characters have with trees and how this particular resource confers authority within the world of the play by structuring discourses of power, as well as conceptual and existential hierarchies. In doing so, I detail how the dependence on trees manifests itself through a wide range of guises while introducing historical context regarding deforestation to inform my reading. The survival element is of course important and should not be overlooked, but less obvious are the ways in which trees become integral to a sense of self-worth and aid in individual development or growth. Much in the way that "roots" became a focal point in *Timon of Athens*, trees and wood dominate the *The Tempest's* language and imagery. For a play that ostensibly concerns the ocean – and indeed opens by depicting the ocean's fury – we quickly see that images of wood are omnipresent.

In addressing some of the dynamics that inform the play's actions, my reading is naturally indebted to New Historicist interpretations of *The Tempest*. As Derek Cohen notes in *Searching Shakespeare*, "the construction of Caliban as a colonized native has become a truism of contemporary criticism of *The Tempest*" and Prospero is habitually regarded as "the embodiment of European, Old World, cultural domination" (Searching Shakespeare 41).

Scholars like Barbara Fuchs have deftly unpacked the "condensed layers of colonialist ideology" that mark the play (Byrd 62). That said, this chapter does not focus on how *The Tempest* fits "the pattern of...traditional master-slave interaction" or speaks to the influence of colonialism and imperialism (Searching Shakespeare 42). Rather, I aim to elucidate how the accumulation of

certain linguistic details and metaphorical patterns construct a remarkably clear picture of Prospero's power and worldview while simultaneously questioning the former's validity and the latter's accuracy.

Man's Arrogance over Nature

The play begins *in media res* with a disturbing and frightening scene – a violent storm that endangers the lives of numerous individuals aboard a ship. And yet, I use the adjective "disturbing" in part because there is a certain levity to the rhetoric that scarcely fits the situation. The noblemen onboard simply do not appear to grasp that their lives are in danger. When they chastise the crew for not showing their social superiors the proper amount of respect, the boatswain responds, "hence! What cares these roarers for the name of king?" (Li.14-15). In not so many words, the boatswain is observing that the sea is unforgiving, waves care not for titles and hierarchy, and nature is all-powerful. ⁴⁸ To further reiterate his point, the boatswain says, "if you can command these elements to silence and work peace of the present, we will not hand[le] a rope more" (Li.18). It is clear the men have little power when pitted against the forces of nature. Still, the noblemen pay no heed. Gonzalo, by far the most kindhearted of King Alonso's lords, jokes, "I have great comfort from this fellow. Methinks he hath no drowning mark upon him; his complexion is perfect gallows" (Li.25). Again, the levity on display is wholly inappropriate; what is more, their attitude seems to mock nature insofar as they do not understand that for all

⁴⁸ Shakespeare's Boatswain comes across like the commoner version of King Canute. According to Henry of Huntingdon *Historia Anglorum* (c. 1129), the eleventh century king of England, Denmark, Norway, and Sweden used his inability to control the elements and the sea to illustrate that a king's power is empty compared to God's authority. The legend, however, has become so distorted over time that references in popular culture today usually depict Canute as a man who arrogantly believes he can hold back waves.

their power to "command" others to "silence" in the safe confines of the aristocrat court, their titles mean nothing here (I.i.26).

Gonzalo refuses to let up with this torrent of inappropriate insults, stating, "I'll warrant him for drowning, though the ship were no stronger than a nutshell and as leaky as an unstanched wench" (I.i.41). He compares their vessel, which is made of wood, to something that he evidently considers to be a weak object that would be found in nature – curiously, a seed that can give rise to a tree. But in truth, nutshells are generally remarkably strong, hence why grocery stores sell pre-shelled nuts, or why humans must resort to using metal nutcrackers to open any number of nuts.⁴⁹ Gonzalo also chooses to bring up the taboo subject of menstruation (one of the most recognizable aspects of mammalian biology) – odd though it is that the subject should appear at such an early stage. He does this to insult the boatswain – a tactic we shall see again in Prospero's interactions with Caliban.

The "nutshell" remark, like so many images in *The Tempest*, belongs to a not so subtle pattern of characters constantly undervaluing plant life, and, on a related note, assuming such organisms are expendable resources for human consumption. For much of the play, trees are constantly being transformed into wood - i.e., a tool for man's use rather than a living organism in its own right. Trees are used even in unexpected ways that have nothing to do with lumber or kindling, but rather involve death and oppression. Stefano warns Trinculo, "if you prove a mutineer, the next tree" (III.ii.33). This is one of many instances where trees are used as punishment – a rather warped conception of a tree in the sense that, when going about our daily business, most of us are unlikely to glance at a tree and think of it as a tool for inflicting harm. And yet, in a strange way, this mindset hints at the power of trees; these massive organisms can so easily destroy a human life – at least when one man uses them against another.

⁴⁹ Incidentally, nutshells can stay afloat quite well in water.

In terms of the play's representations of wood, we see a shift in tone when this fibrous substance is figured explicitly as timber and logs, as when Miranda says to Ferdinand, "I would the lightning had / burnt up those logs that you are enjoined to pile. / Pray set it down, and rest you. When this burns / 'twill weep for having wearied you" (III.i.16-9). This moment is part of a lighthearted and romantic exchange, but Miranda's words underscore an attitude of being able to do as one pleases with this particular resource without regard for the consequences. The sentiment also comes across as silly and wrongheaded since these precious resources are not to blame for Ferdinand's predicament (even though she does make a point of anthropomorphizing the wood), and Ferdinand has already gone through the trouble of carrying a great number of logs. But Miranda's remark reveals the extent to which images of wood being destroyed shadow characters every step of the way (including the opening where a wooden vessel will ostensibly be dashed to pieces).

Prospero's Relationship to Trees

Where Miranda might have learned such an attitude is no mystery; her remark concerning using a bolt of lightning to destroy a tree sounds eerily similar to the type of rhetoric Prospero uses (e.g., "Have I given fire and rifted Jove's stout oak / with his own bolt" (V.i.45-6)). Her father has a complicated relationship with trees, to say the least:

Prospero: Thou, my slave,
As thou reportest thyself, wast then her servant;
And, for thou wast a spirit too delicate
To act her earthy and abhorred commands,
Refusing her grand hests, she did confine thee...
Into a cloven pine; within which rift
Imprisoned thou didst painfully remain
A dozen years...
It was mine art,
When I arrived and heard thee, that made gape

The pine and let thee out.

Ariel: I thank thee, master.

Prospero: If thou more murmurest, I will rend an oak And peg thee in his knotty entrails. (I.ii.272-97)

After hearing this exchange, we must ask ourselves whether Prospero is really so different from Sycorax. Indeed, numerous scholars have noted the striking similarities between Prospero and Caliban's "dam." Given their magical and witchlike powers, Marina Warner writes that they exhibit a "similar mastery over the elements" (Hulme 100). Suzanne Penuel goes further and notes that "both come to the island with a child" and may have been "banished because of their interest in supernatural powers" (Moncrief 121). Genevieve Guenther observes that the torments Sycorax "inflicted on Ariel for his refusal to perform her commands...are reproduced in the torments that Prospero inflicts on Caliban for his refusal, or, rather, for his mere reluctance to perform his commands" (Guenther 96). What is more, both raise their only children as single parents since she lacks a husband and he a wife.

But as the excerpt above shows, the former and present rulers of the island are shockingly similar in their willingness to use trees for very particular (and some might say nefarious) purposes. For Prospero, at best, the tree is incidental since he destroyed or at least maimed the tree to get Ariel out. But he is quite clear that he is willing to split open another tree just to punish poor Ariel and prove a point. Another noteworthy detail is the phrase "knotty entrails", which immediately reminds one of guts and organs. In other words, in almost the same breath that Prospero speaks about destroying and harming trees, he also characterizes them in a manner that emphasizes their very vitality and kinship to other living creatures.

As discussed briefly in the first chapter, ancient Greek originally had no word for matter, so Aristotle adapted "hyle" (i.e., wood) to signify the substance that composes all known entities

in the universe. Prospero's odd phrasing at this juncture is reminiscent of *The Winter's Tale's* propensity to figure people as plants, except here the tree is more like a person, thus sharing the same imaginative space with Spenser's Fradubio in *The Faerie Queene* – a man with the outward form of a tree (Book I, canto ii). But Fradubio's true human nature became clear the moment Redcrosse "pluckt a bough", and out of the "rift there came small drops of gory bloud" (I.ii.30). While Fradubio's own insides belie his treeness, Shakespeare creates a fictive world where even intestines are made of wood. Indeed, throughout *The Tempest* there is a noticeable absence of blood; instead, everything seems to revolve around wood. In that respect, like *The Winter's Tale, The Tempest* may serve as a precursor to hylozoism's seventeenth century revival.

As one might surmise from the exchange with Ariel, Prospero, more than anyone, uses trees to enact his revenge. Alonso, Antonio, Sebastian, and Gonzalo are kept "prisoners" in a "lime-grove" (V.i.9-10) and Stefano, Trinculo, and Caliban fall prey to his plan to "hang [clothes] on this lime" (IV.i.194). Incidentally, the "lime-grove" is specifically mentioned as what protects his abode from the elements (V.i.10) so it serves an important dual purpose. In Wooden Os: Shakespeare's Theaters and England Trees, Vin Nardizzi writes that even King Alonso and his courtiers are like "wooden chess pieces that Prospero...move[s] around the island in spiteful sport" (Nardizzi 130). For many of these instances it is unclear why trees are necessary to accomplish Prospero's goals (especially when he has greater magic at his disposal). Nevertheless, using trees becomes the default modus operandi. Though Prospero's books and cloak are the most recognizable sources of his magic, trees arguably constitute his chief tools and props, if only for practical reasons.

Prospero's staff, for one thing, is of the utmost importance. He says to Ferdinand, "for I can here disarm thee with this stick / and make thy weapon drop" (I.ii.476-7). Ferdinand resists,

but to no avail because Prospero has his wand – which is probably a fairly ordinary piece of wood (a whittled down tree, if you will). Not only does Prospero use wood for day-to-day activities, it also played a pivotal role in terms of his salvation. As he explains to Miranda the tale of their exile, he recounts:

Prospero: So dear the love my people bore me, nor set A mark so bloody on the business, but With colours fairer painted their foul ends. In few, they hurried us aboard a bark, Bore us some leagues to sea; where they prepared A rotten carcass of a boat, not rigged. (I.ii.141-6)

Prospero emphasizes that blood absolutely could not be involved in this "business." Interesting, then, that to solve the problem of what to do with Prospero and Miranda, the exiled individuals become creatures fit for a "bark" – a homograph of the outer skin of a tree. Boats are made from trees and even the word "aboard" is relevant since etymologically it comes from being literally on a board. Similar to "knotty entrails", Prospero's phrasing in "the rotten carcass of a boat" gets to the heart of the matter: the boat is the dead body of a once living tree. Of course, the word "carcass" seems more suitable for describing road kill, but here Prospero (when describing their most vulnerable moment) appears to comprehend fully what the wooden boards represent.

Prospero's Hierarchies

Although Prospero at times seems to go out of his way to characterize trees as living (if not breathing) organisms, the relationship between humans and trees is hardly symbiotic. With the consumption of wood for boats, tools, barrels, boards, boxes, etc. comes deforestation. In other words, our mere existence accompanies the death of trees. This inevitable reality creates a rather jarring and ironic effect at the point where the protagonist explicitly and consistently likens himself to a tree. Early on, we learn that Prospero's "princely trunk" was suffocated by

his brother's "ivy" (I.ii.86). The bitterness and disgust are palpable in Prospero's tone and word choice: "Now he was / the ivy which had hid my princely trunk / and sucked my verdure out on't" (I.ii.85-7).⁵⁰

In essence, Antonio sucked the vitality and power out of Prospero by being a parasitic plant – again, this is not a symbiotic relationship that is being depicted. This particular plant has considerable strength; buildings can be damaged if overgrown by ivy. But putting aside ivy's remarkable propensity to grow and spread, it is evident that, from Prospero's point of view, not all plants should be regarded as equal. Prospero's reasoning seems to be something along the lines of the vine (which, to be fair, could potentially belong to a poisonous variety) obscures the splendor of the majestic tree (with obvious overtones of the noble and rightful lineages within a family tree). To expropriate a line from George Orwell's *Animal Farm*, Prospero's outlook can be described thusly: "All plants are equal, but some plants are more equal than others." Indeed, the most "equal" of all would look something like a majestic genealogical tree with different monarchs representing new outgrowths (Fig. 12).

I should note that although ivies may appear parasitic to the untrained eye, this is not strictly speaking true. Ivy growing on a trunk cannot kill a tree; the plant merely uses the trunk as a ladder and for support. Because bark is non-living tissue, the ivy (which creeps up the bark) does not invade the tree's vascular system. Most importantly, ivies have their own root systems below the ground and are thus self-sufficient in how they receive nutrients and water. So Prospero's complaint stems, at worst, from a purely ornamental concern or, at best, from an

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⁵⁰ Compare the image Prospero creates to the ivy that appears in *A Midsummer Night's Dream* or *The Comedy of Errors*. In the former, Titania's "ivy" charmingly envelopes her beloved Bottom: "the female ivy so / enrings the barky fingers of the elm. / O, how I love thee! How I dote on thee!" (IV.i.40-2). In the latter case, Adriana informs the Antipholus she believes to be her spouse, "thou art an elm, my husband, I a vine, / whose weakness [is] married to thy stronger state" (II.ii.174-5). By coincidence, in these two particular examples Shakespeare feminizes ivy (and likens men to elms in particular); of course, associating ivy with the supposedly weaker sex arguably accentuates the stateliness and strength of trees.

objection to having to "compete" with another life form and share the resources needed to flourish (e.g., water, sunlight).



Figure 12. Detail of the genealogy of Edward IV on trees sprouting from Edward I and Peter of Castile from the *Typological life and genealogy of Edward IV* (c. 1470).

The notion of a vegetal hierarchy is writ large in *The Tempest*. To be sure, other Shakespeare plays hint at such an idea, or in some sense imply it by focusing on the benefits that plants can provide to man (with some plants invariably providing more advantages than others). For example, after going insane, Ophelia famously outlines some of the traditional uses and symbolic meanings of common herbs and flowers. And then there are well-known moments like the garden scene in *Richard II* where a well-tended orchard becomes a metaphor for the health and stability of a political state. But *The Tempest* offers us something different; plants become integral to Prospero's conception of self and his concern with order and hierarchy.

Immediately after the ivy-trunk-verdure line, Prospero continues with the plant analogy: "and executing the outward face of royalty / with all prerogative, hence his ambition growing" (I.ii.104-5). Without question, Prospero thinks in botanical terms, which presents a similar

Macbeth perceived the world through green-colored glasses. But Prospero is very particular in what he considers "good" vegetative growth – and I do not simply mean that he prefers some plants over others (although that is an important factor). Specifically, he favors movement in an upward direction, i.e., towards the sky. Growth outwards in a horizontal direction is not depicted in a favorable light. To be sure, ivy can and does grow up by climbing walls or trees, but it cannot do so alone; the plant needs a crutch to prevent it from growing horizontally.

From a broader perspective, Prospero's attitudes concerning exploitation and hierarchy/order are very much in keeping with Western philosophical tradition and biblical themes. Regarding the former, no less an authority than Plato attempted to legitimize a top-to-bottom hierarchy by grounding or rooting "the human plant in the eidetic ether" – i.e., the realm of Ideas (Vegetal 470-2):

At the inception of Western metaphysis in Plato's thought, a dire attempt is made to harness the plant for the purposes of justifying the unique theo-ontologial status of the human. The highest kind of soul is housed, as Plato states in *Timaeus*, "at the top of our body", elevating us to the position "not [of] an earthly but [of] a heavenly plant – up from the earth towards our kindred in the heaven." The root of the human plant is to be sought not in the ground below its feet – since this would result in confusion with the earthly plants that, etymologically, connote something driven in, if not pushed into the ground, with the feet (*plantare*) – but in the sky...which bestows upon us our humanity. "For it is by suspending our head and root from whence the substance of our soul first came that the divine power keeps upright our whole body." (Vegetal 470)

As the play progresses, it becomes clear that Prospero subscribes to this "inversion of earthly perspective" (Vegetal 471). Even putting aside the fact that, as Duke of Milan, Prospero spent his days philosophizing and pursuing a life of the mind (and could in no respect have been described as grounded), we see that post-ouster, he still appears bent on reaching the empyrean.

In addition to his magic and books, Prospero compares himself to the tallest living organisms on earth (with branches extending upwards into the sky). Meanwhile, Prospero spends an inordinate amount of time lowering other people to the ground by casting spells that cause them to lay asleep stiff as a board – an action analogous to chopping down trees and converting them into horizontal logs.

In terms of Christian theology, we find that the "vitality of plants is accepted but the hierarchical view of life is continued" (Hall 8). As Matthew Hall explains in *Plants as Persons: A Philosophical Botany*, "the predominant Western relationships with plants are instrumental and hierarchical, and the drive toward separation is based upon the systematic devaluation of the lowliest parts of the hierarchy" (Hall 9). Hall is even more forthright than Marder in ascribing ethical consequences to what is fundamentally speciesist logic: "These are the processes that deny moral consideration to plants... In biblical thought, as well as in Plato and Aristotle, hierarchies are built around the issue of use and violence...There is a tension here between the recognition of plants as living beings and the need to kill plants on a daily basis to survive. Rather than acknowledge this killing, and face possible limits to human action, these hierarchies suppress it" (Hall 8-9).

This "logic of domination" essentially allows Prospero to have his tree, and cut it too – i.e., reap the symbolic value of trees while maintaining the "instrumental mode of human-plant relationships" (Hall 8). This kind of tension is evident throughout the bible, but even when trees are used in a purely symbolic (as opposed to instrumental) manner, the trappings of hierarchy and dominion persist. For instance, the well-known parable of the trees in the Book of Judges typifies the hierarchical mindset and shows how easily it extends beyond the human:

The trees went foorth to anount a King ouer them, and sayde vnto the oliue tree, Reigne thou ouer vs. But the oliue tree said vnto them, Should I leaue my fatnes, wherewith by me they honour God and man, and go to aduance me aboue ye trees? Then the trees sayde to the fig tree, Come thou, and be King ouer vs. But the fig tree answered them, Should I forsake my sweetenesse, and my good fruite, and goe to aduance me aboue the trees? Then sayd the trees vnto the Vine, Come thou, and be king ouer vs. But the Vine sayde vnto them, Should I leaue my wine, whereby I cheare God and man, and goe to aduance me aboue the trees? Then said all the trees vnto the bramble, Come thou, and reigne ouer vs. And the bramble said vnto the trees, If ye will in deede anoynt me King ouer you, come, and put your trust vnder my shadowe: and if not, the fire shall come out of the bramble, and consume the Cedars of Lebanon. (Judges 9)

This is not a condemnation of rulership in general, but rather a warning that certain lowly plants (i.e., the bramble or thorn bush) would seek to destroy more majestic exemplars (e.g., the cedar) if given power. Another important lesson of the parable is that each tree has its own place and function in the world (an appealing and reasonable viewpoint to the hierarchy-obsessed Elizabethans).

With respect to the issue of exploitation, it comes as no surprise that after Adam and Eve's expulsion from Eden, the bible displays a certain eagerness towards converting the earth's trees into wooden commodities – an outlook sadly in keeping with man's fall from grace and detachment from the prelapsarian world and its emphasis on living in harmony with nature. After the fall, we find God frequently commanding people to make things with trees such as when God commands Noah, "make thee an Arke of pine trees" (Genesis 6:14) or when he commands Moses to build a tabernacle using shittim wood (Exodus 25:10). In truth, it does not take long for trees to become a resource (certainly an essential and valued one, but a resource to be exploited nonetheless) and the specificity involved frequently borders on fetishization (e.g., "I must have *x* type of wood to create *y* product). In the case of "shittim" (referring to acacia trees that grow on Mount Sinai), its close-grained orange-brown wood was "well adapted for cabinet

work" (Peloubet 217). Given that Prospero assumes a godlike role in the play (an observation countless scholars have made), it is easy to see why he has this mentality involving dominion over trees. After all, these are his resources and Prospero will do with them as he pleases.

Deforestation

Prospero's rhetoric presents a cognitive dissonance of sorts. On the one hand, he speaks of himself as a tree and he refers to trees and the earth itself as living breathing creatures not unlike human beings ("veins o' the earth" (Lii.256)). Yet, as the image of overgrown ivy suggests, things are not as they should be in Prospero's world. For starters, although Prospero compares himself as a tree, he does not explicitly spell out the ramifications of that comparison. As I alluded to before, Prospero is not so much a "trunk" but an important branch of a family tree. By foregoing his duties, Prospero stunted the tree's growth and nearly prevented his own branch and buds from flourishing. In addition to his failings as a ruler when he lived in Milan, there are other troubling aspects about the protagonist's behavior and it is not always clear if an audience member's first reaction would be to feel sympathy towards Prospero considering his harsh treatment of Caliban and Ariel. More generally, I would argue that much of his rhetoric about trees – which implies that these stately organisms possess an inherent nobility – fails to match his actions.

How, then, do we make sense of Prospero's relationship to the natural resources on which he most depends? Prospero is ostensibly at the mercy of trees since he needs them for everything from staying warm to ensnaring his victims. And yet, trees are constantly being chopped down to satisfy Prospero's every whim. In all likelihood, there is no straightforward answer; rather, the relationship that characters like Prospero have to trees belongs to a long

tradition with respect to the "role of forests in the cultural imagination of the west" (Chaudhuri 74). As Robert Pogue Harrison argues in *Forests: The Shadow of Civilization*, "Western civilization has defined itself through a complex and often contradictory relationship to forests" (Chaudhuri 74). That said, the complete lack of concern for the probable rampant deforestation that would have resulted due to Prospero's actions can be read as part of current and pervasive problems that would have registered with at least some members of Shakespeare's audience. (Incidentally, I do not think we should be quick to dismiss concomitant references to the island being bare or barren and the repeated portrayals of timber as mere coincidence.) *The Tempest* is, after all, one of plays in the Shakespearean canon that lends itself most readily to historicist readings. But as important as it is to consider the influence of William Strachey's *True Reportory* on the play or the implications of Trinculo's "dead Indian"/"doit" remark, it is also important to look at what was happening on the ground.

As discussed in the introductory chapter, it would be myopic to assume that individuals living in early modern England had no regard for the fate of trees. Michael Drayton addressed the issue of deforestation directly and "with both wistfulness and concern" (Environmental Degradation 17). In *Poly-Olbion* (1613), the poet repeatedly "laments over the wanton felling of ancient woods" – particularly in Songs 3 and 17 – and in his last work, "The Muses Elizium" (1630), Drayton "figures himself as a Satyre, banished from...England owing to deforestation (Sullivan 296). Meanwhile, John Evelyn's *Sylva* (1662) sought to "reverse the loss of woodland by encouraging reforestation and protective legislation" (Environmental Degradation 17). Evelyn writes that "men should perpetually be Planting" and warns against "continu[ing] to destroy our Woods, without this providential Planting...great Discretion, and Regard of the Future" (Sylva 207). Arthur Standish's *The Common Complaint of the Generall Destruction of*

the Waste of Woods in this Kingdom (1611) – which was written around the same time as The Tempest – imagines a "dire eco-political collapse" for England ("no wood no Kingdome") (Nardizzi 113). Standish "fears that England will suffer an unbearable catastrophe without an intensive program of planting trees" (Nardizzi 113). These are but a few of the most well-known examples, but they provide a good sense of why scholars have concluded that "early modern Englishmen and women could and did see the disappearance of England's forests as a threat to their society's well-being and as the loss of a way of life" (Environmental Degradation 17).

We also need to remember that, if anything, individuals in this era were more intimately acquainted with trees than most of us could ever hope to be. As a resource, wood was an inescapable part of people's lives. In Global Interactions in the Early Modern Age, Charles Parker illustrates how essential wood was to all aspects of life in early modern Europe. That a family might need to devote ten percent of its income to wood alone is hardly surprising considering that Europe was in the midst of the Little Ice Age (Parker 163). In that sense, the inordinate amount of attention paid to procuring a seemingly never-ending supply of firewood in this play is perhaps simply a reflection of the reality of life at this time. Parker explains that, "by the end of the seventeenth century...the overcutting of forests without any policy for replanting led to severe deforestation in many parts of Europe. Woods occupied no more than ten percent of England and Wales, twelve percent of Ireland, and less than ten percent of Scotland...Even in areas where deforestation had not produced a shortage, the perception of scarcity gripped societies. Scholars have determined that when forest acreage goes below twenty percent of a region's land area, the perception emerges among people that a timber crisis exists" (Parker 162). He goes on to explain how "the timber shortage preoccupied European political and economic elites throughout the early modern period" (Parker 162).

Clearly, day-to-day necessities were one crucial element of the reliance on wood, but at the "higher levels of governmental and private financial enterprise, the construction of ships for navies and other marine vessels required an extraordinary amount of timber" (Parker 163). Approximately 3,500 trees went into "the construction of one large warship" (Parker 163). This astonishing amount is only compounded by the fact that Shakespeare is writing during an era of exploration when England, Spain, Portugal, France, and the Netherlands owned large navies (Parker 163). Parker details many of the other stresses on the wood supply (e.g., increasing industrial demand for energy) that came into play, but the end result is hardly surprising (though oddly resonant with *The Tempest*): "The need for fuelwood and timber gave European elites added reason to support overseas exploration, and growing deforestation made it all the more necessary to acquire new sources of lumber in the early modern world" (Parker 163). This is not to say that we should view Prospero as an explorer (let alone some kind of fortune seeker), but there is every reason to view the play's fascination with trees, and specifically trees on a remote unknown island that can provide timber, as emerging out of this specific historical context. Or, as Nardizzi puts it, "scant scholarly consideration has been paid to the deforesting of *The* Tempest's woodlands" despite every indication that "Caliban's burden...signals the extensive reach of lumber in and beyond the virtual world of Shakespeare's play" (Nardizzi 113).

Caliban and Conservation

As Duke of Milan, Prospero repeatedly failed to consider practical matters, but on the island Prospero needs wood for survival; as such, obsessively orders Caliban to procure more firewood. On one level, Prospero's power over nature is never truly up for debate; Miranda's first words – a humble yet extraordinary request – aptly puts the matter in perspective: "If by

your art, my dearest father, you have / put the wild waters in this roar, allay them" (I.ii.1-2). The first description we have of Prospero informs us that this is a man who ostensibly controls nature (an astonishing proposition for a mere mortal!). But his interactions with Caliban – the main source of his wood – paint a different picture. Unlike the airy sprite Ariel, Caliban is not too good for "earthy...commands" (I.ii.275):

Prospero: But, as 'tis, We cannot miss him; he does make our fire, Fetch in our wood and serves in offices That profit us. What, ho! Slave! Caliban! Thou earth, thou! Speak.

Caliban: [Within] There's wood enough within.

Prospero: Come forth, I say! (i.ii.313-19)

If trees are the island's chief natural resource, then perhaps Caliban's response is conservationist in nature; in other words, he informs Prospero that they have enough wood and should stop cutting down more trees for nothing. If Caliban is the "earth" (as Prospero refers to him), then he would have a vested interest in preserving his offspring, in this case the plants that spring up from the ground. Another possible explanation of the apparent difference in how Caliban and Prospero treat the land is that Caliban – as a native inhabitant – views the island's forests as something to preserve for future generations (in this case the denizens whom Caliban would have "peopled...this isle with" (I.ii.354)), while Prospero – a colonial transplant and transient – sees natural resources as something to maximize in the short term.

While the notion of "conservation" might seem distinctly modern, the movement has strong roots in biblical tradition and, indeed, was a relevant idea for managing and stewarding the land in Shakespeare's day with no less an advocate than James I. As Edward Berry explains in *Shakespeare and the Hunt*, James I "can be called an early conservationist. He enlarged the

forests and parks of England, protected and increased the wildlife, even sometimes in opposition to his own officers, for whom the collection of revenues through timber was the highest priority. As is true of some modern hunters, however, his passion for environmentalism derived from the simple desire to kill...For him, forests existed to serve the recreation of the king" (Berry 208).

With respect to how this social context relates to *The Tempest*, Berry argues that "Shakespeare's play... hints towards a more modern attitude" (Berry 208). He explains:

To release Ariel to the air and Caliban to his island is to give up a coercive power over elemental nature, to recognize its own autonomy. This is not to sentimentalize nature, for both Ariel and Caliban can only be left to their own devices if left in their own sphere; in society, both must be controlled. Nor does the gesture towards release sentimentalize Prospero of the play. The release is hard earned, reluctant, and like the play's other hopeful gestures towards a "brave new world", carries with it a skepticism born of tragic experience. *The Tempest* thus participates in the Jacobean culture of the hunt...[and] crystallizes in a single, powerful symbol Shakespeare's continuing preoccupation with the violence of the hunt. It situates Prospero's furious chase of the conspirators within a long tradition of thought linking the origins of the hunt with the origins of tyranny. (Berry 208)

Although I would agree that *The Tempest* does reveal a "more modern attitude", I am struck by Berry's observation that "in society, both [Ariel and Caliban] must be controlled." Berry does not draw the obvious link between timber (and the corresponding revenue it brings in) and society – in other words, civilized society virtually by definition entails a massive consumption of resources. I say "virtually" because one could envision a future where man has learned to control or mitigate the harms of widespread consumption, whether by creating solely biodegradable and nontoxic materials or recycling everything we use. But for now, civilization as we know it involves the constant depletion of the earth's myriad resources. As Freud writes in *Civilization and Its Discontents*, "we recognize, then, that countries have attained a high level of civilization if we find that in them everything which can assist in the exploitation of the earth by

man...everything, in short, which is of use to him, is attended to and effectively carried out" (Freud 76).

I would argue that *The Tempest* leaves us little choice but to conclude that someone like Caliban can "only be left to [his] own devices" at the point where timber is no longer needed. However, I am not convinced, as Berry seems to be, that the gathering of timber links the play to the Jacobean culture of the hunt. In his zeal to associate Prospero with violence and tyranny (especially over the likes of Caliban) Berry makes a rather untenable leap. While I wholeheartedly agree that *The Tempest* brings to mind concerns over conservation, I am not convinced that such concerns would resonate with those who view conservation only through the lens of hunting animals – which is what Berry does, and understandably so since even today many conservation arguments are framed in terms of sustainable yield and population management (both euphemisms for a quota of animals to be killed). But are Prospero's elaborate revenge plans truly a "furious chase" analogous to the violence of the hunt? If anything, Prospero is the one being hunted (however ineptly) by Caliban, Stefano, and Trinculo. His wicked brother too was "hunting" him prior to the ouster. Simply put, Prospero is not the King James of *The Tempest*; he does not appear to have any interest in conservation (e.g., enlarging forests), nor does he furiously chase others (whether deer or men).⁵¹ The play instead presents us with a broader understanding of conservation – one that takes into account the most fundamental resource at stake – the land itself.

⁵¹ We cannot even affirmatively state that Prospero orchestrated the outsiders' arrival on the island. They were traveling from the marriage of Alonso's daughter; that is the occasion for setting sail and why they were even in the vicinity at all. Yes, Prospero concocts the storm that brings their ship ashore, but then he does not so much chase the castaways as manipulate and confuse them in a number of ways.

Caliban's Ties to the Land that Binds Him: Power and Hierarchy

Whatever one makes of Caliban's moral character, most readers would likely come away with the sense that he genuinely loves the land and agree that he is at his most eloquent when discussing it:

Caliban: I must eat my dinner.
This island's mine, by Sycorax my mother,
Which thou takest from me. When thou camest first,
Thou strokedst me and madest much of me, wouldst give me
Water with berries in't, and teach me how
To name the bigger light, and how the less,
That burn by day and night: And then I loved thee
And showed thee all the qualities o' the isle,
The fresh springs, brine-pits, barren place and fertile:
Cursed be I that did so! All the charms
Of Sycorax, toads, beetles, bats, light on you!
For I am all the subjects that you have,
Which first was mine own king: And here you sty me
In this hard rock, whiles you do keep from me
The rest o' the island. (I.ii.334-46)

The passage is powerful and touching in part because we can easily understand Caliban's point of view. He wants to protect his island and he offers a persuasive claim for why it should be regarded as his. But these lines are not even Caliban's most poetic and eloquent statement about the island. That honor goes to the oft-quoted lines he says to Stephano and Trinculo:

Caliban: Be not afeard; the isle is full of noises, Sounds and sweet airs, that give delight and hurt not. Sometimes a thousand twangling instruments Will hum about mine ears, and sometime voices That, if I then had waked after long sleep, Will make me sleep again: and then, in dreaming, The clouds methought would open and show riches Ready to drop upon me that, when I waked, I cried to dream again. (III.ii.130-8)

Evidently, Caliban is able to see the island's beauty no matter the circumstance. He derives pleasure and joy from the berries and springs, but he even appreciates those eerie and magical

noises – instruments and voices – that Prospero has a large hand in generating. Julia Reinhard Lupton even goes so far as to say that Caliban is "unique in his ability to apprehend the island's beauties" and is therefore "at one with the island" (Creature 18). Caliban clearly has much to show and offer, but, in his view, Prospero takes advantage of his goodwill and confines him to a "hard rock" while enjoying the abundance on the "rest of the island."

Continuing with this idea of a hierarchy of plants (something that is not a prominent feature of the other plays examined in this dissertation), as one would expect, Caliban is typically associated with small plants that are close to the ground (e.g., berries) in order to underscore his lowly and servile position. Caliban clearly has difficulty escaping from this bottom-dweller mentality as evidenced by his futile attempt at a curse when he wishes for "all the infections...from bogs, fens, flats" to fall on Prospero (i.e., the tree) (II.ii.1).

Incidentally, he makes that curse immediately after entering with a "burden of wood" (stage direction) and, of course, it is his burden – literally and metaphorically on multiple levels. But, like others before him, Caliban eventually perceives a way to turn that very burden into a tool for revenge against his oppressor:

Caliban: Why, as I told thee, 'tis a custom with him, I' th' afternoon to sleep: There thou mayst brain him, Having first seized his books, or with a log Batter his skull, or paunch him with a stake, Or cut his wezand with thy knife. Remember First to possess his books; for without them He's but a sot, as I am, nor hath not One spirit to command: They all do hate him As rootedly as I. Burn but his books. (III.ii.82-90)

Put simply, trees are associated with dominance and strength. Those who have power are in a position to wield scepter-like branches (or staffs, as the case may be) and, more generally, to utilize these towering organisms to their advantage. Once Caliban, who was previously likened

to shrubs, berries, and bogs (but remains "rootedly" hate-filled), gains confidence from enticing Stefano to kill Prospero, he gleefully suggests they use a "log [to] batter his skull" or "paunch him with a stake" (III.ii.84-5). Caliban's violent outburst is noteworthy because – whether consciously or not – he is attempting to a) participate in the play's established discourse of power and b) behave like the other "civilized" individuals in this play who use trees as tools.

Seeing Caliban strive to be something more than a lowly slave but fail miserably is rather poignant – or at least it would be if his motives were not so sinister. After all, it is one thing to feel anger at Prospero, quite another to plot to kill him. Nevertheless, although the moment above regarding cold-blooded murder is one of several highlighting Caliban's failure to speak politely (he famously laments that he learned how to curse and use foul language), his real failure is in his plans for ambition and power, which are thrown out the window after Stefano and Trinculo arrive:

Caliban: I'll show thee every fertile inch o'th'island...
I'll show thee the best springs; I'll pluck thee berries;
I'll fish for thee, and get thee wood enough.
A plague upon the tyrant that I serve!
I'll bear him no more sticks...
Let me bring thee where crabs grow,
And I with my long nails will dig thee-pig-nuts
Show thee a jay's nest, and instruct thee how
To snare the nimble marmoset. I'll bring thee
To clustering filberts, and sometimes I'll get thee
Young seamews from the rock. (II.ii.140-164)

Caliban seems hopelessly destined to repeat the past. Although he is at his most poetic when speaking about the island, the earth is tied to his subservience. The instant he becomes willing to proffer natural resources, he gets taken advantage of – a causal relationship Caliban appears unable to grasp.

As close as Caliban is to the land and its bounty (not unlike the closeness we saw with Timon once he absconds to the forest and leaves "civilized" society), the other characters refuse to let Caliban bask in his "plantness." There are repeated attempts to emphasize Caliban's grossness and invariably these attempts evoke mammalian biology. For instance, Stefano asks, "how cam'st thou to be the siege of this moon-calf? Can he vent Trinculos?" (II.ii.100). "Moon calf" refers to a deformed creature or to a miscarriage due to the moon's influence (menstruation has traditionally been linked to the moon's cycle). The comment also alludes to excrement in keeping with this focus on the grossness of the body (as opposed to the stately grandeur represented by the "princely tree"). Prospero subjects Caliban to similar attacks, which makes sense since the two are in direct competition and are rivals of sorts (let us not forget that each has a claim to the island). Prospero wants to push Caliban away from nature and towards the mammalian: "For this, be sure, tonight thou shalt have cramps, / side-stitches that shall pen thy breath up." (I.ii.328-9). References to Caliban having cramps are not about emasculating him per se, but about reminding him how far removed his own biology is from the plants and soil he loves so dearly.

"I will supplant": The Victors and the Vanquished

In *Timon*, the word "bountiful" proved integral to understanding the core of the play's problem (and in *Macbeth*, "un" helps us to unpack meaning), but in *The Tempest*, the verb to "supplant" becomes key. As discussed above, it is not a stretch to claim that Prospero succeeds in supplanting Caliban in terms of owning the island and having dominion over its natural resources. Of course, one need not look even that far to perceive the verb's significance; on the most basic level, the conflict stems from one man's desire to supplant another. Considering the

importance of trees, the emphasis on the second syllable fits well within the context, and, indeed,

one of the meanings of "supplant" (which Shakespeare uses) is to root out, or uproot a plant.

When Sebastian says, "I remember you did supplant your brother Prospero" (II.i.266), the prefix

carries extra weight because it functions like a parasite connected to the word plant, thus

reminding us of the ivy that eclipses the tree. The way the term is used clearly denotes

competition, like one organism trying to best the other. Indeed, the scenario that "supplanting"

entails evokes Timon's rant against animals for being backstabbing and predatory by nature. As

we recall, he railed against the competition inherent in the animal kingdom – a kingdom that

includes man.

As Lakoff and Johnson explain, cultural values manifest themselves according to

consistent metaphoric patterns (Lakoff 22). Moreover, metaphors provide a crucial service by

converting abstract and complex ideas into a more comprehensible and tangible format. As the

authors explain, "metaphorical concept[s]...structure what we do and how we understand what

we are doing" (Lakoff 5). It is difficult to imagine, for instance, discussing any kind of social

hierarchy without utilizing up versus down spatialization metaphors to elucidate the

significations behind such a concept. For many, it is no doubt difficult to extricate the notion of

a "hierarchy" from actual or imagined physical space (e.g., Plato's inverted human-plant rooted

in the sky). To understand hierarchies, we typically imagine certain individuals or objects as

being above/superior while others are below/inferior. As the following examples indicate,

Shakespeare makes great use of spatial occupancy in terms of depicting winners and losers:

Ariel: I told you, sir, they were red-hot with drinking,

...[and] beat the ground

For kissing of their feet – yet always bending

Towards their project. (IV.i.171-5)

Caliban: [Enter Trinculo] Lo, now, lo!

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Here comes a spirit of his, and to torment me For bringing wood in slowly. I'll fall flat; Perchance he will not mind me. (II.ii.14-7)

Caliban: I thy Caliban

For aye thy foot-licker. (IV.i.217-8)

Caliban: We shall lose our time, And all be turned to barnacles, or to apes With foreheads villainous low. (IV.i.244-6)

One hardly needs to be a cognitive linguist to realize that the villainous characters always appear to be stooping downwards. Even the repetition of "lo" is not a coincidence; from an aural perspective, this monosyllable functions like a command to make the speaker low, which is exactly what Caliban does, i.e., he lowers himself to the ground. Of course, the final example touches upon the distinct but related notion of regression, painting a picture of being lower down the food chain, but also the *scala naturae*. It would appear that Shakespeare fully buys into the metaphorical relationship between "lowness" and debasement. As such, lowering one's self must be damaging if the alternative is to appear stately and majestic. And, as we see in Caliban's statement, animals are outright rejected too. Being an ape is not good enough. Whereas one might assume that certain animals might "make the cut", this theory does not bear out. Prospero is uninterested in comparing himself to animals for such metaphors would fail to capture the type of organism he aspires to be.

If lowness is understood to be bad, then surely the ground must constitute a negative space? But as with the ivy/tree analogy, there is more behind the logic at work than initially meets the eye. The ground is where life starts and ends; a seed can sprout from the dirt as easily as a human can be buried beneath the soil. Of course, the magnitude and variety of vegetation on earth, coupled with mankind's dependence on agriculture, ensures that the ground's distinction as a site of potentiality and regeneration remains secure. Caliban, not surprisingly, is best able to

capture the inherent liminal/ambiguous nature of the ground, emphasizing that the island contains both "barren place and fertile." But if life both starts and ends there, then the desire to "beat the ground" makes perfect sense, i.e., to achieve a kind of victory by rising from and above it. The lowness described in the quotations above is not so much a condemnation of the ground, but rather an attempt to present a sharp contrast to the highness associated with trees (whose importance cannot be underestimated in this play). Of course, as I have tried to suggest, the efficacy of the metaphor is undermined insofar as Prospero keeps felling trees for timber. Put differently, the visual concept/sign (a prototypical tree) becomes diluted at the point where all that the audience sees on stage are inert logs (shadows of their former selves). But the point still stands that the ground is distinct from lowness because the latter involves intentional physical movement – e.g., bending, stooping, falling, lying down. The criticism, then, is of the action, not of the ground itself.

The Island

The only actual manifestation of physical ground in *The Tempest* is the island.⁵² Early on in the play, it becomes evident that the island which Prospero, Miranda, and Caliban inhabit is anything but normal. Arguably the oddest aspect of the environment is the population of invisible spirits that are at Prospero's beck and call. Less striking, though equally mysterious, is the landscape itself. What precisely does this natural setting look like? Prospero remarks that they live on a "bare island." Gonzalo deems the scenery to be green and lush, while Sebastian and Antonio claim the island is tawny and arid. Still other times, the land is patently swampy. While other characters describe the island as either barren or fertile, Caliban – the island's sole native inhabitant – appears to have the most realistic view; he does not idealize the island, but

⁵² Chapter five examines the play's representations of ground beneath the sea.

recognizes the range of life and landforms that it contains. The only feature of the landscape not up for debate is that there must be a large supply of trees given that timber is the island's main natural resource.

Still, for all the ambiguity, the prevailing view appears to be that the island is mostly barren (which begs the question, where are all the trees coming from?). Adrian says, this island "seem[s] to be desert" (II.i.35), which of course could mean uninhabited, but also implies not lush. Trinculo confirms this estimation, stating "here's neither bush nor shrub to bear off any weather at all" (III.i.18). The main character who disputes this viewpoint is the kindhearted Gonzalo whose estimation of the island is brimming with praise:

Gonzalo: Here is everything advantageous to life... How lush and lusty the grass looks! How green!

Antonio: The ground indeed is tawny.

Sebastian: With an eye of green in't. (II.i.50-5)

"With an eye of green in't" accurately captures the situation; Gonzalo views the world with rose-colored glasses and how the island appears to the beholder is ultimately relative. But this is not like the lack of specificity in *Timon*, which also drew the audience's attention to the ground level. The lowest stratum in *Timon* was vague and marked by a general lack of descriptors; if anything, *The Tempest* has too much specificity, resulting in conflicting accounts. There may not be one "correct" version, but just as vegetation comes in all colors and sizes, and landscapes exist in a multitude of forms, so is the island not simply one thing – whether it be desert, dirt, swamp, forest, or meadow. Of course, that the play's descriptions are self-contradictory reminds us anew that the island is ultimately the stage – a space whose very bareness allows it to function

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⁵³ For a related discussion of how "indeterminacy", "disorientation", and "fluidity of location" lie "at the thematic heart of the play", see Daniel Brayton's *Shakespeare's Ocean: An Ecocritical Exploration* (Brayton 171).

as a locus of possibility. As Sidney Lee writes of the Elizabethan stage, "the boards, which were bare save for the occasional presence of rough properties, were held to present adequate semblance, as the play demanded, of a king's throne-room, a chapel, a forest, a ship at sea, a mountainous pass, a marketplace, a battlefield, or a churchyard" (Lee 41). Given this chapter's interest in trees, I should note that this bareness is what illuminates the wooden boards that compose the platform – hence popular usage of "the boards" as a synecdoche for the theater/stage (which gave rise to idioms like "treading the boards"). But despite (or perhaps because of) the theater's board-ness, there does seem to be a general "greening" of the play that corresponds to the impending nuptials. We learn that the marriage ceremony takes place on this "grass-plot" (IV.i.73), "this short-grassed green" (IV.i.83), and "this green land" (IV.i.130). One can envision a green carpet being placed on the stage to indicate the fertile ground – an appropriate symbol of the hope and renewal that accompanies love and marriage.

Gonzalo's Golden Age

As we saw in *Macbeth*, benevolent characters are conspicuously associated with plants:

Sebastian: I think [Gonzalo] will carry this island home in his pocket and give it his son for an apple.

Antonio: And, sowing the kernels of it in the sea, bring forth more islands. (II.i.87-91)

Just as it was fitting that Gonzalo saved Prospero and Miranda by putting them in a "bark" and sending the wood into the water, so is it hardly surprising that the wicked Antonio and Sebastian should mock Gonzalo along lines that emphasize his connection to the earth. What is striking about the image Antonio puts forth is that land would beget more land in such a seemingly inhospitable environment as the middle of the ocean. We picture landmasses being eroded by

 $^{^{54}}$ In Act V, Prospero contrasts the "green sea" to the "azured vault" (V.i.43)

the sea – not necessarily shrinking in size to a noticeable extent to the naked eye, but we have a general sense that the borders of our terrain are not apt to encroach upon the ocean. Instead, we perceive water's wearing away of the soil as an expected natural process.

Sebastian and Antonio are mocking Gonzalo because seeds should go in the soil; throwing them in the sea could prevent life from sprouting or taking root. And yet, seeds being carried by water is an important dispersal method that allows new species to be introduced to foreign lands. Plants have evolved highly effective mechanisms to aid specifically with this kind of dispersal. Some seeds are lightweight to help with buoyancy; others have waterproof coatings to survive for long periods in salt water (features that again highlight the inanity of Gonzalo's "nutshell" jab in Act I). So it is not quite as ridiculous of an idea as Sebastian and Antonio would have the listener believe. But even though they ridicule him, Gonzalo runs with this sense of the fantastical and extends it to the utopian:

Gonzalo: Had I plantation of this isle, my lord, –

Antonio: He'ld sow't with nettle-seed.

Sebastian: Or docks, or mallows.

. . .

Gonzalo: In the commonwealth I would by contraries Execute all things; for no kind of traffic Would I admit; no name of magistrate; Letters should not be known; riches, poverty, And use of service, none; contract, succession, Bourn, bound of land, tilth, vineyard, none; No use of metal, corn, or wine, or oil;

. . .

All things in common nature should produce Without sweat or endeavour: treason, felony, Sword, pike, knife, gun, or need of any engine, Would I not have; but nature should bring forth, Of its own kind, all foison, all abundance, To feed my innocent people.

. . .

I would with such perfection govern, sir,

To excel the golden age. (II.i.144-167)

Gonzalo's vision is a state where nature flourishes without cultivation. It is noteworthy that Gonzalo does not dispute their claim that weeds and thorn bushes would grow wildly (or prosper, to put it less negatively). Granted, one could argue that Gonzalo is simply off in his own chimerical world and therefore paying no heed to these scoundrels, but even so, we once again see a clear example of the vegetative hierarchy in Antonio and Sebastian's words. Prospero could just as easily have uttered a comparable remark given his disdain for plants that do not appear particularly useful for mankind. But in Gonzalo's utopia, perhaps "nettle seed", "docks", and "mallows" have a place in the ecosystem (we have no reason to assume otherwise). And for all of Sebastian's and Antonio's derisive criticisms of the social structure Gonzalo describes, they have no such attacks on the idea of natural "abundance" (for who could object to such a notion?).

Gonzalo envisions a world marked by harmony, where nature is free from the tyranny of man and vice versa. Man is no longer burdened by agriculture or having to tend to vineyards – both nature and man are free. This ideal is certainly far removed from the reality of existence on even this small island where tyranny and hard labor are inescapable. One need not view Prospero in a negative light to realize that the structure he has built is a far cry from the Golden Age described by Ovid and other classical authors. Perhaps no other character but Gonzalo could get away with espousing such idealistic dreams. Indeed, his benevolent spirit and compassion (evident in speeches like this) go a long way towards redeeming him from his rather inauspicious start where he appeared more clownish than wise. But after the storm subsides, Gonzalo's relationship to plants comes to the forefront as an unavoidable aspect of the character and remains until the end (e.g., Ariel: "his tears run down his beard like winter's drops / from

eaves of reeds." (V.i.16-7)). This association is far more benign than Prospero's connection to plants where we see trees a) in danger of being strangled by ivies, b) used to punish or for sorcery, or c) signifying hierarchy and ambition. Gonzalo's presence offers a counterbalance by reminding the reader that dense vegetation can simply indicate a healthy vitality, rather than be a cause for concern or indicative of struggle amongst organisms, or a competition for resources.

Of course, the Golden Age myth should not be considered in isolation; rather, it falls under the scope of the many cultural narratives that depict a sense of longing for a more pristine epoch (now lost) when man lived in harmony with flora, fauna, and yes, even the ground itself. Chief among these stories in the Western Christian tradition is the Garden of Eden. After Adam and Eve eat fruit from the Tree of Knowledge, God tells Adam: "cursed is the earth for thy sake" (Genesis 3:17), but as Evan Eisenberg astutely notes in *The Ecology of Eden*, "the same Hebrew letters can be read to mean, 'cursed is the ground by thy passing over.' In other words, the earth is not cursed all at once, but by degrees – by human agency" (Eisenberg xxii). This chipping away begins the instant plants become resources to manufacture a wide range of items never needed before the fall.

I belabor this point to stress that this is not how man's relationship with trees always was and is therefore relevant to how we view the characters' attitudes towards plants in this play. Gonzalo's view hearkens back to the beginning of creation when God said, "Let the earth bud forth the bud of the herbe, that seedeth seed, the fruitfull tree, which beareth fruite according to his kinde, which hath his seede in it selfe vpon the earth: and it was so. And the earth brought foorth the bud of the herbe, that seedeth seede according to his kind, also the tree that beareth fruit, which hath his seed in it selfe according to his kinde: and God saw that it was good" (Genesis 1:11-12). This description of growth, coupled with the fact that the Tree of Life and the

Tree of Knowledge should be left alone, speaks volumes as to what constitutes paradise – namely, peaceful coexistence. In Eden, plants and trees should mostly be left to their own devices, propagating as is natural and according to their species, and man should avoid trees that would spell destruction. But after the fall, everything changes and plants become a seemingly inexhaustible source of organic material to be hewn down and repurposed. This is the backdrop that informs the play and presents a choice regarding how one will interact with nature.

The Patient Log-man: Ferdinand

Gonzalo's association with abundance and seeds that give forth new life speaks to larger concerns about regeneration and the land's suitability for life (i.e., arability). But just as barren soil is unproductive, the concept of "bareness" extends to human life as well – specifically to reproduction. If the goal of human beings and indeed all life on earth is to be "fruitful" and "multiply", as the Book of Genesis repeatedly emphasizes, then it is no wonder that the union of Ferdinand and Miranda should be explicitly compared to the plant kingdom. As expected, the wedding masque focuses on thriving and abundance with rhetoric that sounds both like Gonzalo's description of the Golden Age and vegetation's origin in Genesis (note that vines here are beneficial): "Earth's increase, foison plenty, / barns and garners never empty, / vines and clustering bunches growing, / plants with goodly burthen bowing; / spring come to you at the farthest / in the very end of harvest! / Scarcity and want shall shun you; / Ceres' blessing so is on you" (IV.i.110-17). Equally important is Prospero warning his soon to be son-in-law that the "contract" will not "grow" (IV.i.19) if he "breaks her virgin-knot" before the wedding ceremony. In such a case, Prospero tells Ferdinand, "barren hate" would "bestrew / the union of your bed with weeds" (IV.i.19-21). While the wordplay between marriage bed and seed bed is obvious,

less apparent is how barrenness goes hand in hand with weeds, which are notorious for propagating quickly. Once again, Prospero buys into this hierarchy of plants; weeds are not good enough. Like Hamlet chastising his mother for spreading "compost on the weeds / to make them ranker" (III.iv.142-3), Prospero cannot perceive a world in which weeds are beneficial. His attitude is likewise reminiscent of Perdita's debate with Polixenes over whether some plants are inherently inferior. For Prospero, the answer is unequivocally yes, and this outlook taints his reason to the point where barrenness becomes linked to "weeds."

Prospero simply has to have his way and nowhere is that more evident than in his treatment of Ferdinand, whom he grooms to be Miranda's husband. The manner in which Ariel introduces the king's son to us and to Prospero immediately suggests there is something special about him: "All but mariners / plunged in the foaming brine and quit the vessel / then all afire with me. The king's son, Ferdinand, / with hair upstaring – then like reeds, not hair – / was the first man that leaped" (I.ii.211-15). While "weeds" are undesirable, "reeds" – according to Prospero's formulaic understanding of plants – present no such problem. Reeds stand straight up without any support, a fact that is only further emphasized by Ariel's adjective, "upstaring" – in other words, Ferdinand's hair was standing extra straight and tall. 55

The description of Ferdinand preparing to plunge into the water – not knowing what awaits on the other side – suggests a rebirth as a plant-man hybrid (fitting for the man who will join Prospero's family and help carry on his legacy). From Ferdinand's perspective he is delving into the unknown, but the choice of "reeds", which sprout from the water and populate wetlands, reveal the overarching motifs and metaphors at work in *The Tempest*. Ariel goes on to affirm, "the King's son have I landed by myself" (I.ii.222), using a verb that underscores Ferdinand's

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⁵⁵ As an amusing side note with some relevance as to why "reeds" might be associated with the likes of Ferdinand and Gonzalo, Gerard's *Herbal* praises reeds at length since they are valued by "aged and wealthie citizens, and also noblemen and such great personages" to use as walking sticks (which they "garnish…both with silver and gold").

closeness with the land, if not in a sense becoming one with the land. Not coincidentally, Prospero later recounts how he himself was "landed…upon this shore" (V.i.163).

At the time of his jump, Ferdinand surely wishes to swim ashore, but he can scarcely imagine just how "close" he is going to become with the land. Once safely in Prospero's sphere, his future father-in-law informs him: "Sea-water shalt thou drink; thy food shall be / the freshbrook mussels, withered roots, and husks / wherein the acorn cradled" (I.i.466-8). Why Prospero chooses this punishment is somewhat unclear; is it that he actually regards having to subsist on such things and endure this lifestyle (like Timon in the woods) as being degrading? Or is it that Prospero is merely attempting to remove the trappings of the court and humble Ferdinand? Independent of the answer (and of course the aforementioned possibilities are not mutually exclusive), Prospero's description would seem to fit better with our understanding of Caliban's nature – except the latter would enjoy subsisting on the land and would describe such things as the "fresh-brook mussels" without a tinge of bitterness. Of course, Caliban's fatal mistake was attempting to mate with Miranda, understandably becoming a "thing of darkness" in Prospero's eyes. But one of the more curious aspects of Prospero's actions is they result in a kind of reversal. Now Ferdinand, whom he does want to marry Miranda, must become one with the earth (while Caliban must be distanced from the earth he loves).

As I have suggested, in order to achieve that goal, it is essential that Ferdinand be reborn – something that is repeatedly stressed in the discourse and manifests itself through various guises. Prospero tells him, "come on; obey. / Thy nerves are in their infancy again / and have no vigour in them" (I.ii.487-9). The suggestion is that Ferdinand will undergo a metamorphosis, and since Prospero serves as the educator/father figure orchestrating the whole situation, trees become the tools through which the transformation is achieved.

Within the world of the play, trees tend to inspire a kind of awe and fear since they are closely associated with punishment. Ariel was imprisoned in a "cloven pine" for twelve years and Prospero threatens to imprison him anew by "rend[ing] an oak" and stuffing Ariel into the tree's "entrails" (I.ii.297). At the less extreme end of the punishment spectrum, Ferdinand is forced to move "thousands of…logs" (an action – like so many others – which again begs the question: where are all these trees coming from?) (III.i.10):

[Enter Ferdinand bearing a log] Ferdinand: I must remove Some thousands of these logs and pile them up Upon a sore injunction... I am in my condition A prince, Miranda; I do think, a king; I would, not so – and would no more endure This wooden slavery than to suffer The flesh-fly blow my mouth. Hear my soul speak: The very instant that I saw you, did My heart fly to your service; there resides, To make me slave to it; and for your sake Am I this patient log-man... O heaven, O earth, bear witness to this sound And crown what I profess with kind event If I speak true! If hollowly, invert What best is boded me to mischief! (III.i.9-11, 59-71)

Taken independently, the phrase used to describe Ferdinand's unusual sentence – "wooden slavery" – might conjure up images of the trees themselves imprisoning people and subjecting them to hard bondage (not so dissimilar from the marching trees of Birnam wood). In this version, the phrase would imply that trees are the masters of men who must submit by becoming "patient log-m[e]n" (III.i.67). And Ferdinand himself seems to buy into the rhetoric by becoming eager to prove he is not "hollow" (like a deceased and decayed trunk) (III.i.71). Ariel himself was the "patient log-man" par excellence given how long he was trapped in (or by) a tree. I use the preposition "by" because one might expect that after Sycorax's passing, her magic

and spells would eventually wear off – in which case, the tree itself would be keeping Ariel prisoner. ⁵⁶

In any event, Ferdinand finds himself having to bear thousands (yes, thousands!) of logs only to pile them up (III.i.10) – a somewhat pointless task if not for the fact that Prospero and Miranda need some percentage of these resources to survive. And yet, Prospero – though not all-knowing (he famously forgets about the Caliban, Stefano, and Trinculo plot to murder him) – does realize they will soon leave the island. So what could possibly be the purpose of chopping down additional trees and stacking up logs? Perhaps this is Prospero's parting gift to Caliban as a means of transferring power to the new sole possessor of the island. And yet, we know Caliban resented these logs (both the task of gathering wood and Prospero's insatiable desire for more), so, then again, leaving a giant pile may be Prospero's final subtle means of tormenting Caliban. But if the burden of having to "bear" logs is simply about the action itself as punishment, then Ferdinand's pitiful state – as we saw with Caliban – makes it abundantly clear how wood becomes a symbol of Prospero's might (to spin it positively) and oppression (a less sympathetic interpretation).⁵⁷

At a minimum, Ferdinand's repetitive task reveals how he comes to "supplant" Caliban. Evidently, it was not enough for Prospero to supplant Caliban as owner of the island or for Ferdinand to supplant Caliban as Prospero's heir and Miranda's husband. Shakespeare sees to it that Ferdinand supplants Caliban on the most basic and seemingly trivial of levels, thereby creating an equivalence between two characters who are as different as night and day via the

⁵⁶ For examples of spells wearing off in medieval and Renaissance literature, see John Aberth's discussion of the romances of Chrétien de Troyes in *An Environmental History of the Middle Ages* (Aberth 129) and Howard Mancing's entry on witchcraft in Miguel Cervantes' work in *The Cervantes Encyclopedia* (Mancing 781).

⁵⁷ In *Wooden Os*, Vin Nardizzi includes a creative and provocative reading of the play, which argues that the stockpiled logs may be intended for the construction of a theater.

exploitation of trees (similar to the link between Prospero and Sycorax). That Ferdinand's introduction to Prospero's family tree (and vice versa) should be accompanied by the literal chopping down of trees presents an incongruity that again speaks to the paradoxical attitudes that mankind has long exhibited when it comes to trees. Building off Harrison's analysis, Una Chaudhuri argues in *Staging Place* that "the genealogical tree that replaces the real trees must be rooted in the space they had once occupied; thus does humankind mark the space it has appropriated from nature" (Chaudhuri 75).

"Our revels now are ended": Prospero's Rehabilitation

A significant factor in achieving resolution is Prospero giving up his magical powers.

But why is this renunciation (a second abdication, if you will) necessary? One might reasonably assume Ferdinand and Miranda's union, Prospero and Miranda's return home, and the antagonists learning a lesson are what ultimately matter in terms of achieving a happy ending.

But apparently these factors were not sufficient for Shakespeare.

Prospero famously relinquishes his magical powers at the end of the play, but the manner in which he does so once again highlights his strong bond with trees. In the final act, Prospero admits he has "rifted Jove's stout oak...and by the spurs plucked up the pine and cedar", but he promises to renounce such magic and returns his staff to the earth as a gesture of goodwill (V.i.45-8). Although the image of Prospero "drowning" his library is perhaps more enduring, the admission that he has destroyed a great many trees is a curious and significant inclusion insofar as a resolution appears to come with Prospero knowing his place within nature:

Prospero: [tracing a circle on the ground]
Ye elves of hills, brooks, standing lakes, and groves,
And ye that on the sands with printless foot
Do chase the ebbing Neptune and do fly him

When he comes back; you demi-puppets that By moonshine do the green sour ringlets make, Whereof the ewe not bites; and you whose pastime Is to make midnight mushrooms, that rejoice To hear the solemn curfew; by whose aid, Weak masters though ye be, I have bedimmed The noontide sun, called forth the mutinous winds, And 'twixt the green sea and the azured vault Set roaring war – to the dread rattling thunder Have I given fire, and rifted Jove's stout oak With his own bolt; the strong-based promontory Have I made shake, and by the spurs plucked up The pine and cedar; graves at my command Have waked their sleepers, oped, and let 'em forth By my so potent art. But this rough magic I here abjure, and when I have required Some heavenly music, which even now I do, To work mine end upon their senses that This airy charm is for, I'll break my staff, Bury it certain fathoms in the earth, And deeper than did ever plummet sound I'll drown my book. (V.i.33-57)

Prospero recognizes the outrageous things he has done, how he has overstepped the bounds of acceptable human/mortal behavior. "Rough magic" is truly the optimal phrase considering what is involved: burning trees with fire, ripping trunks apart, uprooting full trees (and that is just the damage specific to trees!). Not coincidentally, Prospero tacitly confesses these trees were never his to begin with when he refers to the oak as belonging to the most important deity, not to him. It might seem that the image of breaking his staff continues with this destructive trend, but returning the organic material of a plant to the earth suggests returning the wood to its proper home, or attempting to plant a seed. Perhaps the "breaking" is not a violent action per se, but more akin to when someone divides a plant to create a new shoot or cutting that will give rise to a new plant.

Prospero also goes out of his way to name various trees by species, as if to regard them as individual organisms worthy of his attention. In a play that focused so intensely on woods and logs, it is a pleasant surprise to end with talk of oaks, pines, cedars, and cherry blossoms:

Ariel: Where the bee sucks, there suck I.
In a cowslip's bell I lie.
There I couch when owls do cry.
On the bat's back I do fly
After summer merrily.
Merrily, merrily shall I live now
Under the blossom that hangs on the bough. (V.i.87-96)

Ariel happily says these lines after Prospero tells him "thou shalt ere long be free" (V.i.87), so in his vision of happiness and liberty, his place is "under" (i.e., literally lower than) the tree (even though Ariel of all people has reason to be sick of trees). And Ferdinand, who has every reason to despise water after the ordeal he endured, says the following: "though the seas threaten, they are merciful. I have cursed them without cause" (V.i.181). Interestingly enough, he cites the seas as being merciful, rather than Prospero. One interpretation would be that Prospero has receded from Ferdinand's thinking like the waves after a storm since Prospero is no longer the most powerful force to be reckoned with – that honor reverts back to nature in all her glory.

By the end of the play, Prospero is a far cry from his former self. He says that he is simply an old man preparing to spend his days in quiet retirement – e.g., "Now my charms are all overthrown, / and what strength I have's mine own, / which is most faint" (Epilogue 1-3); "I have hope to see the nuptial / of these our dear-beloved solemnized; / and thence retire me to my Milan, where / every third thought shall be my grave" (V.i.312-5). In effect, he ends the play by humbling himself before everyone and everything. Put differently, Prospero renounces those prerogatives that he used to have.

Conclusion

I would agree with those scholars who have observed that *The Tempest* draws on Montaigne's "novel and progressive feelings of sympathy for brute creation" (Berry 208). Montaigne was clearly on Shakespeare's mind when he drafted the play given that he borrows heavily from "On Cannibals" during Gonzalo's description of his utopian commonwealth (II.i.152-73). But I suspect that from a thematic perspective, Montaigne's broader thinking about man's place in nature suffuses the play. In Montaigne's *Apology for Raymond Sebond*, he speaks of the absurd arrogance of man:

Let him with the utmost power of his discourse make me understand upon what foundation [man] hath built those great advantages...he supposeth to have over other creatures. Who hath perswaded him that this admirable moving of heavens vaults, that the eternal light of these lampes so fiercely rowling over his head, that the...continuall motion of this infinite vaste ocean were established, and continue so many ages for his commoditie and service? Is it possible to imagine anything so ridiculous as this miserable and wretched creature, which is not so much as master of himselfe, exposed and subject to offences of all things, and yet dareth call himselfe Master and Emperour of this Universe? (Apology)

The passage above is often cited in discussion of mankind's relationship to animals, but

Montaigne deliberately broadens the scope from "creatures" to include all of the known universe
and creation and takes great pains to emphasize our closeness and similarities to dirt and plants:

"Men...have their revolutions, their seasons, their birth, and their death, even as cabbages: If
heaven doth move, agitate and rowle them at his pleasure, what powerfull and permanent
authority doe we ascribe unto them?...The forme of our being depends of the aire, of the climate,
and of the soile wherein we are borne...In such manner that as fruits and beasts doe spring up
diverse and different; so men are borne...according as the inclination of the place beareth...and
being removed from one soile to another (as plants are) they take a new complexion." In the

final moments, both air and ground take center stage (e.g., "then to the elements be free!" (V.i.321)). But I think the play's treatment of the ground in particular at this juncture encapsulates its productive quality, which according to Montaigne can yield positive or negative results (at least from a human's perspective). Prospero ends his discourse by remarking on his grave and the bareness of the island – two images that emphasize the ground in its most basic and unadorned state (because with the vegetation gone, what remains but the dirt?). But though Prospero's words allow the play to end on a poignant note, this is certainly not an unhappy ending – quite the contrary as there is much to celebrate. And we know that in due time Prospero will indeed be "removed from one soile to another."

As Roger Shattuck observes in *Forbidden Knowledge*, Montaigne's *Apology* comes across as "playful and relaxed" but – importantly – "shows little sympathy toward human aspirations" (Shattuck 28). To me, this is the play in a nutshell. *The Tempest* is no tragedy and to regard Prospero as a tragic figure would be inappropriate, though one can imagine a drama where a once powerful and proud sorcerer or leader who loses all his powers does play out as a tragedy (Marlowe's *Doctor Faustus* and *Tamburlaine* come to mind). On the question of human aspirations, *The Tempest* reveals no sympathy – indeed the play continually undermines or calls into question aspirations and ambitions, whether it be Antonio usurping Prospero, Sebastian attempting to kill Alonso, or Caliban seeking to overthrow Prospero. Even Prospero's initial bookworm aspirations are regarded as a blunder, and by the play's end, he must give up his learned sorcery and drown his library. W. H. Auden regarded *The Tempest* (and presumably the ending in particular) as "overpessimistic" – certainly a valid interpretation in view of what transpires in Act V (Auden 134). After all, it is difficult to hear Prospero musing on how "every third thought shall be [his] grave" without feeling like perhaps such an outlook is too dour. Yet,

considering that, up until the final scene, Prospero had "graves at [his] command" and even went so far as to "wake their sleepers" (i.e., corpses) (V.i.48-9), I daresay we can take comfort in knowing that Prospero will stop disturbing the dead and instead content himself with thoughts about what lies beyond. At last, Prospero recognizes that man's "little life" (IV.i.157) is indeed small compared to the "infinite vaste ocean" of existence.

Chapter 5

"Of his bones are coral made": The Ocean's Organic Remains in The Tempest

Introduction

This chapter explores *The Tempest's* use of coral, pearls, and ooze, and the significance of imagery associated with terms pertaining to life beneath the sea. Coral in particular is an unusual object because it seems to lie squarely at the intersection of plant, rock, and animal – but, interestingly enough for the early modern period, is thought of more as a plant/rock (or a plant that would turn into stone when exposed to air). This taxonomic indeterminacy is precisely one of the core issues dealt with in the previous chapters (i.e., the blurring of boundaries and an unstable hierarchy). In exploring such ambiguity, I hope to suggest that the attention to coral, pearls, and ooze taps into deep-seated concerns about the possibility for regeneration and is closely linked to the play's interest in the ground and soil. As with *Timon of Athens*, I analyze the ground as a site of a certain type of salvation.

More broadly, this examination builds upon the previous *Tempest* chapter by arguing that the initial tendency of characters to operate under the assumption that plants and the soil from which they sprout are ranked according to a formulaic scheme conflicts with the far more fluid interpretation of existence that comes to forefront. Put differently, I would posit that *The Tempest* "opts out" of a pyramidal view of the natural world in favor of a cyclical view of existence. To be sure, the play does not simply throw order out the window or ignore a top-to-bottom approach. But it does emphasize that the scope of the known universe is greater than the limited understanding of one human and that attempting to rank existences is, at best, pointless when all of creation is intertwined or "knit up" (III.iii.89).

Coral: The Organism

In *The Tempest's* harrowing opening scene, King Alonso's and his party brace themselves for a violent shipwreck. As one might expect, the group becomes separated during the chaos of the storm and apparent capsizing (the audience is soon made aware that Prospero is orchestrating the action). The first survivor to appear on dry land is Ferdinand, who enters being led by the pied piper-esque Ariel and his strange enchanting song:

Ariel: Full fathom five thy father lies; Of his bones are coral made; Those are pearls that were his eyes: Nothing of him that doth fade But doth suffer a sea-change Into something rich and strange. (I.ii.400-5)

The only other play that mentions coral is Shakespeare's early comedy *The Taming of the Shrew* (c. 1591), and like most of the few other references to coral in the Shakespearean canon, the playwright speaks of a woman's "coral lips" – the same image repeated in the sonnets, *Venus and Adonis*, and *The Rape of Lucrece*. In fact, *The Tempest* presents the only instance in which we are dealing with coral the organism. But this departure from using the term as merely a decorative adjective invites us to engage with what it might mean to be transformed into and through coral. And for once, the object in question is a man, not a woman with some variation of a "sweet coral mouth." On that note, Ariel's song may also serve as a clever scrutiny of clichéd Renaissance similes. Like the preposterous literal Petrarchan mistress in Charles Sorel's *The Extravagant Shepherd* (complete with pearls as teeth, roses for cheeks, suns for eyes, Cupid's bows for eyebrows, globes for breasts, and so on), Shakespeare's words invite us to examine how much pressure certain comparisons and equivalences can withstand before the logic behind them starts to break apart (Fig. 13). Though one could reasonably argue that Alonso's body is both feminized and mineralized through the song, the departures are telling; we are no longer

dealing with a superficial coating on lips, but rather with bones that compose a skeleton. And as I shall address in the sections on pearls, Shakespeare is interested in the spherical shape of pearls and their relation to organs (eyeballs) instead of an alabaster hue as applied to skin and teeth.



Figure 13. Charles Sorel, from The Extravagant Shepherd, 1654.

The meaning behind "coral" is as rich as the imagery Ariel creates. Given the play's fixation on trees (as detailed in chapter four), it is worth noting that people refer to coral reefs as the (rain)forests of the sea – an analogy that has more to do with the their biodiversity than the fact that coral branches resemble tree branches. Of course, given the era in which *The Tempest* was written, the second point carries greater weight for purposes of this discussion (Fig. 14):



Figure 14. Images of coral (left), mugwort – *Artemisia vulgaris* (center), and wormwood – *Artemisia absinthium* (right) from the sixth century Vienna Dioscurides, an illuminated version of *De Materia Medica*.

Ariel's song depicts a process whereby the head of the royal family tree metamorphoses into a sea creature that looks like a tree native to the ocean (note the humanlike sea creatures resting beneath the coral branches). Yet early modern thinking about coral was more complicated than a straightforward correspondence between coral and plants. The supposedly ambiguous nature of coral reveals blurred boundaries going back to at least antiquity.

In *On the Parts of Animals*, Aristotle defines coral as a plant-animal (Sears 438). Ever concerned with hierarchy, Aristotle concludes that because coral lacks locomotion or perception, it is inferior to other animals (Ogle xxx). Centuries later, in Stephen Batman's English edition of Bartholomeus Anglicus' *De proprietatibus rerum* (the first printing of John Trevisa's translation appeared in 1495, but the text was reprinted several times, culminating with Batman's 1582 version), we read that:

Corall is gendered in the red Sea, & is a tree as long, as it is couered with water, but anon as it is drawen out of water, & touched with aire, it turneth into stone, and vnder water the boughs therof be white and soft, & waxe redde and turne into stone when they be drawen out of the water with nets...As precious as y^e Margarite of Inde is among vs, so precious and more is Coral among the Indes. Witches tell, that this stone withstandeth lightening...it putteth off lightning, whirle winde, tempest and stormes from Shippes, and houses that it is in. And it is double,

white and redde. And is neuer founde passing halfe a foote long. And the redde helpeth against bleeding, and agaynst the falling Euill, and against the feendes guile and scorne, and against divers wonderous dooing, and multiplieth fruit, and speedeth beginning and ending of causes and of needs. [emphasis added] (Bartholomew 258)

Evidently, coral can combat that which might harm our bodies (mortal) and souls (immortal). Indeed, one wonders if coral's reputed powers against tempests factored into its inclusion in the play and specifically in Alonso surviving the storm – i.e., his association with coral would have registered as a sort of protection against the tempest.⁵⁸ But for practical purposes, if an individual expected to receive some benefit from coral, then actually possessing this precious substance was necessary. Although coral undergoes a radical alteration to render it suitable for human use, the process is not the same as trees turning into logs or deer becoming venison. By this, I am not simply referring to differences in how certain raw materials and goods are harvested, produced, farmed, or mined; I mean that a basic conceptual change occurs – one that is frequently evident in the way we speak about useable things. Linguistic transformations (e.g., trees into logs/timber) abound because they create distance between the dead resource and the living plant or animal from which it came. Yet coral perpetually remains coral (whether it is regarded as an animal, plant, or mineral) and its change is more akin to the pattern we saw in *Macbeth* where movement from one site to another in the female body (specifically from the womb to the breasts) turns red blood into white milk. Here, what is white becomes red via a migration that engenders an even more impressive transmutation. While blood and milk are both life-sustaining corporeal liquids, coral changes from tree (or animal, depending on the context) to stone. Somewhat paradoxically, the further coral moves down the scala natura, the more precious it becomes. And though the passage above understandably highlights coral's

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⁵⁸ Not unlike how Ferdinand's vertical "reeds" arguably reveal his safety in water (I.ii.212).

importance in terms of how it can supposedly abet mankind (not unlike some of the herbal remedies popular today), it is worth noting that coral's significance went far beyond its value as oddity or talisman. In the early seventeenth century, the president of the East India Company in Surat noted that next to "broadcloth", coral was "the most staple and vendible commodity that Europe produced" (Krishna 114; Francis 156). English merchants were particularly active in the growing market of the coral trade and could expect to turn a good profit for coral exports (Yogev 130).

The description in *De proprietatibus rerum* is also noteworthy precisely because it emphasizes coral's lowness to the ground – despite initially categorizing coral as a tree. That the organism looks like a miniature tree or bush yields more ambiguity in Ariel's song. Is this a subtle attempt to humble the king (and the king's body)? Or does our notion of perspective and scale change entirely when dealing with a different milieu – in this case, a separate ecosystem beneath the waves? Coral very much straddles two worlds: land and sea. In other words, "it is double" in more than a superficial sense (and yet, as the absence of noun-differentiation indicates, perhaps not necessarily on a linguistic level). In the sea, tiny fish swim and live amidst the coral branches, not unlike the birds that fly around and perch on trees. But once on land, coral's classification shifts dramatically, with each piece that washes ashore morphing into a prized stone.

Although deforestation was plainly a concern in the Elizabethan and Jacobean eras (and even before then), Shakespeare and his contemporaries likely could not have foreseen the catastrophic destruction of coral reefs – those rainforests of the sea – occurring in the modern era. But the link between coral and trees involves more than a superficial resemblance in their branches. Indeed, the similarities in their growth patterns are quite striking given that, like a tree

trunk that grows by adding rings, coral grows by accumulating layers of deposits. Essentially, coral is an organism that manages to look remarkably like a tree while augmenting its size by adding strata in a manner not unlike the concentric rings of trees. Moreover, in his discussion of zoophytes, Aristotle notes that this class of creatures appears to generate spontaneously or sprout from a seed – a hardly surprising assumption considering coral sits atop rocks and other marine sediment (Ogle xxix). (Of course, Aristotle would not have known that the nonliving material forming the foundation (e.g., limestone deposits) is actually dead coral.) Although trees have long been heralded for their longevity, coral seems even more capable of offering a unique alternative to death. Coral's distinct hardness appears to evade degeneration by turning into something new – a seemingly magical process precisely because of the object's uncertain taxonomy.

Approximating the Eternal Body

In chapter four, I analyzed the extent to which trees serve as the impetus for Ferdinand's growth insofar as Prospero uses them to train and mold his future son-in-law. Importantly, however, trees (or logs, as the case may be) are not what initiate the prince's transformation or rebirth. With respect to Ferdinand's second "infancy" (I.ii.488), we must look elsewhere to clarify how life begins anew within the parameters set forth in the play. His own father provides one clear vision of Ferdinand's "life" post-shipwreck/tempest:

Alonso: O thou mine heir Of Naples and of Milan, what strange fish Hath made his meal on thee?

. . .

Francisco: I not doubt he came alive to land. (II.i.111-22)

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⁵⁹ The OED explains that coral is the "continuous skeleton secreted by many tribes of marine coelenterate polyps for their support and habitation."

This brief but touching exchange presents two competing views. The first – Alonso's – evokes Hamlet's musings about how a decomposing body becomes a meal for other creatures. Hamlet famously fixates on worms, but in a dramatic text where water plays a central role, fish are more appropriate (though they serve the same role in this never-ending saga of consumption and degradation). The second view ("he came alive to land") is obviously uplifting in tone, reiterating that land equals life and presenting an alternative to being eaten by animals.

Of course, Alonso is not the only one with visions of what might happen to people in the afterlife. Ariel's song about coral and pearls proffers one potential fate for bodies that sink into the depths (five fathoms below to be exact). The suggestion that Ferdinand's father drowned is of course disturbing and one has to wonder if the song is meant to torment Ferdinand. Crucially, however, the lyrics focus on regeneration through natural geologic and biologic processes.

Though a corpse cannot be reanimated, it can be transformed into something "rich and strange" – perhaps even an eternal nonhuman body with bones and organs that cannot decay. 60

In this respect, Shakespeare may be tapping into deep-seated political and theological beliefs about a ruler's natural body versus the eternal body politic as explained in Ernst Kantorowicz's famous examination of medieval and Renaissance thinking, *The King's Two Bodies*. Kantorowicz cites Edmund Plowden's *Reports* (collected and written under Queen Elizabeth) as a "clear elaboration of that mystical talk with which the English crown jurists enveloped and trimmed their definitions of kingship and royal capacities" (Kantorowicz 7). The crown lawyers agreed that "the King has in him two Bodies...a Body natural, and a Body political. His Body natural...is a Body mortal, subject to all Infirmities that come by Nature or Accident...But his Body politic is a Body that cannot be seen or handled, consisting of Policy

⁶⁰ I mean cannot be reanimated according to the laws of nature (e.g., scientific principles and empirical evidence concerning observable phenomena). Prospero, however, claims that his "rough magic" (dark magic perhaps?) enabled him to wake the "sleepers" inside graves.

and Government...This Body is utterly void of Infancy, and old Age, and other natural Defects and Imbecilities, which the Body natural is subject to" (Kantorowicz 7). Without question, Ariel presents a kingly body that is "utterly void" of infancy, old age, and imbecilities. To borrow from *Hamlet* again, one could even say that this new body is completely devoid of "the thousand natural shocks / that flesh is heir to" (III.i.64-5). But Ariel's tale of transformation could be read as decidedly mundane – the opposite of mystical. There is nothing mysterious about someone drowning and a corpse decaying and becoming something else; it is as if Shakespeare sought to render the tortuous logic behind the legal fiction as literally as possible. Put somewhat differently, Shakespeare is not encouraging readers to visualize an animated anthropomorphic body constructed of coral and pearls à la Arcimboldo's famous figures composed entirely of objects or Sorel's rendition of a Petrarchan mistress (Fig. 15). Rather, the syntax suggests new entities that grow and form by subsuming decaying organic material (not unlike roots that imbibe and absorb nutrients and matter from the soil they touch).



Figure 15. Giuseppe Arcimboldo, *The Librarian*, c. 1566 (an oddly appropriate image considering Prospero's obsession with his "own library" cost him his dukedom).

Ariel alludes to coral's changing nature when he says, "nothing of him that doth fade / but doth suffer a sea-change / into something rich and strange" – lines that are strongly reminiscent of a section from the end of Ovid's *Metamorphoses*. In the fifteenth and concluding book, Ovid has Pythagoras state (as part of a long oration) that "All things do change. But nothing, sure, doth perish":

Al things doo chaunge. But nothing sure dooth perrish. This same spright Dooth fleete, and fisking heere and there dooth swiftly take his flyght From one place to another place, and entreth every wyght, Removing out of man to beast, and out of beast to man. But yit it never perrisheth nor never perrish can...

The soule is ay the selfsame thing it was and yit astray It fleeteth into sundry shapes. Therfore lest Godlynesse Bee vanquisht by outragious lust of belly beastlynesse, Forbeare (I speake by prophesie) your kinsfolkes ghostes to chace By slaughter: neyther nourish blood with blood in any cace. And sith on open sea the wynds doo blow my sayles apace, In all the world there is not that that standeth at a stay. Things eb and flow: and every shape is made to passe away. The tyme itself continually is fleeting like a brooke (Book XV, 183-195)

It seems fitting that for Shakespeare's farewell to the stage he would look to the closing of a book he knew closely (and given all of the Ovidian references in the Shakespearean canon, likely loved as well). I would posit that the line "nothing of him doth fade" plainly evokes "nothing sure doth perish", and that Shakespeare's rendering is appropriate for a verse pertaining to coral in particular. Coral, after all, ostensibly turns bright in color (the opposite of fading) when brought out of the water. So the situation that Ariel devises is win-win from the perspective of creating a vibrant new body for the king that cannot perish. As coral, he can stay alive in the water like a tree, or he can come out and transform into a brilliant stone that radiates the color of blood. In other words, coral will not decay according to our normal understanding of the passage

of time. And of course, the vibrant red pieces of coral strewn about the beach can themselves become fossilized, thereby delaying decay even further – for eons, in fact.

Regarding Ovid's line in the excerpt above about blood (and Pythagoras' unsurprising aversion to it), the play seems to adhere to the precept put forth as *The Tempest* is largely devoid of blood. There is no bloodshed despite Stephano's talk of "bloody thoughts", which fortunately do not come to fruition (as with Sebastian's and Antonio's plot) (IV.i.219). Rather touchingly, after meeting again, Alonso and Prospero both use the phrase "flesh and blood", as if to cement their kinship and reconciliation through the union of their children. But there are no actual blood drops in this world where non-animal organisms (e.g., trees, coral) seem to define and characterize existence. The closest we come to a representation of a bloody body are coral's limbs that appear frozen with a red hue, but remain eternally bloodless all the same.

Pearls

On the most basic level, Ariel's song concerns transforming the king's body into precious objects – fitting since jewels adorn a monarch's crown. But the specifics, like the use of coral, are worth analyzing. As for the complementary image, "those are pearls that were his eye", many of the same observations on coral apply to pearls as well. For starters, *The Tempest* also departs from standard decorative and opulent connotations of the term "pearl." One certainly does not have to look far in the Shakespearean canon to find instances where pearls simply connote luxury. In *The Merry Wives of Windsor* we have "sapphire, pearl and rich embroidery" (V.v.68); *Much Ado About Nothing* contains "laced with silver, set with pearls" (III.iv.17). At the end of *Othello*, the title character famously remarks that "like the base Indian, [he] threw a

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⁶¹ Although there are ample references to ebbing and flowing (cf. line 194 of the Ovid excerpt).

pearl away / richer than all his tribe" (V.ii.356-7). But even in this striking example, the use of pearl does not deviate from the ordinary.

Continuing with the vegetal theme, a pearl begins its existence due to a small seed or kernel (often a grain of sand) that forms the basis of the core and from which the pearl will "grow." Indeed, the association between pearls and plants should not be discounted or underestimated. One of the Latin terms for pearl, *unionem* (nominative *unio*), was also a colloquial term for an onion (even today we cook with pearl onions). As one medieval lapidary explains, "the pearl is found in a shell, and it is called *unio* (union), because it is always found alone. The wise say that the oyster shells are open at certain times, and they receive the dew of heaven; the morning dews become white and clear pearls, while the evening dews are obscure" (Shackford 114).⁶² A Lapidary of Sacred Stones explains that "unio" was "another name for pearl, which medieval authors justified with the assertion that there was only one pearl per oyster" (Lecouteux 325). Pearls were believed to heal leprosy, gout, stomachaches, and even protect against infection from the bites of rabid animals (Lecouteux 325). Common lore held that those who habitually ate pearls would "never die suddenly from poisoning" (Lecouteux 325). The fifteenth century Peterborough Lapidary observes that:

Margarita is chef of al stons that ben wyght and preciose...And it hathe the name margarita for it is founde in shellis...or in mosclys and in schellfyssh of the see...it is genderd of the dewe of heven, which dewe the schell fissh receyveth in certen tymes of the yer, of the which dew margarites comen. Some ben cleped unyons...for ther is oonly one ifonde and never two togeder...and somme seyne that they comforten lymes and membris, for it clenseth him of superfluite of homours and fasten the lymes, and helpen agen the cordiacle passioun and agens swonyng of hert, and agens febilnes...and also agens rennyng of blod, and agens the flyx of the wombe...it is trowed that no margarite groweth past half a

⁶² Shackford notes that the account of pearls is translated from a twelfth century French prose version Marbod of Rennes' verse lapidary, *Liber de lapidibus* (Book of Gems) (Shackford 171).

fote...The best and most noblyst margarites comen owt of Inde and of old Brytayn. (Evans 107-8)⁶³

Like coral, pearls are no ordinary objects; their supposed powers of healing (over such conditions as cardiac pain and heart failure, no less) represent a kind of triumph over the animal kingdom and human biology. Of course, oysters themselves are animals but pearls were thought of as gems and "almost all of the lapidaries discuss it" (Lecouteux 220). More broadly, though, pearls again suggest a dream of achieving eternal life by beating death. After all, being able to heal such an extensive range of diseases is quite the impressive feat.

With respect to the soul's eternal life, Maidie Hilmo observes in *Medieval Images, Icons, and Illustrated English Literary Texts*, that the Book of Matthew explicitly "links both seed and pearl images with the kingdom of heaven" through a series of parables (Hilmo 149): "Another parable put hee foorth vnto them, saying, the kingdome of heauen is like vnto a man which sowed good seede in his fielde"; "The kingdome of heauen is like to a marchant man, that seeketh good pearles" (Matthew 13). A version of the pearl parable also appears in the Gnostic Gospel of Thomas, where Jesus says that "the Father's kingdom is like a merchant who had a supply of merchandise and found a pearl. That merchant was prudent; he sold the merchandise and bought the single pearl for himself. So also with you, seek his treasure that is unfailing, that is enduring, where no moth comes to eat and no worm destroys" (Thomas 76). I include this version because it renders even more explicit the association between pearls and the dual conceptions of "eternal." Here, the pearl symbolizes the path to a heavenly afterlife and the Kingdom of God. But on a more literal level, this "enduring" object – unlike the human body decaying in the soil – cannot be consumed by creatures as slight as worms and moths.

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⁶³ One of the main sources of the Peterborough Lapidary is John Trevisa's translation of *De proprietatibus rerum* (Bitterling 303). Even with the brief samples included in this chapter, one can detect similarities – e.g., the description of coral in the latter as being no taller than half a foot high matches the nearly identical description of a pearl's maximum size in the former.

Pearls and the Fragmented Human Body

As the medieval lapidary examples indicate, pearls were not merely solid objects to be found in the water – water itself played a key role in their creation. In the second half of the seventeenth century, John Fryer wrote in his New Account of East-India and Persia, "it is a fabulous thing that the pearl should be generated by the dew of heaven, seeing the shellfishes in which they are conceived have their residence in the very bottom of the deep. That which is reported of them, that they are soft in the water, and grow hard, like coral, as soon as they are taken out, is not true" (Fryer 321). A Lapidary of Sacred Stones notes that in antiquity, pearls "were believed to be the tears of Venus" and the OED records that one of the definitions of "pearl" that was in use in Shakespeare's time was "a small round drop or globule resembling a pearl in shape, color, or luster, especially a dewdrop or a tear" (Lecouteux 220). These various meanings and explanations present a curious – if not somewhat incongruous – way of thinking about pearls that results in a closed circuit of signification. For instance, dewdrops or tears create a "pearl" (as in the gem), but "pearl" also denotes dewdrops or tears. There is a certain degree of circularity involved, or, put differently, a constant loop whereby the signifier's meaning habitually reverts back to water as a key ingredient constituting a "pearl." And while it is certainly not unusual for words to have distinct meanings, we do not usually expect meanings to be opposed diametrically in the way that a hard spherical white gemstone composed of calcium carbonate (the same compound coral secretes) is utterly different from a watery, clear, and yielding teardrop that will dissipate and evaporate at a moment's notice.

But the tear meaning is undeniably important to Shakespeare, who frequently uses "pearl" in this sense – though not in *The Tempest* (similar to how he treats "coral" differently in

this particular play as well). In the "Rape of Lucrece", Lucrece "wiped the brinish pearl from her bright eyes" (1213). In King John, Shakespeare writes, "not his mother's shames / draws those heaven-moving pearls from his poor eyes" (II.i.169). There is clearly a precedent for associating pearls with eyes in Shakespeare's works, but in *The Tempest*, pearls are not the tears eyes produce; rather, they supplant the spherical organ itself. In Ariel's song, Shakespeare utilizes the existing close association between pearls and eyes to transmit an undercurrent about the fragmentation of the human body. Consider when Prospero says, "at the first sight / [Ferdinand and Miranda] have changed eyes" (I.ii.444-5). Eyes are figured as physical objects or spherical tokens of great value, with the implication being that the body is broken apart as if to be rebuilt into something new (i.e., the parts of Miranda and Ferdinand combine to form a better whole). Similarly, when Stefano says to Caliban, "Drink servant monster...thy eyes are almost set in thy head" and Trinculo interjects, "Where should they be set else? He were a brave monster indeed if they were set in his tail" (III.ii.6-7), we once again see this odd insistence on fragmenting the body – specifically in relation to eyes – with a verb that evokes gemstones to be "set" in a piece of jewelry, such as a ring or crown.

Prospero seems oddly preoccupied with this particular body part – first referring to Sycorax as this "blue-eyed hag" (I.ii.271) and speaking of "eyeballs" (as if to emphasize their shape and contour). In addition to the changing eyes comment, Prospero says he will "bestow upon the eyes of this young couple / some vanity of mine art" (IV.i.40-1) and implores them to keep quiet, saying "no tongues! All eyes!" (IV.i.59). Prospero's chastisement is rather amusing, but it also suggests that eyes should supplant tongues; or that they are ultimately more important, more precious. *The Tempest* generally takes a lighthearted tone in these instances of imagined or rhetorical fragmentation, shying away from the more sinister forms such images could take.

Oedipus Rex, of course, taps into a deep-seated fear of injuring this soft and jellylike body part filled with vitreous humor. As various medieval and Renaissance texts reveal, pearls were thought to be soft before exposed to air, at which point, like coral, they would undergo a transformation into something "rich and strange" – lines fittingly sung by the airy sprite (i.e., as air personified, Ariel is the medium prompting crystallization). It is precisely their softness that poses grave danger and induces fear – something Shakespeare understood well when he crafted arguably his most horrific and shocking moment: Cornwall plucking out Gloucester's eyes in King Lear. But any fixation on eyes likely also has to do with two simple facts: First, this is the body part capable of producing an onslaught of tears. As we recall from chapter one, Shakespeare uses this to great effect and quite creatively in The Winter's Tale when he depicts Leontes' eyes as the organ that will water a plot of ground day in and day out. Second, these organs are, to the naked eye, perfectly spherical – a detail that holds a particular resonance in this play. I shall address the second observation in a later section, but with respect to the first point, the mixture of water and soil undeniably poses a powerful prospect for new life.

The Ground Beneath the Waves: Ooze and Mud

As the first scene closes, we see Gonzalo desperate for land, recognizing solid ground is all that can save them from certain death at this point: "Now would I give a thousand furlongs of sea for an acre of barren ground" (I.i.58). Similarly, in the next scene, Miranda asks "how came we ashore?", to which her father replies, "by providence divine" (I.ii.159-60), employing a term that evokes the religious sense of salvation. Of course, the more mundane meaning of salvation – i.e., your life being saved in the here and now rather than attaining redemption for one's soul in the afterlife – is inextricably linked to the ground itself.

As we saw with trees, Prospero's relationship to the ground he walks on is rarely straightforward. Indeed, he often speaks of the ground as though it were one of the many instruments in his retribution toolbox: "Fortune...hath mine enemies / brought to this shore" (I.ii.180-1). To be sure, this statement is obvious insofar as there would be no play to speak of if the others did not wind up on the island, but the emphasis on the ground persists in unexpected ways, such as when Prospero demands, "here cease more questions. / Thou art inclined to sleep" (I.ii.185-6). Prospero's word choice suggests an incline or sloping downwards, but more generally, when the stage directions indicate that a character should fall asleep, it seems unlikely they would remain standing.

Prospero has quite the proclivity for sending people to the ground, and, like other aspects of the play, these movements cast our eyes downward, to the lowest level of the stage. Of course, Prospero's tendency to put people to sleep (literally, not euphemistically) is largely benign. Still, the play hardly shies away from exploring the link between sleep and death – most famously in the oft-quoted line, "our little life is rounded with a sleep" (IV.i.157). Not surprisingly, in certain situations, the ground comes dangerously close to being a site of death:

Sebastian: What a strange drowsiness possesses them!

. . .

Antonio: They fell together all, as by consent. (II.i.195-9)

Sebastian: Prithee, say on: The setting of thine eye and cheek proclaim A matter from thee, and a birth indeed Which throes thee much to yield.

Antonio: Thus, sir:
Although this lord of weak remembrance, this,
Who shall be of as little memory
When he is earthed, hath here almost persuaded,
For he's a spirit of persuasion, only
Professes to persuade – the king his son's alive,
'Tis as impossible that he's undrowned

And he that sleeps here swims... Here lies your brother No better than the earth he lies upon. (II.i.224-77)

Once again, downward movement (as opposed to the ground itself) becomes problematic and linked to baseness. Of course, we know that Prospero is responsible for making Alonso and Gonzalo fall to the ground due to drowsiness, so in that sense, there is never any real danger. But even so, this harebrained and murderous scheme reveals just how swiftly and easily a plot of ground can become a burial site. For Antonio and Sebastian, once someone has been "earthed", that is the end. Having the victim come back to life would be as crazy as someone being "undrowned." Little do they realize, in their limited and unproductive view, that the man they speak of is "undrowned." Antonio even brazenly mocks the king, claiming he is no better than dirt. Under the conventional view (which I would argue the play works to supplant), comparing someone to dirt is a grave insult, but this line of thinking works only if one ignores a) the capacity of this organic substance to nourish and generate new life and b) the sacred and profound meanings that cultures have long associated with the soil. With respect to the second point, I think Robert Pogue Harrison sums up the matter best when he states that the act of burial is an attempt to define our "place of belonging" by rooting ourselves back in the soil because "the humus grounds the human" (Harrison 7). Regarding the first point, this is precisely what Antonio hints at – whether consciously or not – when visualizing his son's fate:

Alonso: O, it is monstrous, monstrous: Methought the billows spoke and told me of it; The winds did sing it to me, and the thunder, That deep and dreadful organ-pipe, pronounced The name of Prosper: it did bass my trespass. Therefore my son in the ooze is bedded, and I'll seek him deeper than e'er plummet sounded And with him there lie mudded. (III.iii.95-102)

"Ooze" is not a word that appears with great frequency in Shakespeare's works. In fact, it shows up only seven times, and the only play with more than one occurrence is *The Tempest. Antony and Cleopatra*, with all of its intense focus on the Nile's rich soil (and its regenerative properties) contains but one instance. *Timon*, another play with a surprising fixation on the earth's soil, uses the term once. *Pericles*, another oceanic play, contains one appearance. Finally, *Henry V* and *Cymbeline* both refer to the ooze at the "bottom of the sea."

But what is ooze? In truth, the word is every bit as semantically rich as what we picture ooze to be in real life: a thick, nutrient-rich wet mud or slime, especially at the bottom of a river or ocean. This typical meaning was certainly current in Shakespeare's time, as we see in the examples above. But it meant several other things that are less likely to register for a modern audience. Ooze also signifies the juice, sap, or liquid from a plant or fruit (a meaning still in use today, though not a particularly common one). Interestingly enough, ooze was also a name for seaweed. And of course, the term functions equally well as a verb, as if to capture the dynamism of the mineral rich and life-giving substance itself.

How fitting, then, that a word closely related to water (specifically to the ocean) and to plants (even referring to the most common plants living in the water) should hold some significance in this play. Alonso's statement about Ferdinand wonderfully complements what Ariel says to Ferdinand about his father (i.e., Alonso), creating a kind of circularity or closed circuit whereby certain rhetorical strategies can be recycled into something new. This time, Ferdinand is the one who is being pictured as being part of the muddy ooze and sedimentary bed. But a part of what makes this statement where Alonso is trying to cope with what has happened so poignant and effective is the hint of hopefulness mixed with desperation, particularly when he says "I'll seek him...there" – at once a death wish, but perhaps also indicative of a glimmer of

hope that his son remains alive. Similarly, shortly before Prospero "comes clean" about Ferdinand's whereabouts but after Prospero informs Alonso that he has "lost" a child too (i.e., Miranda), Alonso remarks, "O heavens, that they were living both in Naples, / the king and queen there! That they were, I wish / myself were mudded in that oozy bed / where my son lies" (V.i.151-4). As we recall, this is not even the first time in *The Tempest* that Shakespeare has used the relatively rare form "mudded", which means covering or mixing something with mud. The word choices in these instances are no coincidence; to be bedded in ooze or "mudded" is to be enveloped in the richness and fertility of silt, like in the famous passage from *Antony and Cleopatra*:

Antony: The higher Nilus swells, The more it promises: As it ebbs, *the seedsman Upon the slime and ooze scatters his grain*, And shortly comes to harvest.

Lepidus: You've strange serpents there...

Your serpent of Egypt is bred now of your mud by the

Operation of your sun: So is your crocodile. [emphasis added]
(II.vii.19-26)

The degree to which ooze proves inescapably tied to the potential for birth and renewal cannot be underestimated in an era when the theory of spontaneous generation still held considerable sway (and was often taken at face value). So its presence is ideal for a play concerned with transformations, second chances, and new lives. Towards the end, Prospero says of Gonzalo, Antonio, and Sebastian: "Their understanding / begins to swell, and the approaching tide / will shortly fill the reasonable shore / that now lies foul and muddy" (V.i.79-82). "Swell", of course, is often used in the context of pregnancy and fertility (hence why it appears multiple times in *Antony and Cleopatra*); here, Prospero describes water mixing with mud as the final stage to achieving transformation, as though the gestation period were finally complete. Quite literally,

the men are about to exit their stupor/magic-induced coma and reenter the world of consciousness with a new comprehension.

Spontaneous Generation and Blurred Boundaries

Though the comparisons to *Antony and Cleopatra* are useful in elucidating themes, in truth, one does not need to look to this Roman play to find explicit references to spontaneous generation. To return to Caliban's premonition that they shall "all be turned to barnacles, or to apes with foreheads villanous low", many modern readers likely gloss over the word "barnacle" without realizing that Caliban is referring to a specific type of goose, not the crustacean. As Gerard's *Herbal* explains, "There are in the north parts of Scotland certain trees whereon do grow shell-fishes, which, falling into the water, do become fowls, whom we call barnakles, in the north of England brant-geese, and in Lancashire tree-geese." The *Herbal* is referring to the belief that barnacle geese spontaneously generated from goose barnacles.

Indeed, the barnacle goose was a prototypical example of spontaneous generation and the case of this one random bird was so well-known that it figured prominently in religious discussions. For instance, in the late twelfth century, Gerald of Wales argued in his *Topographia Hiberniae* that the generation of barnacle geese proved the Immaculate Conception:

There are here many birds that are called "Barnacles" which in a wonderful way Nature unnaturally produces...For they are born at first like pieces of gum on logs of timber washed by the waves. Then enclosed in shells of a free form they hang by their beaks as if from the moss clinging to the wood and so at length in process of time obtaining a sure covering of feathers...Be wise at length, wretched Jew, be wise even though late. The first Generation of man from dust without male or female [Adam] and the second from the male without the female [Eve] thou darest not deny in veneration of thy law. The third alone from male and female, because it is usual, thou approvest and affirmest with thy hard beard. But the fourth, in which alone is salvation, from female

without male, that with obstinate malice thou detestest to thy own destruction...[Nature] is an argument for the faith and for our conviction procreates and produces every day animals without either male or female. (Jacobs 92-3)

Part of what I find striking about this account and Gerard's as well is that the creation is not limited to simply barnacles (i.e., "shell-fishes") and geese; trees, plants, and water are conspicuously thrown into the equation, serving as key ingredients in the generative process. But given the haziness surrounding how spontaneous generation exactly works, it should come as no surprise the end result should blur boundaries among life forms. During the fasting that occurs during Lent, Christians historically were allowed to consume fish, but not fowl; however, the belief that the barnacle goose was in reality a fish suggested to some followers that consuming this animal was fine. ⁶⁴ In a rather amusing turn, Pope Innocent III had to issue a decree that explicitly prohibited eating the geese during Lent (Lankester 117).

This blurring of boundaries is evident in Caliban's words. In the blink of an eye, he imagines them becoming birds, crustaceans (since that meaning cannot be ignored), and primates. Moreover, the allusion to spontaneous generation occurs right before the final act when everything begins to "swell" or come to fruition. In the final book of the *Metamorphoses*, Ovid too describes the process of spontaneous generation as a blending or amalgamation of organisms and likens the process to the phoenix that rises from the ashes ("generation...from dust" sans "male or female" as Gerald notes): "Sum folk doo hold opinion when the backebone which dooth growe / in man, is rotten in the grave, the pith becommes a snake. / Howbee't of other things all theis theyr first beginning take. / One bird there is that dooth renew itself and as it were / beget it self continually" (Book XV).

⁶⁴ Clearly, an additional layer of confusion and obscuration occurred since shellfish are unrelated to fish.

Towards Circularity: Bending the Great Chain of Being

Just as there were some Renaissance scholars who argued that spontaneous generation posed a threat to Christian theological teachings because it implied godless creation, denied intelligent design, and relied too heavily on chance (Boorstin 39; Goodrum 208), I would suggest that the blurring of the boundaries between life forms undermines the Great Chain of Being. According to Plato, the "completeness of the world demanded a full range of different beings ranked hierarchically on a chain that descended from the immortal gods on high, down through humans to animals, plants, stones, and dust at the very bottom" (Patterson 21). The fifteenth century jurist Sir John Fortescue eloquently articulated this perfect and divine ordering of the universe in which "angel is set over angel, rank upon rank in the kingdom of heaven; man is set over man, beast over beast, bird over bird, and fish over fish, on the earth in the air and in the sea...There is no worm that crawls upon the ground, no bird that flies on high, no fish that swims in the depths, which the chain of this order does not bind in the most harmonious concord" (Tillyard 27). Given the play under discussion, it is nice to know that the organisms and organic material beneath the surface were not forgotten from this hierarchy and were as much a part of the ladder as everything on dry land.

But of course, all of the known universe would have to be included in order for the hierarchy to be complete; as Charles Patterson explains, the hierarchy (which included social rank) needed to be "continuous since the perfect fabric of God's creation could have no gaps" (Patterson 22). The theologian Nicolas of Cusa wrote in *De docta ignorantia* (1440), that "the highest species of one genus coincides with the lowest of the next higher genus, in order that the universe may be one, perfect, [and] continuous" (Lovejoy 80). I would argue that *The Tempest* envisions a different, but more accurate, type of continuousness – less a ladder or chain, and more a circle (or to use a modern-day example, the recycling symbol). If Prospero represents the

top of the pyramid in the world of the play (whether as the godlike protagonist or simply as a man whose place above plants, animals, women, men of lower social rank, etc. seems secure), then this position is weakened or eroded as the action progresses. As I discuss in the prior chapter, the ladder arguably becomes destabilized at the point where, structurally, Prospero moves down a few pegs to link his own person to trees. Of course, Prospero being Prospero, he creates a microcosm or subset of the Great Chain of Being by devising a hierarchy of plants where trees are naturally on top. But this new order is undermined in no small part by Prospero's arrogance and suspect dominion over nature (which he ultimately forswears). More importantly, as the play turns our attention to alternate modes of existence and creation (e.g., equating the human body to soil and rocks, organisms turning into other organisms) what initially looks to be a ladder becomes bent and twisted out of its vertical shape into something more ovoid in nature.

Through visions of hardened coral and pearls, Shakespeare incites us to consider the notion of achieving something constant, and perhaps even eternal. To return to pearls, the external round contour that we perceive merely scratches the surface of a pearl's intrinsic circularity. As with coral, pearls grow by layers, but if anything, they grow in a manner even more akin to tree rings. A pearl sliced in half compared to the cross-section of a tree trunk reveals noticeable similarities (Fig. 16).



Figure 16. Cross-sections of a pearl (left) and tree trunk (right).

These images depicting growth emanating radially from an originary nucleus could easily serve as models for what Marder defines as the quintessence of vegetal being. Humans have a natural tendency to think of organisms as being vertically structured, but, of course, in doing so, we are merely projecting our own sense of what is normal (top to bottom/head to feet) onto other life forms (namely vegetation). Marder poses the intriguing question of what it would mean to approximate "the locus of vegetal being" while also reminding us that seeds denote "animal and vegetal modes of reproduction alike" (Vegetal 474, 487). Indeed, the concept "seed" (which is relevant to early modern thinking on coral and pearls) always already defies boundaries between species and kingdoms (Vegetal 487). Bearing these points in mind, Marder astutely observes that "the act of placing oneself in the position of a vegetal being" involves the "seemingly banal fact of...stretching up and down simultaneously" (Vegetal 474). In other words, from a seed's germination, offshoots may emerge in any direction such that all living extensions (e.g., roots, stems, branches, flowers) are radii from the origin.

While this radial process is not how humans typically characterize life on earth, circles, rings, spheres, and globes have held symbolic significance in virtually every age. Not surprisingly, their continuous shape with no break or end has frequently been used to signify eternalness or the notion of infinity (a standard explanation behind wedding bands). Ariel's song ends with a different kind of ring ("sea nymphs hourly ring his knell") – the sound emanating from a bell, in this case to mark someone's passing. This type of ring presents a striking juxtaposition to the longevity of the coral and pearl considering that the sound, though it can echo for several seconds in the air, is ultimately fleeting.

The symbolic significance behind concentric rings cannot be overestimated as such images are used to depict everything from creation itself (Fig. 17) to celestial orbits and the harmony of the spheres (Fig. 18) to the structure of the universe (Fig. 19):

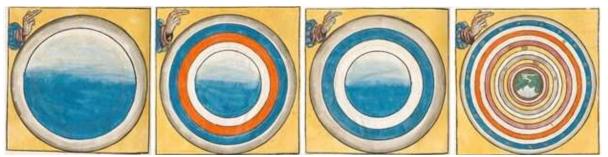


Figure 17. Days one through four of creation, as depicted in the late fifteenth century *Book of Chronicles*.



Figure 18. Geocentric celestial spheres from Peter Apian's Cosmographia (1539).

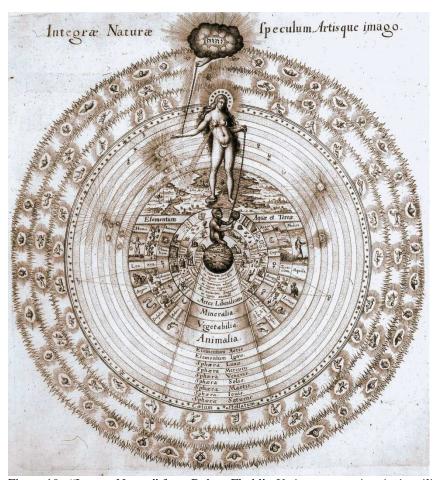


Figure 19. "Integra Natura" from Robert Fludd's *Utriusque cosmi maioris scilicet et minoris metaphysica, physica atque technica historia* (1617-18).

Regarding the first set of images from the *Nuremberg Chronicle*, a modern viewer might be struck by their plainness and starkness, particularly in the first blue circle, which represents in abstract form the creation of water. I would suggest that the structure of *The Tempest* – with its godlike protagonist – bears some important similarities to the biblical account of creation. Prospero begins by creating the opening watery scene, then he brings humans to land. And, as I detail in chapter four, mankind's postlapsarian existence is closely linked to the rampant exploitation of the earth's riches and is marked by an inability to return to the harmony that existed before the fall – themes that *The Tempest* addresses directly.

On the one hand, orbs seem to encapsulate limitless potential (particularly evident in the images conveying the grandeur and scope of God's work), but they also affirm perfect order.

Shakespeare memorably depicts the common Elizabethan picture of the world in Ulysses' famous monologue about cosmic order and the Great Chain of Being in *Troilus and Cressida*:

Ulysses: The heavens themselves, the planets, and this centre Observe degree, priority and place,
Insisture, course, proportion, season, form,
Office and custom, in all line of order;
And therefore is the glorious planet Sol
In noble eminence enthroned and sphered
Amidst the other; whose medicinable eye
Corrects the ill aspects of planets evil,
And posts, like the commandment of a king,
Sans check to good and bad. But when the planets
In evil mixture to disorder wander,
What plagues and what portents, what mutiny!
What raging of the sea, shaking of earth! (I.iii.85-97)

Established hierarchies are crucial not simply to social stability, but to the safety of the whole cosmos. The alternative, as Ulysses explains, is chaos and anarchy. *The Tempest*, interestingly enough, contains the most appearances of the words "harmony" and "harmonious." Granted, these words are sprinkled only sporadically across the Shakespearean canon, but, as with coral, their inclusion in this play should not therefore be regarded as inconsequential or coincidental.

Prospero begins his renunciation speech by tracing a circle on the ground – perhaps one final quasi-magical gesture that symbolizes the harmony and eternity of a circle. Yet this initial circular motion is simply the preamble to a speech that replicates verbally the visual effect of concentric rings. After drawing the circle, Prospero immediately mentions Neptune and the moon (referring to the sea and light, respectively, but the choice of celestial orbs amplifies the effect). More significantly, Prospero moves on to describe "green sour ringlets" – i.e., fairy rings (also known as elf circles). The only other Shakespearean work that mentions this phenomenon is, appropriately enough, *A Midsummer Night's Dream*. These ethereal botanical circles are bands of grass that differ in color from the surrounding area and are caused by fungi growth.

Incidentally, given that Prospero was directly responsible for the felling of countless trees and in this all-important speech finally admits to inflicting needless harm upon trees, the circle may also serve to recreate the circumference of a trunk. Such an interpretation is strengthened by the focus on a) vegetal circles that sprout from the grass and b) relinquishing his wooden staff and "bury[ing] it certain fathoms" deep, again evoking the rhetoric of life spontaneously generating from ooze (V.i.55). After Prospero says this, the First Folio states, "they all enter the circle which Prospero had made, and there stand charmed."65 This action prolongs the wellestablished circle/sphere motif, and – as previously intimated – these circles are often celestial in nature. Gonzalo worries that the moon will be "lifted out of her sphere", and Prospero speaks poignantly about the "great globe" before observing that "our little life is rounded with a sleep." The word "rounded" invites the reader to envision a sphere, while the transience of life suggests that we are insignificant when compared to the universe's magnitude. Similarly, the masque that Prospero creates speaks of Jupiter, Venus, and Mars – astronomical designations for these heavenly orbs that were already in use centuries before Shakespeare's lifetime. (Incidentally, the brightest objects in the night sky are the moon, Venus, Jupiter, and Mars.) "Moon" appears a dozen times in the text – hardly surprising for the sphere that controls the "flows and ebbs" of the earth's oceans (V.i.273).

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Although we cannot know for certain whether Shakespeare wrote these stage directions, at a minimum, it seems probable this is how the play was performed given that the action necessitates that all of these characters stand near or around Prospero in their charmed state. Put differently, the characters enter into a magical zone that numbs their senses (so demarcating a circle would be logical given the context). Like many of Shakespeare's plays, no version of *The Tempest* exists aside from what was ultimately printed in the First Folio. However, *The Tempest* appears to be one of a handful of plays that were set into type from a manuscript prepared by Ralph Crane, professional scrivener to the King's Men. This detail cuts both ways, however. On the one hand, Crane prepared high-quality versions and, across the board, "Crane's work appears clear and accurate" with "few verbal corrections needed in any script" that he prepared (Freeman xl). Moreover, given Crane's role, he may have been working from a "transcript of the author's papers" rather than a "theatrical prompt copy" (Freeman xl). On the other hand, some scholars have argued that Crane intervened by elaborating the stage directions. For a discussion of this point see John Jowett's "New Created Creatures: Ralph Crane and the Stage Directions in The Tempest."

Prospero draws this symbol on the stage perhaps as another means of evoking the celestial orbits that compose the harmony of the spheres. This theory that Pythagoras put forth suggested that a harmonious arrangement of the sun, moon, and other planets was defined by mathematical proportions. The perfect alignment of revolutions resulted in pure musical intervals (i.e., musical harmony). For a play that concerns the redemption of certain characters, the education of others, finding liberty and love for some, and perhaps even achieving harmony through forgiveness, the circle presents an ideal image to convey the happiness of such endings. And yet, the circle's association with infinity implies that no ending is truly finite, but simply presents a shift or movement along a new trajectory – hence Prospero's emphasis during the play's final moments on embarking upon a new phase of his life.

Conclusion

Though the opening lines and the epilogue are not usually considered side by side, they subtly reveal the degree to which the play has come full circle. The Boatswain – who appears only in the first and last scenes – orders his men in the beginning to "take in the topsail" and encourages the storm to "blow, till thou burst thy wind" (I.i.5). At the end of the play, Prospero tells the audience that the "gentle breath of yours my sails must fill" (Epilogue 11). These lines are almost mirror images of one another. Initially, the sail must be drawn in and contracted; the wind, meanwhile, blows so violently that it could burst. Prospero's words present the flipside to this image; the sail must grow and expand and strong gales have been replaced by "gentle breath", which almost by definition cannot emanate with any real force.

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⁶⁶ Although the theoretical music of the spheres was not audible to humans, from a thematic perspective, the allusions are particularly fitting in one of Shakespeare's most musical plays. David Lindley notes, that "from beginning to end the play is suffused with musical sounds and the effects of music are a continuous dramatic and thematic subject" (Lindley 199). John P. Cutts argues that "the whole play is conceived as taking part on an island that resounds continually to music in the air, which is...equivalent to music of the spheres" (Cutts 347).

This small detail that bookends the play by reusing certain terms and concepts is one of many examples that demonstrate the extreme/hyper interconnectedness that defines *The Tempest*: All of the characters are "knit up" (III.iii.89), which in turn echoes the "knotty entrails" of both trees and humans. Trees are linked to coral. The Golden Age myth cannot be extricated from Eden. Pearls offer but one type sphere and represent one instance of concentricity. Most everything involves water in one fashion or another (e.g., spontaneous generation). Barren dirt morphs into ooze via a liquid conduit. A word like "ooze" at once denotes a plant, its crop, and the soil from which it grows. Brittle bones become vibrant gems (which themselves may be part plant or animal). Images such as bodies in sediment and actions like servants being trapped in trees repeat like a broken record. Everything tends to circle back to everything else and that very circularity is integral to appreciating the play as a whole. It is perhaps unavoidable that such a never-ending chain of signification would undermine any sense of a facile vertical hierarchy, for what can be man's role in such a setting? More importantly, can he ever truly be ontologically and epistemologically separated from other forms of matter?

There are many ways to read and perform Prospero's quick retort when his daughter exclaims, "How many goodly creatures are there here! / How beauteous mankind is! O brave new world / that has such people in it!" (V.i.185-7). A skilled actor could easily make an audience chuckle at the witty and curt rejoinder, "'tis new to thee." Of course, Prospero's remark can also be read as a cynical appraisal of the world and of his daughter's limited knowledge. But regardless of the tone, the irony is clear: there is nothing truly new in a world marked repetition and interdependence. What's more, man is not the exceptional, distinct creature he often thinks himself to be.

Chapter 6 Love, Liberty, and the Pursuit of Game in As You Like It

Introduction

No ecocritical examination of Shakespeare would be complete without considering the playwright's ubiquitous use of animals. As I alluded to in the introductory chapter, I chose to focus on vegetation and the ground in part because animals have received far more attention in ecocritical scholarship. But *As You Like It* (c. 1599), as one of the plays that utilizes animal imagery the most, dovetails nicely with this inquiry not simply because of its memorable sylvan setting, but because the use of animals entails a different type of grounding: the return to earth and reality from metaphorical flight. This type of closeness to the ground, though not exactly negative, carries darker undertones than we have seen in the other iterations of the theme, which depict the regenerative and/or transformative properties of the soil. *As You Like It*, with all of its emphasis on animal life, presents a more tempered view of the ground that corresponds to the play's ability to depict love in both a cynical and triumphant manner. In other words, for better or for worse, humans are tied to the ground, as much as individuals may, at times, aspire to be like birds that can fly away at a moment's notice.

Though dozens of nonhuman creatures are mentioned to varying degrees in *As You Like It*, the present discussion attends to Shakespeare's prevalent use of birds and deer. The imagery associated with these animals serves as a springboard to weave together various themes in the play. More specifically, this chapter details the ubiquitous avian motif and argues that its primary value rests in its ability to represent the pursuit of an ideal existence. However, its secondary purpose stems from the role of birds as a link between the thorny matter of finding love and *As You Like It's* treatment of hunting. It is at this intersection that the focus of the

discussion shifts to deer and, more broadly, hunting as indicative of the quest for love, repressed anxieties, and a rejection of utopian ideals – all of which undermine the foundation of the fledgling society in the forestial shelter away from court.

Early in the play, the benevolent and wrongfully exiled Duke Senior famously remarks that now that he and his men are living in Arden "exempt from public haunt", they will find "tongues in trees, books in the running brooks, / sermons in stones, and good in everything" (II.i.16-7). With Shakespeare's green world plays, the vegetative and topographical features (e.g., trees, brooks, stones) invariably come into sharp relief; however, I hope to show that man's relationship to animals is of central concern in the play. The phrase "exempt from public haunt", which immediately precedes a poignant conversation about killing deer, is likely intended to serve as a pun between haunt/hunt (with the implication that the men would be free from persecution and persecuting others). Drawing upon historical, legal, and philosophical thinking on the relationship between ethical behavior and the exploitation of animals, this chapter argues that *As You Like It* reveals what a model society could entail, but then shatters the illusion of harmony by introducing the effects of love and lust.

To put this discussion in context, *As You Like It*'s candid depiction of animal suffering appears before Descartes' now infamous animal-machine hypothesis. Indeed, before Descartes, seventeenth century authors generally agreed that animals possessed cognitive powers (Broughton 417). In *Man and the Natural World*, Keith Thomas argues that the early modern period revealed a new attitude towards animals as beings within mankind's moral and social framework (Brutal Reasoning 74). One of the chief proponents of a more inclusive approach was Michel de Montaigne, whose writings may have influenced *As You Like It*. Erica Fudge claims that Shakespeare represents Montaigne's "ethics in order to parody them" and that he

does not treat Montaigne's pro-animal views seriously since they are articulated primarily by Jaques (Brutal Reasoning 79). While this may be the default interpretation of the play, I argue that there is no compelling reason to discount Jaques' observations once understood in their proper context (and even though the character may appear melodramatic to some). As the philosopher Mary Midgley puts it, "the fact that some people are silly about animals cannot stop the topic being a serious one. Animals are not just one of the things with which people amuse themselves...they are the group to which people belong. We are not just rather like animals; we are animals" (Masson 37). These words essentially describe the foundation upon which *As You Like It* is built, and the question of how to treat animals when designing a society proves to be a troublesome subject. *As You Like It* emphasizes man's relationship to animals and, in the process, examines whether anything truly distinguishes us from them.

Taking Flight

The shift from Duke Frederick's court to the forest of Ardenne happens so quickly that the manner in which individuals enter the new milieu could easily go unnoticed. However, the path to the idyllic setting is marked by references to birds, with flight serving as a metaphor for the escape from Duke Frederick's tyranny. The first description of Ardenne is of a place where "many merry men" gather with the exiled Duke Senior to "live like the old Robin Hood of England" (I.i.100). Indeed, "many young gentleman flock to [Duke Senior] every day and fleet the time carelessly, as they did in the golden world" (I.i.101-3). The choice of the verb "flock", which is semantically tied to bird congregation patterns, accentuates the bucolic aspects of forest life. The fact that the "merry men" of Sherwood Forest lived in canopies only adds credence to an avian subtext. However, the more significant clue in the opening portrayal of Ardenne that

relates to birds and utopian landscapes can be found in the simile comparing their lifestyle to the "golden world", referring to the Golden Age in Book I of Ovid's *Metamorphoses* – a chimerical time when man could communicate with animals and learn from their acumen (Spencer 189).

The reference to the Golden Age as an archetype for an ideal society is only the beginning in terms of allusions to the *Metamorphoses* and we soon perceive how various references relate to Shakespeare's use of animal imagery. In Book X, Ovid depicts the myth of Ganymede, i.e., the ananym that the play's heroine, Rosalind, adopts when she flees Duke Frederick's court. According to the myth, Zeus either sent an eagle or morphed into one himself to seize Ganymede and transport him to Olympus. Eventually, Zeus placed Ganymede in the sky as the constellation Aquarius. Although Aquarius is commonly assumed to signify water (*aqua*), the cluster of stars is also associated with the eagle (*aquila*). Consequently, the majestic bird became a symbol for Ganymede. After Zeus first plucks Ganymede from the ground, Ovid describes how the youth's hounds barked uselessly at the sky. Though the canines belong to Ganymede, hounds are invariably associated with hunting and tracking animals. In *As You Like It*, Duke Frederick pursues Celia, Rosalind, and Orlando but his efforts are in vain because like, Ganymede, his daughter and niece figuratively manage to leave *terra firma*.

To be sure, Shakespeare is usually exceedingly explicit in crafting the analogy between his characters and birds. For instance, in order to strengthen the tie between birds and the divine realm, Celia remarks that they are as inseparable as "Juno's swans." And when Rosalind and Celia make their first entrance on stage, Celia remarks that a newly arrived courtier "will force upon us as pigeons feed their young" (I.ii.77-8). As a joke, Rosalind responds that in being forced to digest the courtier's news, they will be like pigeons crammed in a cage being fattened for food. The deeper consequence of this conversation is that staying in Duke Frederick's court

would prove a grave a threat to Rosalind's life since she would be like the poor incarcerated pigeons (i.e., sitting ducks) awaiting their doom. Shortly thereafter, Duke Frederick, in an act of pure tyranny, banishes Rosalind without any cause. It is at this point that Rosalind and Celia decide to escape from their caged existences and "devise how [they] may fly" (I.iii.94).

The symbolic properties of birds are attractive because these creatures are seemingly unconstrained by the forces that otherwise keep animals grounded. Accordingly, Celia is confident that "after [their] flight...[they] go in content to liberty and not to banishment" (Liii.131). Duke Frederick will be unable to track them if they adopt forms capable of leaving earth at a moment's notice and seeking shelter high above in limbs that are out of reach. Although Rosalind and Celia are not literally tree-dwellers, their connection to branches is maintained throughout the play and indeed strengthened by such occurrences as when Orlando decides to post his verses "on" and "upon" trees (e.g., III.ii.158, III.iii.353) as a way to reach Rosalind. Moreover, statements such as Rosalind's "worth being mounted on the wind" (III.ii.79) suggest that by escaping into the air (even if only in a metaphorical sense), her value approaches new and divine heights, much like with Ganymede who was bequeathed a place of distinction among the gods and granted immortality.

Jaques

The melancholy Jaques comes across as an individual whose spirit never soars, with eyes permanently cast downward as he dwells on the sad minutiae of life. When we first meet Jaques, he characterizes others – though never himself – as birds (e.g., he asks his fellow Lords to "warble", which means to sing collectively as a flock of birds (II.v.31)). However, his outlook undergoes a striking transformation once he has an epiphany concerning his ambitions and

realizes the optimal lifestyle for him. Jaques is incredibly excited due to a chance encounter with Touchstone, a former clown of Duke Frederick's court, in the forest. Jaques notes that when he "did hear the motley fool thus moral...[his] lungs began to crow like chanticleer"(II.vii.28-34). Jaques' worldview has abruptly switched to one where he too can spread his wings, which is precisely what he intends to do, albeit in his own unusual way. Jaques explains that he is "ambitious for a motley coat" (II.vii.43). Interestingly enough, a rooster is one of two birds in the play (the other being the parrot) who don feather patterns that could rightly be described as "motley." Although in the modern era we visualize chickens as monochromatic poultry largely because of the way they have been bred with the rise of big agribusiness and mass production factory farms, it used to be the norm to see domesticated fowl with plumage containing myriad hues resembling a chequered coat (Fig. 20).

Jaques' conclusion that he "must have liberty" from "as large a charter as the wind" (II.vii.47-8) parallels Rosalind and Celia's decision to "take flight" and settle in the space where birds fly in the hope of reaching freedom far from the oppressive dukedom. Yet Duke Senior remains weary of giving Jaques "license of free foot" (II.vii.68) because he fears the discontented lord would do little more than exorcise the sins that he himself has committed at the expense of hapless bystanders. Shakespeare's choice of diction here again implies an avian quality insofar as a bird's "foot" can literally be "free" of the ground. Given the tensions that exist between these two men, it is hardly surprising that Jaques seeks "to avoid" Duke Senior (II.v.28). Yet, if his goal is to convince the duke that he is qualified to be installed as the official moralizing fool, one might assume that Jaques would actively try to display his talents. The reason behind this incongruity appears to lie in the fact that Duke Senior "love[s] to cope" Jaques in his "sullen fits" (II.i.67). The verb "cope" is telling since it also denotes the action of cutting

the beak or talons of a hawk. Thus, on some level, Jaques realizes Duke Senior is not the type to permit him a "license of free foot", as clipping talons would suggest.



Figure 20. Left: detail from the thirteenth century *Theological Miscellany* of Peraldus. Right: rooster from *Imaginacion de vraye noblesse*, copied by Poulet circa 1500.

Romantic Anxieties

Although references to birds are used implicitly and explicitly in matters that relate to the fullest realization of happiness in life, birds are hardly limited to chimerical visions of the ideal. Birds also represent anxieties in romantic relationships. For all of the play's focus on love, many characters are inordinately concerned with cuckoldry. The term originates from the name of the bird that lays its eggs in another bird's nest. Shakespeare is perhaps alluding to this behavior when Celia chastises Rosalind and insists she should "show the world what the bird hath done to her own nest" (IV.i.174). The phrase "cuckoldly ram" highlights a crucial feature about the cuckolded male, namely that he supposedly wears horns to signify his shame. As Brucer Boehrer notes in *Shakespeare Among the Animals*, no animal image is more common in English Renaissance culture than the cuckold's horns given their ubiquity in sixteenth and seventeenth century English prose, poetry, legal records, visual iconography, and drama (Among the Animals 71). It is at this peculiar intersection between birds and creatures with horns that we can begin to broach the complex treatment of finding a mate in this fictional world and how the forces of love and lust negatively influence what could otherwise be a near-utopian society.

There can be no doubt that hunting and love go hand in hand. When Celia notifies Rosalind that she spied Orlando "furnished like a hunter", Rosalind exclaims "O ominous – he comes to kill my heart", with an obvious pun on heart/hart (III.ii.224). Of course, the difficulty lies in differentiating between the hunter and the hunted. Like the muddled human/animal dichotomy, it is rarely clear who typifies what variable in the relationship. Rosalind and Orlando are both depicted as hunters and, on other occasions, they resemble animals that are hunted. That vacillation exists in quixotic affairs should hardly come as a surprise. Such uncertainty and tensions are inevitable in the games lovers play. On the one hand, the thrill of the chase can be exhilarating, but the individuals involved must be vigilant of the dangers of romance, e.g., cuckoldry.

Rosalind takes great pains to convey to Orlando that there are numerous obstacles to surmount in order for love to succeed. She tells him that being in love is like being trapped in a "cage" (III.ii.335) and tries to bait Orlando into admitting he is a "prisoner" because to appear otherwise would imply that he is not in love. The image of entrapment recalls the description of Rosalind and Celia as pigeons caged in Duke Frederick's court. In that situation, it was eminently clear that they should abscond to be free of tyranny, but now the reader is forced to reevaluate his original understanding because the forest is plainly a location where love is found, and yet, being in love can limit a person's freedom and make him a prisoner of passionate emotions.

Whenever the topic of "horning" comes up, it is almost always in conjunction with birds. As we have seen, birds can exemplify the pursuit of happiness and freedom, but too much liberty implies a dearth of restrictions and undesirable looseness. In one of her lessons to Orlando, Rosalind explains that "men are April when they woo, December when they wed: / maids are

May when they are maids, but the sky / changes when they are wives. I will be more jealous / of thee than a Barbary cock-pigeon over his hen, / more clamorous than a parrot against rain" (IV.i.125-9). Rosalind maintains that the springtime epitomized by the Ovidian Golden Age will dissipate and only the harsh reality of winter remains once a man and woman wed. Her illustrations involving the stereotypically wayward birds are designed to prove that all that glitters is not gold because love is not necessarily an ideal state of bliss. This is especially true, Rosalind claims, because infidelity is an unavoidable aspect of romantic relationships. Orlando simply but assuredly states that "virtue is no hornmaker and my Rosalind is virtuous" (IV.i.55).

As far as the men of this world are concerned, Orlando is the exception rather than the rule. Touchstone wishes to marry Audrey and explains to Jaques that his desire is natural because "as the falcon her bells, so man hath his desires; and as pigeons rub bill to bill, so wedlock would be nibbling" (III.iii.67-68). His declaration appears to follow the established trope of birds signifying happiness, but Touchstone's statement does not convey the entire picture as evidenced by attempts to reassure himself that cuckoldry is not shameful:

Touchstone: Many a man has good horns, and knows no end of them. Well, that is the dowry of his wife; 'tis none of his own getting. Horns? Even so. Poor men alone? No, no; the noblest deer hath them as huge as the rascal. Is the single man therefore blessed? No. As a walled town is more worthier than a village, so is the forehead of a married man more honourable than the bare brow of a bachelor. (III.iii.42-8)

While As You Like It's preoccupation with "horning" might seem a tad out of place, the intersection between cuckolds and deer is indisputable. Of course, readers can infer that these repeated references concern man's desire to maintain control over partners who, upon cheating, would subvert their authority and sexual potency. Touchstone's own apprehensions elucidate Jaques' conclusion that "the worst fault...is to be in love" (III.ii.258). Clearly, Jaques is either

unwilling or unable to understand that love can yield its own rewards. Orlando, who is much more well-versed in affairs of the heart, retorts "'tis a fault I will not change for your best virtue" (III.ii.259). Orlando then teases Jaques that the fool he is searching for has "drowned in the brook" but that if Jaques "look[s] in, [he] shall see him" (III.ii.262). Jaques plays into Orlando's game and says "there I shall see my own figure" not realizing that Orlando is referring to the myth of Narcissus (Book III) who was so enamored with himself that he fell into a stream while admiring his reflection. Orlando perceptively discerns that Jaques is as much in love as anyone else, except he is in love with himself, or more specifically the melancholic role that he so enjoys playing.

A Nobler Kindness

One of Jaques' most memorable moralizing spectacles is an incident we do not have the pleasure of seeing preformed on stage but, rather, we hear the tale from one of Duke Senior's lords whose memory is sparked when Duke Senior says: "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" (II.i.21-4). What ensues is a lengthy (and arguably poignant) discourse depicting Jaques' reaction to watching a deer die from wounds received at the hands of a hunter:

First Lord: Indeed, my lord,
The melancholy Jaques grieves at that;
And, in that kind, swears you do more usurp
Than doth your brother that hath banished you.
Today my Lord of Amiens and myself
Did steal behind him as he lay along
Under an oak whose antique root peeps out
Upon the brook that brawls along this wood,
To the which place a poor sequestered stag,
That from the hunter's aim had ta'en a hurt,

Did come to languish. And indeed, my lord,
The wretched animal heaved forth such groans
That their discharge did stretch his leathern coat
Almost to bursting, and the big round tears
Coursed one another down his innocent nose
In piteous chase. And thus the hairy fool,
Much marked of the melancholy Jaques,
Stood on the extremest verge of the swift brook,
Augmenting it with tears.

Duke Senior: But what said Jaques? Did he not moralize this spectacle?

First Lord: O, yes, into a thousand similes. First, for his weeping into the needless stream: 'Poor deer,' quoth he, 'thou makest a testament As worldlings do, giving thy sum of more To that which had too much.' Then, being there alone, Left and abandoned of his velvet friend, "Tis right,' quoth he, 'thus misery doth part The flux of company.' Anon a careless herd Full of the pasture jumps along by him And never stays to greet him. 'Ay' quoth Jaques, 'Sweep on, you fat and greasy citizens, 'tis just the fashion. Wherefore should you look Upon that poor and broken bankrupt there?' Thus most invectively he pierceth through The body of the country, city, court, Yea, and of this our life, swearing that we Are mere usurpers, tyrants, and what's worse, To fright the animals and to kill them up In their assigned and native dwelling place.

Duke Senior: And did you leave him in this contemplation?

Second Lord: We did, my lord, weeping and commenting Upon the sobbing deer. (II.i.25-66)

I posit that like a number of other instances in the play, Shakespeare once again invokes a specific story from Ovid's *Metamorphoses* – The Doctrines of Pythagoras – in this scene. Arthur Golding's translation of the *Metamorphoses* provided widespread knowledge of Pythagoras' views on vegetarianism and particularly on the evils of hunting animals (McColley 174):

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 woorking such a feate? (Book XV)

As You Like It's tale involving the crying deer was not staged presumably due to the difficulty of bringing a stag and a brook onto the Elizabethan stage, and, as Joan Fitzpatrick has observed, the ventriloquized account produces the "distinct effect of distancing Jaques from the sentiments expressed" (Fitzpatrick 58). But far from being detrimental, this result may be both intentional and desirable because it strengthens the analogy to Ovid's work. In the play's first scene devoted to deer, Jaques serves as a comic version of Pythagoras since, in both cases, the speaker's views are filtered through the lens of another individual recounting the story.

Although the verse from Ovid refers to a goat, this discrepancy might further support the theory that the idea for Act II, scene i may be partly inspired by Ovid's work given that, later in the play, Touchstone remarks, "I am here with...thy goats as the most capricious poet honest Ovid was among the Goths" (III.iii.6). 67

Although the above excerpt from the *Metamorphoses* is a mere sampling of the extensive discourse devoted to the cruelty and sadness that stems from killing animals, there are striking thematic resemblances to Shakespeare's verse even within those seven short lines. Both narrators personify the animals and, if anything, Jaques does so to a much greater extent. In his eyes, the deer is a city denizen and words like "bankruptcy", "fashion", and "velvet" are but a few of the terms that seem incongruous with the woods but are suitable for urban life. Of course,

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⁶⁷ "Capricious" also pertains to goats, possibly deriving from the Italian word capra. The OED's earliest entry for capricious comes from Richard Carew's work: "The inventive wits are termed in the Tuscan tongue capricious (capriciuso) for the resemblance they bear to a goat, who takes no pleasure in the open and easy plains, but loves to caper along the hill-tops."

one cannot ignore the obvious human qualities that Jaques bestows upon the deer – e.g., shedding tears, awaiting some offer of assistance from its "friends." In both reports, the animal's cries prove futile on account of "deaf ears." Additionally, Jaques and Pythagoras both depict the act of killing the animal as a crime but, according to Jaques, it is doubly illicit because murdering a deer is analogous to tyranny and usurpation given that the territory lawfully belongs to the animals.

There are certainly similar models to be found among the writings of prominent Renaissance thinkers that advance the argument that hunting is a detrimental pursuit of dubious ethics. In Thomas More's *Utopia* (1516), the Utopians regard hunting "as a thynge unworthy to be used of free men", relegating the revolting activity to butchers, who happen to be slaves in their society (Berry 25). More writes, "if the hope of slaughter and the expectation of tearing the victim in pieces please you, you should rather be moved with pity to see an innocent hare murdered by a dog – the weak by the strong, the fearful by the fierce, the innocent by the cruel and pitiless. There this exercise of hunting...the Utopians have rejected" (Book II). Erasmus satirized the huntsman in *The Praise of Folly* (1511) by stating, "when they, the sportsmen, have run down their victims, what strange pleasure they have in cutting them up!...[They] shall dissect all the joints as artistically as the best skilled anatomist, while all who stand round shall look very intently and seem to be mightily surprised with the novelty, though they had seen the same thing a hundred times before" (Williams 89). Heinrich Cornelius Agrippa launches perhaps the most scathing humanist critique of hunting in the sixteenth century in Of the Vanitie and Uncertaintie of Artes and Sciences (1530) where he deems hunting a "detestable" and "cruell Arte" that leads men to set "all humanities apart" and "become salvage beastes" (Berry 25). The subtle implication is that man can and should rise above animals in terms of moral duties given

his higher intellectual capabilities. In this respect, the reasoning is similar to contemporary debates on animal rights and the qualification that, although humans have a duty not to exploit animals, they do not necessarily have any obligation to prevent the predation that occurs in any given ecosystem.

Like Pythagoras' and Plato's vision of an ideal world where men and animals coexist peacefully, More too believes that kindness towards all of God's creatures is a requisite feature of Utopia. But such views cannot be regarded as the norm for early modern England, making Act II, scene i all the more noteworthy. Hunting animals was a part of life and their flesh constituted a staple of virtually any diet. Rather than being relegated to a slaughterhouse away from the domestic sphere, killing animals was a chore within the list of regular household activities (Renaissance Beasts 73-4). Vegetarianism was almost unheard of. A half a century after Shakespeare penned *As You Like It*, Roger Crab wrote in his autobiography, *The English hermite, or, Wonder of this age* (1655), that he had "become a gazing stock to the Nation" because a plant-based diet and showing compassion towards animals due to ethical formulations were such anomalies.

And yet, in evaluating the implications of Shakespeare's writing, we must also consider that, at the time, animals were put on trial in continental Europe, and would even be dressed up for the occasion (Perceiving Animals 122). Naturally, such trials were partly for the sake of creating a spectacle. However, the very notion of having animal defendants indicates that, at a minimum, humans are willing to entertain the idea that animals are sentient creatures capable of understanding right from wrong (Perceiving Animals 123). In Elizabethan England, the attitude was somewhat divergent because deodand law was applied to cases involving animals. The premise was that the animal involved in the legal proceedings could be forfeited to the crown and

whatever sum it was worth should be applied to pious purposes (Animal Studies 109). For example, according to English common law in this area, "if a man riding over a river is thrown off his horse by the violence of the water and drowned, his horse is not deodand, for his death was caused *per cursum aquae*. But if the horse [threw] him into the water, the horse becomes a deodand" (Deacon 337). In other words, perceived intent was key in determining whether the animal was ultimately at fault – or, "guilty" as the case may be. Regarding more serious legal and ethical matters, bestiality had become a capital crime in England by the mid sixteenth century and Keith Thomas contends that the execution of animals and humans suggests a blurring of the line between the two groups (Salisbury 100). That such a law had to be enacted in the first place reveals that the separation between mankind and animals could no longer be taken for granted (Salisbury 100).

Montaigne's Influence

While the idea that nonhuman creatures could be declared innocent or guilty reveals a high degree of anthropomorphism in the Elizabethan era, one certainly can and should look beyond the legal issues surrounding transgressions and/or misfortunes for early modern examples that highlight the closeness between humans and animals. Early modern enthusiasm for anthropomorphic literature remained consistently high, and some authors moved beyond this familiar outlook to include expressions of a distinctly theriophilic nature (Wolloch 119). Theriophily – i.e., the "love of animals" – was a classical philosophical position that received renewed attention in the Renaissance (Wolloch 14). Nathaniel Wolloch writes that, as a literary device, theriophily was used to present "authentic pro-animal views" (Wolloch 31). Perhaps the most prominent early modern theriophile was Montaigne. Jaques' compassion for the stag bears

important similarities to Montaigne's "Of Cruelty" (1580). The latter writes that during the hunt "when the Stag...finds his strength to faile him, having no other remedie left him, doth yeeld and bequeath himselfe unto us that pursue him, with teares suing to us for mercie." This image of the tear proves to be "a very unpleasant spectacle" to both men – a spectacle that is only exacerbated by what appears to be a stricken creature's plea for mercy (Brutal Reasoning 76).

Although Montaigne lived long before Jeremy Bentham proposed that the most salient question about animals is "can they suffer?", he too regards animals as moral patients given their capacity to feel pain (Brutal Reasoning 78; Berry 188). Citing Ovid's *Metamorphoses* and other classical texts, Montaigne famously describes his own aversion to inflicting harm and the broader relationship between cruel behavior and systematized violence in "Of Cruelty":

As for me, I could never so much as endure, without remorse or griefe, to see a poore, sillie, and innocent beast pursued and killed, which is harmlesse and void of defence, and of whom we receive no offence at all... Pythagoras was wont to buy fishes of fishers, and birds of fowlers to set them free againe. 'Primoque a cæde ferarum / Incaluisse puto maculatum sanguine ferrum. - Ovid. Metam. xv. 106. And first our blades in blood embrude deeme / With slaughter of poore beasts did reeking steeme.' Such as by nature shew themselves bloodie-minded towards harmlesse beasts, witnesse a naturall propension unto crueltie. After the ancient Romanes had once enured themselves without horror to behold the slaughter of wild beasts in their shewes, they came to the murther of men and Gladiators. Nature (I fear me) hath of her owne selfe added unto man a certaine instinct to inhumanitie. (Of Cruelty)

Although Montaigne somewhat sarcastically admits that the distress he feels when he sees a "chickins necke puld off" is due to "faint-hartednesse", he reiterates that his position is, in fact, logical because there is an "alliance betweene us and beasts", a "resemblance betweene us and beasts", and an "enterchangeable commerce and mutual bond betweene them and us": "There [is] a kinde of respect and a generall duty of humanity which tieth us not only unto brute beasts that have life and sense, but even unto trees and plants. Unto men we owe Justice, and to all

other creatures that are capable of it, grace and benignity." Montaigne then proceeds to detail the ways that animals have helped various cultures throughout the ages and how different societies have reciprocated with affection. These same themes appear elsewhere in his writing, as in "An Apology of Raymond Sebond" where Montaigne reasons that if, according to Plato, men led much happier lives during the Golden Age because they could communicate with and gain wisdom from animals, then what more proof do we need that we should strive to approximate that kinship?⁶⁸

It is this very relationship "between them and us" that Gail Kern Paster cites to argue that early modern discussions of animals need not viewed merely as anthropomorphic, but rather as recognizing a shared aspect of existence (Brutal Reasoning 108). When considering Edward Topsell's *Historie of Foure-Footed Beastes* (1607), she writes "there is not only significant continuity between human and animal emotions...for Topsell, as for other early modern thinkers, it was not just that the qualities of animals resembled those of human beings, but that those qualities were directly transferable from animal to human" (Brutal Reasoning 108). Paster astutely notes that when, for example, "the cat is regarded as melancholy it is because it is perceived to share the corporeality that can produce melancholy" (Brutal Reasoning 108). Surprisingly, Erica Fudge comes to the conclusion that, "in identifying with the animal, Jaques has failed to use the thing that distinguishes him from animals in the first place: reason" and that Shakespeare stages "Jaques' compassion as unreasonable" (Brutal Reasoning 75). Such a reading misses the point that Jaques can logically extend firsthand knowledge of his own

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⁶⁸ The thematic resemblances between Shakespeare and Montaigne are further strengthened by the fact that the most famous lines in the play (again, vocalized through Jaques), and which may have served as the Globe's motto (Grande 736), appear in the latter's *Essays*: "Most of our vacations are like Playes. Mundus universus exercet histrioniam: 'All the world doth practise stage-playing.' Wee must play our parts duly, but as the part of a borrowed personage. Of a visard and apparance wee should not make a reall essence, nor proper of that which is another." However, it should be noted that the old Petronius saying that Montaigne cites was already current at the time in England (Robertson 51).

condition and/or prior experiences to the plight of others. (And who better to perceive the sorrow of the deer than the perpetually melancholic Jaques?) After all, early modern anatomists were well aware that the human body and the animal body were highly similar in physiological structure (Brutal Reasoning 7). It is thus with confidence that Topsell can declare that when "looking into the nature of Beasts...we ought to enter into their consideration without feare or blushing, [because] seeing the operation of nature is euery where very honest and beautifull...But if any man be so Barbarous, as to thinke that the beasts and such other, creatures, cannot affoord him any subject woorthy of his contempaltion, then let him thinke so of himself...for what ignoble basenesse is there in bloode, flesh, bones, vaines, and such like?

Doth not the body of man consist thereof? And then how abhominable art thou to thy selfe, that doest not rather looke into these which are so neere of kinde vnto thee?"

What I mean to suggest by introducing this historical context, is that Jaques' invective is not unusual from the perspective that he personifies the deer. Clearly, individuals have humanized animals for millennia. But, of course, not everyone who bestows human characteristics upon animals takes the next logical step and concludes that those similarities create a moral obligation to treat other creatures humanely (as Montaigne or Pythagoras would contend). As such, the level of empathy and compassion Jaques feels is the most striking facet of his conduct. And yet, would not such comportment – though not expected or required by the standards of the day – seem fitting for an idyllic society meant to serve as a direct contrast to the world of the court where corrupt individuals like Oliver and Duke Frederick behave as though they can hunt other people and degrade them by characterizing them as animals?

The forest of Ardenne ostensibly purports to reverse such malignant views and, indeed, the *dramatis personae* are well on their way to deviating radically from the norm in their own

fictional society and that of contemporaneous England. Duke Senior appears poised to denounce hunting for reasons that have nothing to do with the fact that he and his men, as outlaws, would technically be poaching since presumably the land and deer belong to Duke Frederick (Berry 25). Rather, he expresses concern over what Tom Regan describes as the traditional view of animals "as mere receptacles or as renewable sources" (Animal 146). Likening Duke Senior's position to a modern animal rights philosopher might seem inappropriate, but what I mean to suggest is that Duke Senior's position stems from a proto-legal and moral rights framework insofar as there is evidently some violation of social laws that he finds troubling (Fitzpatrick 57). As an interesting note, Shakespeare arguably presents a similar claim, but from another perspective, in *Cymbeline*, where the wicked queen believes that the lives of creatures like cats and dogs are so worthless that she can experiment upon (i.e., poison) them at will and without attracting opprobrium (I.v.18-20). Indeed, Shakespeare uses the horrifying detail about her poisoning cats and dogs to bookend his depiction of the queen – i.e., this is how the audience learns early on how awful she is and how the doctor reveals her baseness at the play's end.

The Pythagorean Theorem

Despite the deer's status as the property of the ruler, John Minsheu explains in his *Dictionary* (1599) that "if the King or Queen do hunt [a hart], and he escape away alive, then afterward he is called a Hart Royal. And if the beast...be chased out of the forest, and so escape, proclamation is commonly made...that...none shall hurt him" (Seager 144). Implicit in such discourse is an acknowledgement of the animal's ability to earn something akin to freedom. According to John Manwood's *Lawes of the Forest* (1598), forests were intended to keep wildlife for the "princely delight and pleasure" of the monarch (Royal Landscape 111). In other

words, certain animals were reserved for hunting parties. However, in *As You Like It*, the exiles find themselves in a precarious position; since the forest is their makeshift home, the rules concerning hunting game are unclear, and they themselves are arguably now part of the wildlife. Even if the deer did not belong to Duke Frederick, Duke Senior might still lack legal claim to these "poor dappled fools." As Michael Dalton writes in *The Covntrey Justice* (1618), in terms of ownership, "a man cannot haue in any thing which is *ferae Natura*", i.e., wild animals (Perceiving Animals 125). Accordingly, it is perhaps in the interest of these new inhabitants of Arden to redefine "delight and pleasure" in a manner that would involve seeking satisfaction outside the hunt. Perhaps not coincidentally, various characters seem to take pleasure and pride in being able to subsist on nature's bounty of fruits and vegetables.

In the *Metamorphoses*, vegetarianism was a feature of the Golden Age and neither hunting nor fishing occurred until the Iron Age (Berry 26). Shakespeare too seems bent on exploring the possible link between social decline and hunting. Whereas his *dramatis personae* reveal sympathy for their fellow "burghers" after escaping Duke Frederick's tyranny, Ovid prefaces Pythagoras' exhortation against eating flesh with the story of his exile from Samos because he hated the tyrants (McColley 174). Moreover, Celia's description of Orlando "under a tree, like a dropped acorn" (to which Rosalind humorously replies that "it may well be called Jove's tree when it drops forth such fruit!" (III.ii.213)) echoes Ovid's account of the Golden Age:

The fertile earth as yet was free, untoucht of spade or plough, And yet it yeelded of it selfe of every things inough.

And men themselves contented well with plaine and simple foode, That on the earth of natures gift without their travail stoode, Did live by...plummes and cherries...

Apples, nuttes and peares, and lothsome bramble berries,

And by the acorns dropt on ground, from Joves brode tree in field.

The Springtime lasted all the yeare, and Zephyr with his milde

And gentle blast did cherish things that grew of owne accorde, The ground untilde, all kinde of fruits did plenteously afforde. [emphasis added] (Book I)

While lines like the reference to living "as they did in the golden world" (I.i.111) also provide a clear indication of Ovid's influence, less obvious is how the breaking down of boundaries between human and animal life throughout the play may be a product of Shakespeare's fascination with Ovid's depictions of metamorphoses (Berry 187). As I have endeavored to show, this is particularly evident in the use of birds.

Ovid's collection of myths entails many transformations, but it is worth pausing to consider one specific type of change that Shakespeare refers to directly in As You Like It: the transmigration of souls. Rosalind humorously says, "look here what I found on a palm tree. I was never so berhymed since Pythagoras' time that I was an Irish rat, which I can hardly remember" (III.ii.161). It is easy to treat this remark as nothing more than attempt to garner some laughs by roundly mocking Pythagoras – especially given the choice of "Irish rat." But we cannot assume that because the humor comes across as playful and teasing, the influence of Pythagorean thought (particularly as articulated in Ovid's work) should therefore be discounted. What Shakespeare is referring to is the belief that because the soul was immortal, it inhabited new life after death in a never-ending cycle that was not limited to human beings. Because the "soul was not the exclusive property of human life: the divine element went beyond the human family to include animals...and this led [Pythagoreans] to ban the eating of meat and to forbid the wearing of clothes made from animal pelts or wool" (Roetzel 41). This idea is especially intriguing for a play that seems to espouse a kind of proto-vegetarianism, but I also raise the issue because it presents a parallel to what we saw in *The Tempest* with spontaneous generation. Just as *The Tempest* bore significant similarities to *Antony and Cleopatra* with respect to this

mode of genesis, so too does the Roman tragedy speak directly to transmigration (and in a somewhat comparable tone):

Lepidus: What manner o' thing is your crocodile?

Antony: It is shaped, sir, like itself; and it is as broad as it hath breadth. It is just so high as it is, and moves with its own organs. It lives by that which nourisheth it; and the elements once out of it, it transmigrates. (II.vii.39-42)

Again, Shakespeare derives humor from a discussion of transmigration, but I find it curious that he prefaces these instances with observations that are humorous, but also true. Rosalind was indeed "never so berhymed" in her life and Antony is technically correct in all of his remarks about the crocodile. More importantly, however, is that, as with the explicit references to spontaneous generation, these instances similarly make it difficult to ignore the blurring of boundaries between life forms. Gabriel Egan takes this premise even further, arguing that these theories deny "the special condition of humanity" and decenter mankind (Egan 116). Whether or not this is the case, transmigration certainly undermines any sense that man is a uniquely special and superior form of existence and to Pythagoras' credit, he refuses to shy away from the logical outcome of such a premise, explaining that soul moves "out of man to beast, and out of beast to man. / But yit it never perrisheth... Therfore lest Godlynesse / bee vanquisht by outragious lust of belly beastlynesse, / Forbeare...your kinsfolkes ghostes to chace / by slaughter: neyther nourish blood with blood" (Book XV).

However, it is important to stress Pythagoras is not relying solely on the principle of transmigration to demonstrate the value and virtue of his teachings. For instance, when he describes the horror of slaughtering an ox, the ethical dilemma is not framed in terms of the transmigration of souls argument (which has generally been the main selling point). Instead, Pythagoras discusses the relationship between man and ox, the obligations living beings have to

one another, and the sense that man fails to reciprocate kindness and live up to his end of the bargain on account of his own selfishness and wickedness:

What trespasse have the Oxen doone, a beast without all guyle Or craft, unhurtfull, simple, borne to labour every whyle? In fayth he is unmyndfull and unwoorthy of increace Of come, that in his hart can fynd his tilman to releace From plowgh, to cut his throte: that in his hart can fynde (I say) Those neckes with hatchets off to strike, whoose skinne is worne away With labring ay for him: whoo turnd so oft his land most tough, Whoo brought so many harvestes home.

...But give good eare and heede
To that that I shall warne you of, and trust it as your creede, That whensoever you doo eate your Oxen, you devowre Your husbandmen. (Book XV)

The judgment that "whensover you doo eate your Oxen, you devowre your husbandmen" sounds very similar to the rhetoric pertaining to reincarnation. However, the term husbandry means "bonded to the house" and conveys "commitment, mutuality, and a sense in which the interests of the farmer and animal [are] meaningfully, if not entirely bound together in symbiotic enterprise" (Scully 270). As Corin explains, "the greatest of my pride is to see my ewes graze and my lambs suck" – i.e., husbandry (III.ii.75). Indeed, once in Arden, there seems to be an almost suspicious absence of hunting activity among the natives. Conversely, Oliver's house is described as "but a butchery" (II.iii.28) and, as Katherine Duncan-Jones points out, imagery of butcheries as part of a bloody, violent trade permeate Shakespeare's plays (Fitzpatrick 64). Moreover, the banquet that Orlando and Adam are invited to partake in ostensibly consists solely of fruit (II.vii.98). There is perhaps no other moment in the play that better epitomizes the spirit of conviviality, harmony, and sympathy towards one's fellow man. Not coincidentally, the tear motif recurs when Orlando, grateful that Duke Senior will share his food, says, "if ever from your eyelids wip'd a tear, / and know what 'tis to pity and be pitied, / let gentleness my strong enforcement be; / in the which hope I blush, and hide my sword" (II.vii.117-120). Not only is

this scene a reversal of the heartrending episode involving the dying deer, it is arguably the apex of their new society. Consequently, Orlando, who is figured as a "doe", manages to save his "fawn" (II.vii.129) and his words mark the end of the threat of violence (e.g., "hide my sword").

The negative characterization of the butchery, coupled with the apparent absence of meat, fits well with a line from *Twelfth Night* when Sir Andrew Aguecheek declares, "I am a great eater of beef and I believe that does harm to my wit" (I.iii.83). One wonders to what extent these attitudes can rightfully be seen as the precursor to the explicitly pro-vegetarian writings of individuals like Thomas Tryon (1634-1704) and Roger Crab (1621-1680) just a few decades later. Tryon was a follower of Shakespeare's contemporary, the mystic Jacob Boehme (1575-1624), and he believed that a vegetarian diet resulted in an enlightenment of perception because "pure, vegetable food is lighter than meat, and therefore does not clog the body, making it 'gross' and 'heavy'" (Landry 110).

Such dietary views owe a considerable amount both to humanist thinkers of the sixteenth century (who were perhaps the first early modern writers to identify the ethical problems of exploiting animals) and to the prevailing medical views of the day. In *The Anatomy of Melancholy*, for example, Robert Burton writes that "all venison is melancholy and begets bad blood." To be clear (and as one would predict given the era), Burton does not advocate abstaining from meat, though he cites health problems stemming from virtually every type imaginable. Even with regard to venison he calls it a "pleasant meat", but one that is "seldom to be used." And as More's work illustrates, a desire to refrain from hunting does not necessarily

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⁶⁹ For analysis on the particular significance of venison in the play, see Joan Fitzpatrick's *Food in Shakespeare* where she argues that Jaques is hypocritical because he appears to suffer from the ailments of eating too much venison, which was well-known to engender melancholy: "It seems likely that an early modern playgoer would conclude that he eats the meat of the deer hunted by Duke Senior and his fellow-exiles" (Fitzpatrick 63) – hence Jaques' nickname "Monsieur Melancholy" (III.ii.288).

entail a vegetarian diet. Nevertheless, the inverse correlation between hunting and the likelihood that one will abstain from meat is palpable in *As You Like It*. But despite recognizing that the deer, like him, are trying to lead a life free from abuse, Duke Senior refers to them not as living beings, but as the meat they are to become, i.e., "venison." From the outset it would appear that Duke Senior cannot fully escape the presumption that animals are resources (similar to how trees in *The Tempest* are generally regarded as logs prior to the auspicious ending). And, yet, he never makes the leap to the type of mindset found in Ben Jonson's country house poem, "To Penshurst" (1616), where the pheasant and partridge are more than "willing to be killed" for the sake of feeding hungry men and women (30). In other words, Duke Senior and his group do not seem to hold any illusions about what the animals supposedly want – nor do they ever offer a justification for hunting. Not surprisingly, the person who does justify tracking down living beings is Duke Senior's wicked brother. For Duke Frederick, the pursuit equals a manhunt; he wants his brother "dead or living" (III.i.6) and he regards the lot of them "all traitors" (I.iii.49).

Arden's landscape and biodiversity

Whereas the country house or estate poem genre invariably focuses on topographic features, plays like *As You Like It*, *The Tempest*, and *Timon* seem far less intent on providing a precise description of the landscape. The descriptions from a distance that are so common in topographical poetry, and which allow the reader to visualize an almost panoramic view of a scene present a very different aesthetic and technique than what we frequently find in some of Shakespeare's green world plays. Like the original Utopia, the location where everyone ends up in *As You Like It* is essentially a "not-place." By this, I do not simply mean that Ardenne is a fictional setting. Like the island of *The Tempest*, the forest seems to hold everything and

anything all at once; the presence of incongruous flora, fauna, and landscapes is of no concern. Arden contains, among other things, oak trees, palm trees, fruit trees, olive trees, lions, serpents, caves, pastures, barren land, and wintry weather (Berry 167). What results is a scene not unlike the chimerical visions of Orpheus among the animals that were common in Renaissance art (Fig. 21).

Shakespeare exploits still another implication of what it means to be a non-existent location through the very name of Ardenne/Arden. By Shakespeare's day, the once heavily wooded land near Stratford was no longer a royal hunting preserve and trees had given way to pasture (Berry 168). It is perhaps no wonder, then, that Shakespeare imagines an environment where myriad trees prosper as the utopian version of a forest so close to home, but one that truthfully no longer exists. In this respect, As You Like It compels readers to question their expectations of what constitutes reality and Shakespeare's treatment of Arden accords with Lawrence Buell's characterization of place as something constantly changing – that which "is not entitative – as a foundation has to be – but eventmental, something in process" (Buell 73). Along this line of thought, the French anthropologist Marc Augé introduced the term "nonplace" to refer to an engineered space such as an airport or hotel, which provides shelter for the temporarily displaced without proscribing the kinds of identity that are normally associated with one's place (Buell 145). More than being just a not ($o\Box$) place (τόπος), Arden may very well serve as the type of space that Augé describes, so that, by the play's end, Shakespeare has removed any doubt that the forest was anything other than a de facto hotel for the aristocrats. Under such a reading, the permanent residents' identities are wholly shaped by the pastoral

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⁷⁰ See Josias Murer's *Orpheus Charming the Animals* or Antonio Tempesta's *Orpheus Charming the Birds and the Animals* for additional early seventeenth century examples.

setting, while the status of the non-shepherds (in essence, the hunters) remains untouched by their time in the woods.

But if settings like Utopia and Ardenne equal non-places, then what of the organisms that live within their bounds? First, I want to consider arguably the most important creature to understanding the play as a whole: the cuckold or "horn-beast." While it is undeniable that cuckolds were figured as beasts in the early modern period, defining the exact nature of this being is easier said than done given the "parade of animals associated with the image", e.g., ox, camel, snail, ass, deer (Among the Animals 74-5; Bruster 52). The tradition of ridiculing the husband by placing horns atop his head is the sole link between the term and its principal visual emblem (and is almost certainly an extension of hunting imagery since the horns have nothing to do with cuckoos) (Among the Animals 76).



Figure 21. Nicholaes de Bruyn, Orpheus Playing to the Animals, c. 1600

The fixation of cuckolds proves an even more masterful maneuver for a play set in a nonplace since cuckolds constitute the non-animal par excellence. Like the amorphous and fluid environment where virtually any organism can exist, the cuckold is a creature of the imagination and sans bounds. The only semantic certainty is that a "cuckold" is related to a cuckoo, but even this identification leads to a dead-end since the bird's actions apply to the verb (i.e., to cuckold someone). In other words, the noun is the creature being taken advantage of by the bird, but we are still no closer to ascertaining its own nature, somewhere between man and beast. Such a nebulous existence is ideal for a play brimming with images of animals, which by their frequency upset the normal distinction that is made between humans and nonhumans. The cross-species distortion is only amplified by the fact that a single person can represent a remarkable range of creatures. Orlando appears as a bird, horse, ox, deer, lion, snake, etc. The rampant proliferation of animals ensures that the line between the supposedly civilized and urbanized world of men and the rural realm inhabited by animals is thoroughly obscured.

Of course, in certain crucial ways, urban and rural environments are not so far apart. Both entail the deliberate congregating of humans and animals who spend their days interacting with others of their kind. The social aspect is unmistakable, hence the sheer volume of collective nouns that describe these groupings and bonds in the animal kingdom: flock, herd, swarm, pack, brood, gaggle, colony, nest, hive, litter, bevy, pride, murder, school, pod, etc. We simply do not see the same linguistic diversity when it comes to groupings of plants (e.g., grove, copse) and many of the terms that do come to mind imply human agency cultivating and bringing vegetation together (e.g., vineyard, orchard, garden). With respect to this particular play, I cannot help but wonder whether the intense focus on animals to some extent pushes plants aside, relegating them to a more ornamental status as scenery. In other words, for a play to engage so deeply with what it means for humans to act like or resemble animals, it is perhaps only natural that plant life should not be a primary focus. Clearly, vegetation matters in *As You Like It*, but my sense is that in a play obsessed with relationships, plants are mostly there to serve as props: "these trees shall be my books, / and in their barks my thoughts I'll character" (III.ii.5-6), "the Duke will drink

under this tree" (II.v.26), "will you...be married under a bush?" (III.iii.68). The treatment of plants as an "added bonus" (i.e., lovely but ultimately incidental) is perhaps best summed in the play's epilogue, when Rosalind observes, "if it be true that good wine needs no bush, 'tis true that a good play needs no epilogue. Yet to good wine they do use good bushes; and good plays prove the better by the help of good epilogues."

Rosalind's language in particular is peppered with animal references that she freely applies to herself, e.g., hare, hyena, ape, parrot, cony, rat, hind, pigeon, swan, hind, cat, and monkey (Shakespearean Wild 94). The effect of such language does not degrade Rosalind; on the contrary, the ability to adapt to the context by donning and discarding these roles at will enhances her image and underscores her resourcefulness and intelligence (Shakespearean Wild 94). In this regard, Rosalind is perhaps the prototypical agent for Gilles Deleuze and Felix Guattari's model of "becoming-animal." Rosalind as [x animal] is clearly not "standing in for another" (e.g., the animal in question), nor is the resultant structure necessarily a "relation of representation" (both in that she is not a representative of the species and the animal does not circumscribe her existence) (Lawlor 175). Most importantly, her process of becoming animals is not governed by a singular "eminent form or endpoint" (Lawlor 175). Deleuze and Guattari insist that, in becoming animal, one does not end up looking like an animal. They maintain that "natural history can think only in terms of relationships (Between A and B), not in terms of production (from A to x)" (Deleuze 234). Although these relationships often involve alliances and symbioses, one could argue that certain discords such as predation also permit individuals to become animals, such as when the lion preys on Oliver, or when Oliver preys on Orlando. As Oliver himself notes, although he did not physically morph into an animal, he underwent a transformation nonetheless: "Twas I; but 'tis not I. I do not shame / to tell you what I was, since my conversion / so sweetly tastes, being the thing I am" (IV.iii.134-6). For Deleuze and

Guattari, the transformations are real due to the interconnectedness of the parties involved. In

general, though, symbiosis seems like an apropos characterization of life in Arden where various

biological species live closely together, e.g., "an oak, whose boughs were mossed with age"

(IV.iii.103). Indeed, perhaps the overarching structure of the country and court together side by

side represents a symbiotic relationship.

Jaques Revisited

Though Oliver ultimately abandons the notion of hunting his brother, Duke Senior

decides to proceed with the hunt despite serious misgivings. This seems strange because he

understands that it is by virtue of escaping into the land belonging to the deer that he is free from

persecution. Why then would he want to inflict "tyranny" on the "native burghers of this desert

city" when doing so ruins the animals' bucolic closely-knit society and, by extension, the

doctrines of his own? However, this breach represents only a taste of what is to come; the reality

is that no one adheres to the original attitudes that befit the utopian pastoral existence. The

hypocrisy of the court expatriates is magnified when Jaques, the person most disturbed by the

death of the deer, appears in a later scene praising the man who recently killed a deer. The one

hundred and eighty degree turn certainly makes Jaques difficult to pigeonhole. It is in the

shortest scene of the play (and, as such, the incident is easy to disregard) that we witness the

following exchange:

Jaques: Which is he that killed the deer?

First Lord: Sir, it was I.

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Jaques: Let's present him to the duke, like a Roman conqueror; and it would do well to set the deer's horns upon his head, for a branch of victory. Have you no song, forester, for this purpose?

Second Lord: Yes, sir.

Jaques: Sing it: 'tis no matter how it be in tune, so it make noise enough.

Lords [sing]: What shall he have that killed the deer? His leather skin and horns to wear.
Then sing him home; the rest shall bear this burden.
Take thou no scorn to wear the horn;
It was a crest ere thou wast born.
Thy father's father wore it, and thy father bore it:
The horn, the horn, the lusty horn
Is not a thing to laugh to scorn. (IV.ii)

Jeanne Addison Roberts remarks that the scene's only obvious purpose is to provide for the passage of time between Rosalind's parting from Orlando (Shakespearean Wild 91). However, I would argue the inclusion of this scene has less to do with logistical concerns, than with encapsulating the abandonment of the pursuit of an ideal lifestyle where all creatures live together in harmony. Certainly, one could claim that Duke Senior and his men were never committed to exhibiting nonviolence. As with the use of "venison", the word "leather" strips the deer of their animal-hood: "A poor sequestered stag / that from the hunter's aim had taken a hurt / did come to languish and, indeed, my lord / the wretched animal heaved forth such groans / that their discharge did stretch his leathern coat" (II.i.33-7). In an instant, a creature whom man can empathize with – "the poor sequestered stag" – undergoes a metonymic transformation (the irony being that this too fits the metamorphosis theme in a perverse way). Once the animal is hit with man's tool (i.e., an arrow), the animal is rendered as a commodity resulting from man's labor in tanning the hide/carcass. With Jaques, this shift in outlook is extended over many scenes instead

of in five lines, but the dissonance is the same. Whereas Jaques previously marveled at the soft fur, he now refers to the deer's skin as "leather" (implying malleability and objectification).

Given how much space this chapter has devoted to passages that pertain either directly or indirectly to Jaques, I must note that I have never quite understood the contempt for the character that is palpable in a great deal of Shakespearean scholarship. In "The Invention of the Human", Harold Bloom (who is being more charitable than most by at least admitting that Jaques' speeches are uniquely powerful), says the following: "Jaques, poseur as he is, gets some of the best speeches in Shakespeare... What pleasure Shakespeare took in Jaques and in Touchstone, we are misled if we are persuaded by their negations... Touchstone, authentically witty, is rancidly vicious, while Jaques is merely rancid (the Shakespearean pronunciation of his name plays upon a jakes, or privy)" (Critical Interpretations 151). Regarding the final jab, the Jaques/jakes connection has long been singled out as perhaps the strongest piece of evidence in favor of disregarding Jaques. However, I am not convinced that a single pun outweighs everything else.

In the famous seven ages of man monologue, Shakespeare creates a loose adaption of a similar speech in the *Metamorphoses*, which also depicts life stages via analogies to nature. As with the passage in *As You Like It*, Ovid's ending (i.e., man's decline and eventual passing) is both poignant and haunting:

Then followeth Harvest when the heate of youth growes...cold, Rype, meeld, disposed meane betwixt a yoongman and an old, And sumwhat sprent with grayish heare. Then ugly winter last Like age steales on with trembling steppes, all bald, or overcast With shirle thinne heare as whyght as snowe. Our bodies also, ay, Doo alter still from tyme to tyme, and never stand at stay. Wee shall not bee the same wee were today or yisterday. (Book XV)

While Ovid's version adheres closely to the humans as plants model (e.g., flowers, blades of grass), Jaques depicts innocent children as animals; the infant "mewls" like a cat and the school-

boy walks to school "creeping like a snail" (II.vii.145). Importantly, in the next phase – the lover – Jaques distances the hypothetical human from the animal kingdom. Now, man burns like a furnace (with the not so subtle implication being that fire can cause great harm).

"This new-fallen dignity": Falling in love and the fall from grace

Jaques' "all the world's a stage" speech is one of the best examples in the play that illustrates not just how indebted Shakespeare is to Ovid, but to Book XV of the *Metamorphoses* in particular – the book that takes great pains to a) explicate the need to be compassionate towards animals and b) convey what a utopian world looks like. From a practical standpoint, Pythagoras exhorts the listener to remember that "the lavish earth dooth yeeld you plenteously / most gentle foode, and riches to content bothe mynd and eye. / There needes no slaughter nor no blood to get your living by" (Book XV). Nature's bounty, of course, was most plentiful during that "auncient age / which wee have naamd the golden world":

Then birds might safe and sound
Fly where they listed in the ayre. The hare unscaard of hound
Went pricking over all the feeldes. No angling hooke with bayt
Did hang the seely fish that bote mistrusting no deceyt.
All things were voyd of guylefulnesse: no treason was in trust:
But all was freendshippe, love and peace. But after that the lust
Of one (what God so ere he was) disdeyning former fare,
To cram that cruell croppe of his with fleshmeate did not spare,
He made a way for wickednesse. And first of all the knyfe
Was staynd with blood of savage beastes in ridding them of lyfe.
(Book XV)

I find it curious that Golding's translation specifically uses the word "lust" as that emotion/sensation that first caused man to attack and kill his fellow creatures for food. Lust, of course, denotes something sinful and the lust Ovid describes is not so different from the gluttony that Jaques hints at when describing the now older "justice / in fair round belly with good capon

lined / [and] with eyes severe." But from a broader perspective, because the *Metamorphoses* and *As You Like It* take such a keen interest in the notion of the golden world, they must also address certain failings – i.e., urges and desires that cannot be controlled or tamed. As Simone de Beauvoir explains, woman is "the privileged object through which [man] subdued Nature...[she] is the fixed image of his animal destiny" (Bowerbank 3). Or, to put the issue another way, Ludovico Ariosto writes in *Orlando Furioso* (1532) that only men consciously harm their mates for "we see the rest of liuing creatures all / both birds and beasts that on the earth do dwell / liue most in peace, or if they hap to brall / the male and female still agreeth well.../ The sauage Lions, Beares, and Buls most wyld / Vnto their females shew themselues most myld. / What fiend of hell, what rage raignes here so rife / disturbing still the state of humane harts?" (Canto V, 1-2).

On the surface, it makes little sense that Jaques should be happy that his fellow lord killed a deer and that he wishes to hail him "like a Roman conqueror" (IV.ii.4). For those familiar with Shakespeare's *Titus Andronicus*, it is hard not to wonder if the playwright had the revenge tragedy on his mind given that a) he puns "goats" on "Goths" in explicit reference to Ovid whom he frequently cites in *Titus Andronicus* and b) the main Goth is Tamora whom Titus, as conqueror, triumphantly hauls to Rome. Of course, a part of what makes Tamora such a depraved character is her sexual looseness. She repeatedly makes a cuckold out of her husband, the newly crowned Roman emperor, through her wanton escapades.

Allusions to cuckolded males occur throughout *As You Like It* and it is their high rate of recurrence that signals a prevailing anxiety concerning women – namely that their untrustworthy nature creates a schism between ideal love and an often disappointing reality. In a play where the heroine effortlessly shifts between genders and routinely outsmarts men, it is necessary to

offset this construction in some manner. The emphasis on deer is hardly a novel device to accomplish this goal given that it was common in Renaissance poetry for a herd of deer being hunted to serve as a metaphor for sexual conquest over women. Moreover, the very perseity of Cupid – the mythological god of erotic love who carries a quiver of arrows – presents unambiguous proof that an abstract semblance between falling in love and hunting has existed in mankind's thought for millennia. *As You Like It* reconstitutes the metaphoric relationship so that the fundamental image/action (hunting; piercing of flesh), which gave rise to the symbolic analogue (conceptualization of lust/love), is rendered explicit and literal anew through a return to the hunt. Individuals flock to Ardenne to free themselves from persecution only to confront new versions of what it means to be hunted. When Celia entreats "may Cupid have mercy" (I.iii.1), she realizes that Rosalind has fallen under a quixotic spell and thus she asks that the forces of love show her cousin compassion. The humane idealism inherent to abstract values such as "mercy" and "compassion" is best exemplified by the scenes where characters convey a desire to take pity on animals they would otherwise kill.

Conclusion

Jaques presents a curious nexus for several key themes. He champions showing mercy to all of God's creatures while, at the same time, serving as chief exponent of the view that the worst fault is to be in love. As far as Jaques is concerned, it is essential to recognize that it is only after he "falls in love" with his vision of the ideal life (and the happiness it grants) that he abandons all previous desires of ensuring that the deer are not struck with arrows. Thus, the play presents a worldview that seems to stipulate that when individuals surrender to the game of targeting others with (and being hit by) Cupid's shafts, it is necessary – if solely as a

literary/dramatic device – to elucidate and expose this theme through hunting of any sort. Put differently, love leads to the hunt for a mate (who is often cast as a nonhuman organism), which in turn, is transmuted into the actual hunting of animals. Of course, when the pursuit of love is depicted vividly through analogy to hunting, the destructive power of both constituents emerges much more clearly. On some level, love – in whatever form it manifests itself since love need not be of an erotic/romantic kind – destroys the illusion that the characters reside in an Arcadian forest. Such a claim undoubtedly appears counterintuitive (if not wholly wrongheaded) because, superficially, *As You Like It* exalts love and the happiness that accompanies it. My goal is not to argue that Shakespeare condemns love as that would be tantamount to ignoring the basic premises behind the plot. However, the play vocalizes the drawbacks and limitations of love as much as the text celebrates this particular emotion.

The play's finale is notable for the absence of references to deer and "horning" – images that heretofore pervaded the dialogue and were associated with love's failings. What conspicuously remain are mentions of birds, which come at full throttle during the closing song that immediately precedes the marriages. The chorus "when birds do sing...sweet lovers love the spring" (V.iv.15) is repeated four times, but thanks to Rosalind's prior expositions on the nature of love, the audience is well aware that love can presage winter as easily as it can herald spring. After the ceremony concludes, the characters who hail from the court intend to return to their old home (with the notable exception of Jaques). Certainly, one could insist that the outcome is due to dramatic convention and because, quite frankly, no one expects these aristocrats to stay in Ardenne permanently. Their make-believe pastoral society bears little resemblance to the reality of living in the woods, complete with the hard toil that true rustics confront on a daily basis.

These are all valid points but perhaps the dramatis personae must also abscond from a setting that embodies the closest they have ever known to an ideal society, because the characters fail to live up to the standards set forth at the beginning of the play. The characters' exodus from the forest of Ardenne is thus perhaps not unlike the departure from the Garden of Eden. The model the men propose (through songs and dialogue) entails living in harmony with the animals around them and a rejection of love insofar as they dismiss love's gravity by denying that adultery bothers them. In short, they picture a world free from the urge to tyrannize others and free from the tyranny of love's hold over their minds. However, the characters utterly relinquish such tenets and, instead, seem keen to sign on to a philosophy of finding love and happiness that is inextricably tied to hunting. Orlando, who was initially furious over being treated like an animal, changes his tune completely and even begins to perceive himself as one – all for the sake of partaking in the sport of love. The transformations in the forest result in joy at the play's conclusion, but this version of a happy ending is ultimately incompatible with the liberty they originally endeavored to find. As Rosalind remarks, to be in love is to be held prisoner in a cage (a compelling answer to her simple yet thought-provoking question, "what think you of falling in love?" (I.ii.21)). But with Rosalind's pronouncement creeping back into the collective subconscious, the characters are "free" to return to the enclosed realm of the courtly world. As Touchstone humorously and somewhat dubiously reasons, if one accepts that bachelor is less well-off than a horned husband, then so must a fortified and "walled town" be worthier than life in the open air (III.iii.46).

Bibliography

- Aberth, John. <u>An Environmental History of the Middle Ages: The Crucible of Nature</u>. New York, NY: Routledge, 2012.
- Amico, Leonard. Bernard Palissy: In Search of Earthly Paradise. Paris, FR: Flammarion, 1996.
- Anglicus, Bartholomaeus. Stephen Batman, ed. <u>Batman uppon Bartholome, His Booke De</u>
 <u>Proprietatibus Rerum; newly corrected, enlarged, & amended, with such Additions as are</u>
 requisite, unto every severall Booke. Trans. John Trevisa. London, 1582.
- Animal Studies Group, The. <u>Killing Animals</u>. Champaign, IL: University of Illinois Press, 2006.
- Ariosto, Lodovico. <u>Orlando furioso in English heroical verse</u>. Trans. John Harrington. London, 1591.
- Aristotle. On the Parts of Animals. Trans. William Ogle. London, UK: Kegan Paul, Trench & Co., 1882.
- Aristotle. <u>The Works of Aristotle</u>. Trans. D'Arcy Wentworth Thompson. Eds. J.A. Smith and W.D. Ross. Oxford, UK: Clarendon Press, 1910.
- Armstrong, Catherine. <u>Writing North America in the Seventeenth Century</u>. Burlington, VT: Ashgate, 2007.
- Arons, Wendy. "Review: Ecology and Environment in European Drama." <u>Modern Drama</u>. 54.3 (2011): 385-387.
- Auden, W. H. The Dyer's Hand and Other Essays. London, UK: Faber and Faber, 1963.
- Bate, Jonathan. The Song of the Earth. Cambridge, MA: Harvard University Press, 2002.
- Beauregard, David. <u>Catholic Theology in Shakespeare's Plays</u>. Cranbury, NJ: Associated University Presses, 2008.
- Bekoff, Marc. The Animal Manifesto. Novato, CA: New World Library, 2010.
- Bernstein, Richard. "The Ineluctable Lure and Risks of Experience." <u>History and Theory</u>. 45.2 (2006): 261-275.
- Berry, Edward. <u>Shakespeare and the Hunt: A Cultural and Social Study</u>. Cambridge, UK: Cambridge University Press, 2001.

- Bitterling, Klaus. "Notes on the Text of the Peterborough Lapidary." <u>Notes and Queries</u>. 24.4 (1977): 303-306.
- Bloom, Harold, ed. <u>Modern Critical Interpretations</u>: As You Like It. Broomall, PA: Chelsea House Publishers, 2004.
- Bloom, Harold. <u>Shakespeare: The Invention of the Human</u>. New York, NY: Penguin Putnam Inc., 1998.
- Boehrer, Bruce. <u>Environmental Degradation in Jacobean Drama</u>. Cambridge, UK: Cambridge University Press, 2013.
- Boehrer, Bruce. <u>Shakespeare Among the Animals: Nature and Society in the Drama of Early</u> Modern England. New York, NY: Palgrave, 2002.
- Bogost, Ian. <u>Alien Phenomenology, or What It's Like to Be a Thing</u>. Minneapolis, MN: University of Minnesota Press, 2012.
- Boorstin, Daniel. <u>The Lost World of Thomas Jefferson</u>. Chicago, IL: The University of Chicago Press, 1948.
- Borlik, Todd. <u>Ecocriticism and Early Modern English Literature: Green Pastures</u>. London, UK: Routledge, 2010.
- Bowerbank, Sylvia. Speaking for Nature: Women and Ecologies of Early Modern England. Baltimore, MD: Johns Hopkins University Press, 2004.
- Bradley, Andrew Cecil. <u>Shakespearean Tragedy: Lectures on Hamlet, Othello, King Lear,</u> Macbeth. New York, NY: Penguin, 1991.
- Bradshaw, Graham and Tom Bishop. <u>The Shakespearean International Yearbook: Volume 8</u>. Farnham, UK: 2008.
- Brayton, Daniel. <u>Shakespeare's Ocean: An Ecocritical Exploration</u>. Charlottesville, VA: The University of Virginia Press, 2012.
- Broughton, Janet and John Carriero. <u>A Companion to Descartes</u>. Oxford, UK: Blackwell Publishing Ltd, 2007.
- Brown, Bill. "Thing Theory." Critical Inquiry. 28.1 (2001): 1-22.
- Browne, Sir Thomas. <u>Religio Medici</u> (1634) in <u>The Major Works</u>. Ed. C.A. Patrides. New York, NY: Penguin, 1977.
- Browne, Thomas. <u>Miscellaneous Works of Sir Thomas Browne</u>. Cambridge, UK: Hilliard and Brown, 1831.

- Bruckner, Lynne and Dan Brayton, eds. <u>Ecocritical Shakespeare</u>. Burlington, VT: Ashghate, 2011.
- Bruster, Douglas. <u>Drama and the Market in the Age of Shakespeare</u>. Cambridge, UK: Cambridge University Press, 2005.
- Bucholz, Robert and Newton Key. <u>Early Modern England 1485-1714</u>: A Narrative History. Oxford, UK: Blackwell Publishing Ltd., 2009.
- Buell, Lawrence. <u>The Future of Environmental Criticism</u>. Oxford, UK: Blackwell Publishing Ltd, 2005.
- Burton, Robert. <u>The Anatomy of Melancholy</u>. London, 1683. Available: http://www.gutenberg.org/ebooks/10800
- Bushnell, Rebecca. <u>Green Desire: Imagining Early Modern English Gardens</u>. Ithaca, NY: Cornell University Press, 2003.
- Bychkov, Oleg and Anne Sheppard, eds. <u>Greek and Roman Aesthetics</u>. Cambridge, UK: Cambridge University Press, 2010.
- Bynum, William. "The Great Chain of Being After Forty Years: An Appraisal." <u>History of Science</u>. 13 (1975): 1-28.
- Byrd, Jodi. <u>The Transit of Empire: Indigenous Critiques of Colonialism</u>. Minneapolis, MN: The University of Minnesota Press, 2011.
- Capra, Fritjof. The Science of Leonardo: Inside the Mind of the Great Genius of the Renaissance. New York, NY: Doubleday, 2007.
- Cavell, Stanley. <u>Disowning Knowledge in Seven Plays of Shakespeare</u>. Cambridge, UK: Cambridge University Press, 1987.
- Chaudhuri, Una. <u>Staging Place: The Geography of Modern Drama</u>. Ann Arbor, MI: The University of Michigan Press, 1995.
- Cless, Downing. <u>Ecology and Environment in European Drama</u>. New York, NY: Routledge, 2010.
- Cohen, Derek. <u>Searching Shakespeare</u>: <u>Studies in Culture and Authority</u>. Toronto, ON: University of Toronto Press, 2003.
- Cohen, Jeffrey Jerome, ed. <u>Animal, Vegetable, Mineral: Ethics and Objects</u>. Washington, D: Punctum Books: 2012.

- Conan, Michael and John Kress eds. <u>Botanical Progress, Horticultural Innovation and Cultural Changes</u>. Washington, DC: Dumbarton Oaks Research Library and Collection, 2007.
- Crab, Roger. The English Hermite or, Wonder of this Age. London, 1655.
- Crisp, Frank ed. <u>Journal of the Royal Microscopical Society: Its Transactions and Proceedings</u>, <u>Volume 2</u>. London, UK: Williams & Norgate, 1879.
- Cutts, John. "Music and the Supernatural in The Tempest: A Study in Interpretation." <u>Music & Letters.</u> 39. 4 (1958): 347-358.
- Da Vinci, Leonardo. <u>Leonardo da Vinci's Notebooks</u>. Trans. Edward McCurdy. London, UK: Duckworth & Co., 1906.
- Da Vinci, Leonardo. <u>The Literary Works of Leonardo da Vinci</u>. Trans. Jean Paul Richter. London, UK: Sampson Low, Marston, Searle & Rivington, 1883.
- Danby, John. <u>Shakespeare's Doctrine of Nature: A Study of King Lear</u>. London, UK: Faber and Faber, 1948.
- Darwin, Charles. <u>The Formation of Vegetable Mould through the Action of Worms, with Observations on their Habits</u>. New York, NY: Humboldt Publishing Co., 1887.
- Darwin, Francis. <u>The Life and Letters of Charles Darwin: Volume 3</u>. London, UK: John Murray, 1888.
- DasGupta, Shamik, Clara Howcroft Ferreira, and Gero Miesenböck. "FoxP influences the speed and accuracy of a perceptual decision in Drosophila." <u>Science</u>. 344.6168: 901-904.
- De Bray, Lys. <u>Fantastic Garlands</u>: <u>An Anthology of Flowers and Plants from Shakespeare</u>. Poole, UK: Blandford Press, 1982.
- Deacon, Edward. A Digest of the Criminal Law of England. London, UK: Saunders and Benning, 1831.
- Deleuze, Gilles and Felix Guattari. <u>A Thousand Plateaus: Capitalism and Schizophrenia</u>. Trans. Brian Massumi. Minneapolis, MN: University of Minnesota Press, 1987.
- Dolan, Frances. "Taking the Pencil out of God's Hand: Art, Nature, and the Face-Painting Debate in Early Modern England." PMLA. 108.2 (1993): 224-239.
- Drew, John. <u>Shakespeare and the Language of Doubt</u>. Dissertation, Ohio University. Ann Arbor, MI: ProQuest/UMI, 2008.
- Dusinberre, Juliet. Shakespeare and the Nature of Women. London, UK: Macmillan, 1996.

- Egan, Gabriel. <u>Green Shakespeare: From Ecopolitics to Ecocriticsm.</u> London, UK: Routledge, 2006.
- Ehrenfeld, David. <u>Swimming Lessons</u>: <u>Keeping Afloat in the Age of Technology</u>. Oxford, UK: Oxford University Press, 2002.
- Eisenberg, Evan. The Ecology of Eden. New York, NY: Alfred A. Knopf, 1998.
- Estok, Simon. <u>Ecocriticism and Shakespeare: Reading Ecophobia</u>. New York, NY: Palgrave Macmillan, 2011.
- Evans, Joan and Mary Serjeanston, eds. <u>English Mediaeval Lapidaries</u>. Oxford, UK: Oxford University Press, 1933.
- Evelyn, John. <u>Fumifugium: Or The Inconveniencie of the Aer and Smoak of London</u>. London: 1661.
- Evelyn, John. Sylva: Or, A discourse of forest-trees, and the propagation of timber in His Majesty's dominions. London: 1662.
- Fagan, Brian. <u>The Little Ice Age: How Climate Made History, 1300-1850</u>. New York, NY: Basic, 2001.
- Fitzpatrick, Joan. <u>Food in Shakespeare: Early Modern Dietaries and the Plays</u>. Burlington, VT: Ashgate Publishing, 2007.
- Flannery, Tim. "They're Taking Over." <u>New York Review of Books</u>. 60.14 (2013). Available: http://www.nybooks.com/articles/archives/2013/sep/26/jellyfish-theyre-taking-over/
- Francis, Peter. <u>Asia's Maritime Bead Trade</u>: 300 B.C. to the <u>Present</u>. Honolulu, HI: University of Hawai'i Press, 2002.
- Freeman, Neil ed. <u>The Tempest: Applause First Folio Edition</u>. Vancouver, BC: Folio Scripts, 1998.
- Freud, Sigmund. Civilization and Its Discontents. New York, NY: Norton, 2005.
- Fromm, Harold and Cheryll Glotfelty, eds. <u>The Ecocriticsm Reader</u>. Athens, GA: The University of George Press, 1996.
- Fryer, John. New Account of East-India and Persia. London: 1698.
- Fudge, Erica. Animal. London, UK: Reaktion Books, 2002.
- Fudge, Erica. <u>Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern</u> England. Ithaca, NY: Cornell University Press, 2006.

- Fudge, Erica. <u>Perceiving Animals: Humans and Beasts in Early Modern English Culture</u>. London, UK: Macmillan, 2000.
- Fudge, Erica, ed. <u>Renaissance Beasts: Of Animals, Humans, and Other Wonderful Creatures</u>. Urbana, IL: University of Illinois Press, 2004.
- Garrard, Greg. <u>The Oxford Handbook of Ecocriticism</u>. Oxford, UK: Oxford University Press, 2014.
- Gerard, John. The Herball, or, Generall historie of plantes. London: 1597.
- Gessert, George. "Bastard Flowers." Leonardo. 29.4 (1996): 291-298.
- Gilson, Hilary. "Leonardo da Vinci's Embryological Drawings of the Fetus." <u>The Embryo Project Encyclopedia</u>. Available: http://embryo.asu.edu/pages/leonardo-da-vincis-embryological-drawings-fetus#sthash.zgAkKufn.dpuf.
- Goodrum, Matthew. "Atomism, Atheism, and the Spontaneous Generation of Human Beings: The Debate over a Natural Origin of the First Humans in Seventeenth-Century Britain." <u>Journal of the History of Ideas</u>. 63.2 (2002): 207-224.
- Grande, Troni and Garry Sherbert eds. <u>Northrop Frye's Writings on Shakespeare and the Renaissance</u>. Toronto, ON: University of Toronto Press, 2010.
- Greenblatt, Stephen, et al., eds. The Norton Shakespeare. New York, NY: Norton, 1997.
- Grohmann, Gerbert. <u>The Plant: A Guide to Understanding Its Nature, Volume 2</u>. Kimberton, PA: Bio Dynamic Literature, 1989.
- Grössinger, Christa. <u>Picturing Women in Late Medieval and Renaissance Art</u>. Manchester, UK: Manchester University Press, 1997.
- Guenther, Genevieve. <u>Magical Imaginations: Instrumental Aesthetics in the English Renaissance</u>. Toronto, ON: University of Toronto Press, 2012.
- Guillemeau, Jacques. Child-birth, or The Happy deliuerie of women. London: 1612.
- Hall, Matthew. <u>Plants as Persons: A Philosophical Botany</u>. Albany, NY: State University of New York Press, 2011.
- Hallock, Thomas, Ivo Kamps, and Karen Raber, eds. <u>Early Modern Ecostudies: From the Florentine Codex to Shakespeare</u>. London, UK: Palgrave Macmillan, 2008.
- Harman, Graham. "The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism." New Literary History. 43.2 (2012): 183-203.

- Harris, Henry. <u>Things Come to Life: Spontaneous Generation Revisited</u>. Oxford, UK: Oxford University Press, 2002.
- Harrison, Robert Pogue. <u>Forests: The Shadow of Civilization</u>. Chicago, IL: The University of Chicago Press, 1992.
- Harvey, William. <u>The Works of William Harvey</u>. Trans. Robert Willis. London, UK: The Syenham Society, 1847.
- Hass, Andrew. <u>Poetics of Critique: The Interdisciplinarity of Textuality</u>. Burlington, VT: Ashgate, 2003.
- Hattaway, Michael ed. <u>A New Companion to English Renaissance Literature and Culture</u>. Oxford, UK: Wiley-Blackwell, 2010.
- Hayles, Katherine. "Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments." Configurations. 10.2. (2002): 297-320.
- Hedin, Paul ed. <u>Plant Resistance to Insects: Based on a symposium sponsored by the ACS</u>
 <u>Division of Pesticide Chemistry.</u> Washington, DC: American Chemical Society, 1983.
- Heidegger, Martin. <u>The Fundamental Concepts of Metaphysics: World, Finitude, Solitude</u>. Bloomington, IN: Indiana University Press, 2001.
- Hilmo, Maidie. <u>Medieval Images, Icons, and Illustrated English Literary Texts</u>. Hampshire, UK: Ashgate, 2004.
- Hiltner, Ken. Milton and Ecology. Cambridge, UK: Cambridge University Press, 2003.
- Höfele, Andreas. Stage, Stake, and Scaffold. Oxford, UK: Oxford University Press, 2011.
- Hoffmann, Richard. <u>An Environmental History of Medieval Europe</u>. Cambridge, UK: Cambridge University Press, 2014.
- Holdsworth, R.V. "Biblical Allusions in Timon of Athens and Thomas Middleton." <u>Notes and Queries</u>. 37.2. (1990): 188-192.
- Hulme, Peter and William Sherman eds. <u>The Tempest and Its Travels</u>. Philadelphia, PA: University of Pennsylvania Press, 2000.
- Hunt, Doris. The Flowers of Shakespeare. Exeter, UK: Webb and Bower, 1980.
- Ishiguro, Kazuo. The Remains of the Day. London, UK: Faber and Faber Ltd., 1988.

- Jacobs, Joseph ed. <u>The Jews of Angevin England</u>: <u>Documents and Records from the Latin and</u> Hebrew Sources, Printed and Manuscripts. London, UK: G. P. Putnam's Sons, 1893.
- Jones, Jonathan. "Leonardo da Vinci's earth-shattering insights about geology." The Guardian. November 2011. Available: http://www.theguardian.com/artanddesign/jonathanjonesblog/2011/nov/23/leonardo-davinci-earth-geology.
- Jones, Richard. The Medieval Natural World. New York, NY: Routledge, 2013.
- Jowett, Benjamin ed. <u>The Dialogues of Plato: Translated Into English with Analyses and Introductions, Volume 3.</u> Oxford, UK: Clarendon Press, 1953.
- Kampis, György, István Karsai, and Eörs Szathmáry eds. <u>Advances in Artificial Life</u>. Berlin, DE: Springer-Verlag, 2011.
- Kantorowicz, Ernst. The King's Two Bodies. Princeton, NJ: Princeton University Press: 1957.
- Kastan, David. Shakespeare After Theory. London, UK: Routledge, 1999.
- Kermode, Frank. <u>Shakespeare, Spenser, Donne: Renaissance Essays</u>. London, UK: Routledge, 1971.
- Kerridge, Richard and Neil Sammells, eds. Writing the Environment: Ecocriticism and Literature. London, UK: Zed Books Ltd, 1998.
- King, Ross. Leonardo and the Last Supper. New York, NY: Bloomsbury Publishing, 2012.
- Knight, G. Wilson. The Wheel of Fire. Oxford, UK: Oxford University Press, 1930.
- Kober, Michael ed. <u>Deepening Our Understanding of Wittgenstein</u>. Amsterdam, NL: Rodopi, 2006.
- Krishna, Bal. <u>Commercial Relations Between India And England 1601-1757</u>. London, UK: George Routledge & Sons, Ltd., 1924.
- Lakoff, George and Mark Johnson. <u>Metaphors We Live By</u>. Chicago, IL: The University of Chicago Press, 1980.
- Landry, Donna, Gerald Maclean, and Joseph Ward, eds. <u>The Country and the City Revisited:</u>
 <u>England and the Politics of Culture, 1550-1850</u>. Cambridge, UK: Cambridge University Press.
- Lankester, Ray. Diversions of a Naturalist. New York, NY: Macmillan, 1915.

- Laroque, François. <u>Shakespeare's Festive World: Elizabethan Seasonal Entertainment and the Professional Stage</u>. Trans. Janet Lloyd. Cambridge, UK: Cambridge University Press, 1991.
- Lawlor, Leonard. "Following the Rats: Becoming-Animal in Deleuze and Guattari." Substance. 37.3 (2008): 169-187.
- Lecouteux, Claude. <u>A Lapidary of Sacred Stones: Their Magical and Medicinal Powers Based</u> on the Earliest Sources. Rochester, VT: Inner Traditions, 2012.
- Lee, Sidney. Shakespeare and the Modern Stage with Other Essays. London, UK: Archibald Constable and Company Ltd, 1907.
- Leitch, Vincent et al., eds. <u>The Norton Anthology of Theory and Criticism</u>. New York, NY: W. W. Norton, 2001.
- Levack. Brian. <u>The Oxford Handbook of Witchcraft in Early Modern Europe and Colonial</u> America. Oxford, UK: Oxford University Press, 2013.
- Lightman, Bernard and Bennett Zon eds. <u>Evolution and Victorian Culture</u>. Cambridge, UK: Cambridge University Press, 2014.
- Lindemann, Mary. <u>Medicine and Society in Early Modern Europe</u>. Cambridge, UK: Cambridge University Press, 1999.
- Lindley, David. <u>Shakespeare and Music: Arden Critical Companions</u>. London, UK: Thompson Learning, 2006.
- Lovejoy, Arthur. <u>The Great Chain of Being: A Study of the History of an Idea</u>. Cambridge, MA: Harvard University Press, 1936.
- Lupton, Julia Reinhard. "Creature Caliban." Shakespeare Quarterly. 51.1 (2000): 1-23.
- Lupton, Julia Reinhard. <u>Thinking with Shakespeare: Essays on Politics and Life</u>. Chicago, IL: The University of Chicago Press, 2011.
- Maeterlinck, Maurice. <u>The Intelligence of Flowers</u>. Trans. Philip Mosley. Albany, NY: State University of New Press, 2008.
- Mancing, Howard. The Cervantes Encyclopedia. Westport, CT: Greenwood Press, 2004.
- Manwood, John. <u>A Treatise and Discourse of the Lawes of the Forrest</u>. London: Thomas Wight and Bonham Norton, 1598.
- Marcus, Paul. <u>In Search of the Good Life: Emmanuel Levinas, Psychoanalysis and the Art of Living</u>. London, UK: Karnac Books Ltd., 2010.

- Marder, Michael. "Plant Intelligence and Attention." <u>Plant Signaling and Behavior</u>. 8.5 (2013): 1-5.
- Marder, Michael. <u>Plant-Thinking: A Philosophy of Vegetal Life</u>. New York, NY: Columbia University Press, 2013.
- Marder, Michael. "Vegetal anti-metaphysics: Learning from Plants." <u>Continental Philosophy</u> <u>Review</u>. 44.4 (2011): 469-489.
- Marienstras, Richard. <u>New Perspectives on the Shakespearean World</u>. Trans. Janet Lloyd. Cambridge, UK: Cambridge University Press, 1981.
- Martin, Randall. "Mortal Engines and Blasted Heaths: Thresholds of Catastrophic Ecologies in Macbeth." Shakespeare Association of America. St. Louis, MO: 10 April 2014. Conference Presentation.
- Masson, Jeffrey Moussaieff, and Susan McCarthy. When Elephants Weep: The Emotional Lives of Animals. New York, NY: Delacorte, 1995.
- McColley, Diane. <u>Poetry and Ecology in the Age of Milton and Marvell</u>. Hampshire, UK: Ashgate, 2007.
- McGowan, Kat. "Listen to the Plants." <u>Slate</u>. April 2014. Available: http://www.slate.com/articles/health_and_science/feed_the_world/2014/04/plant_animal_communication_control_agricultural_pests_with_chemical_signals.html.
- Mentz, Steven. "Flood in Antony and Cleopatra." Shakespeare Association of America. St. Louis, MO: 10 April 2014. Conference Presentation.
- Meyer, Arthur. <u>An Analysis of the De Generatione Animalium of William Harvey</u>. Palo Alto, CA: Stanford University Press, 1936.
- Meyers, Amy and Therese O'Malley eds. <u>The Art of Natural History: Illustrated Treatises and Botanical Paintings</u>, 1400-1850. Washington, DC: National Gallery of Art, 2008.
- Moncrief, Kathryn and Kathryn McPherson eds. <u>Performing Maternity in Early Modern</u> England. Hampshire, UK: Ashgate, 2007.
- Montaigne, Michel de. <u>Essays</u>. Trans. John Florio. London, 1603. Available: http://www.luminarium.org/renascence-editions/montaigne/.
- More, Thomas. Utopia. Oxford edition. Oxford, UK: Oxford University Press, 1999.
- Müntz, Eugène. <u>Leonardo Da Vinci: Artist, Thinker and Man of Science</u>. London, UK: William Heinemann, 1898.

- Nakagaki, Toshiyuki, Hiroyasu Yamada, and Ágota Tóth. "Maze-Solving by an Amoeboid Organism." Nature. 407 (2000): 470.
- Nakagaki, Toshiyuki. "Smart behavior of true slime mold in a labyrinth." Research in Microbiology. 152.9 (2001): 767-70.
- Nardizzi, Vin. <u>Wooden Os: Shakespeare's Theaters and England Trees</u>. Toronto, ON: The University of Toronto Press, 2013.
- Nollman, Jim. <u>Why We Garden: Cultivating a Sense of Place</u>. Boulder, CO: Sentient Publications, 2005.
- Ovid. The Fifteen Bookes of P. Ouidius Naso, Entituled Metamorphosis. Trans. Arthur Golding. London, 1567. Available: http://www.perseus.tufts.edu/hopper/text?doc=Ov.%20Met.
- Oxford English Dictionary. 2013 online edition. http://oed.com
- Paré, Ambroise. On Monsters and Marvels. Trans. Janis Pallister. Chicago, IL: The University of Chicago Press, 1982.
- Parker, Charles. <u>Global Interactions in the Early Modern Age, 1400-1800</u>. Cambridge, UK: Cambridge University Press, 2010.
- Paster, Gail Kern. The Body Embarrassed: Drama and the Disciplines of Shame in Early Modern England. Ithaca, NY: Cornell University Press, 1993.
- Patterson, Charles. <u>Eternal Treblinka</u>: <u>Our Treatment of Animals and the Holocaust</u>. New York, NY: Lantern Books, 2002.
- Patterson, Stephen. The Gospel of Thomas and Jesus. Salem, OR: Polebridge Press, 1993.
- Peloubet, Francis. <u>Peloubet's Select Notes on the International Sunday School Lessons</u>. Boston, MA: W. A. Wilde and Company, 1888.
- Pettman, Dominic. "The Noble Cabbage: Michael Marder's Plant-Thinking." <u>Los Angeles Review of Books</u>. July 2013. Available: http://lareviewofbooks.org/review/the-noble-cabbage-michael-marders-plant-thinking.
- Phaedrus. <u>The Fables of Phaedrus with a Literal English Translation</u>. London, UK: Baldwin and Cradock, 1828.
- Pizzorusso, Ann. "Leonardo's Geology: The Authenticity of the 'Virgin of the Rocks." Leonardo. 29.3 (1996): 197-200.

- Procházka, Martin, Michael Dobson, Andreas Höfele, and Hanna Scolnicov, eds. <u>Renaissance Shakespeare</u>: <u>Shakespeare Renaissances Proceedings of the Ninth World Shakespeare</u>. Newark, DE: University of Delaware Press, 2014.
- Rackin, Phyllis. "Review: Shakespeare: The Invention of the Human." <u>Sixteenth Century</u> <u>Journal</u>. 31.2 (2000): 591-592.
- Read, Sara. "Thy Righteousness is but a menstrual clout: Sanitary Practices and Prejudice in Early Modern England." <u>Early Modern Women: An Interdisciplinary Journal</u>. 3 (2008): 1-25.
- Roberts, Hugh. <u>Dogs' Tales: Representations of Ancient Cynicism in French Renaissance Texts</u>. Amsterdam, NL: Rodopi, 2006.
- Roberts, Jane. <u>Royal Landscape: The Gardens and Parks of Windsor</u>. New Haven, CT: Yale University Press, 1997.
- Roberts, Jeanne Addison. <u>The Shakespearean Wild: Geography, Genus, and Gender</u>. Lincoln, NE: University of Nebraska, 1991.
- Robertson, John. Montaigne and Shakespeare. London, UK: Swan Sonnenschein & Co., 1897.
- Roetzel, Calvin. <u>The Letters of Paul: Conversations in Context</u>. Louisville, KY: Westminster John Knox Press, 1998.
- Romanes, George. Mental Evolution in Animals: With a Posthumous Essay on Instinct by Charles Darwin. London, UK: Kegan Paul & Trench Co., 1883.
- Ruskin, John. <u>The Stones of Venice Volume III: The Fall</u>. New, York, NY: John Wiley & Sons, 1880.
- Sacks, Oliver. "The Mental Life of Plants and Worms, Among Others." New York Review of Books. 71.7 (2014). Available: http://www.nybooks.com/articles/archives/2014/apr/24/mental-life-plants-and-worms-among-others.
- Salisbury, Joyce. <u>The Beasts Within: Animals in the Middle Ages</u>. New York, NY: Routledge, 1994.
- Saussure, Ferdinand de. <u>Course in General Linguistics</u>. Trans. Roy Harris. Peru, IL: Open Court Publishing, 1986.
- Scholl, John. "The Gardener's Art in The Winter's Tale." <u>Modern Language Notes</u>. 27.6 (1912): 176-178.

- Scott, Alison. <u>Selfish Gifts: The Politics of Exchange and English Courtly Literature, 1580-1623</u>. Madison, NJ: Fairleigh Dickinson University Press, 2005.
- Scully, Matthew. <u>Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy.</u> New York, NY: St. Martin's Press, 2002.
- Seager, Herbert. Natural History in Shakespeare's Time: Being Extracts Illustrative of the Subject as He Knew It. New York, NY: AMS Press, 1971.
- Sears, Mary and Daniel Merriman, eds. <u>Oceanography: The Past: Proceedings of the Third International Congress on the History of Oceanography held September 22-26, 1980 at the Woods Hole Oceanographic Institution.</u> New York, NY: Springer, 1980.
- Shackford, Martha Hale, ed. <u>Legends and Satires From Mediæval Literature</u>. Boston, MA: Ginn and Company, 1913.
- Shattuck, Robert. <u>Forbidden Knowledge: From Prometheus to Pornography</u>. New York, NY: St. Martin's Press, 1996.
- Shaviro, Steven ed. <u>Cognition and Decision in Non-Human Biological Organisms</u>. Open Humanities Press, 2011.
- Shell, Hanna Rose. "Casting Life, Recasting Experience: Bernard Palissy's Occupation between Maker and Nature." Configurations. 12.1 (2004): 1-40.
- Shirley, John and F. David Hoeniger, eds. <u>Science and the Arts in the Renaissance</u>. Washington DC: The Folger Shakespeare Library, 1985.
- Simons, Paul. "Anaesthetics Wake Up Dozy Plants." New Scientist. 99.1371 (1983): 472-473.
- Simons, Paul. "The Touchy Life of Nervous Plants." New Scientist. 93.1296 (1982): 650-652.
- Singer, Peter. Animal Liberation, Third Edition. New York, NY: HarperCollins, 2002.
- Singer, Peter. <u>Practical Ethics, Second Edition</u>. Cambridge, UK: Cambridge University Press, 1993.
- Sluga, Hans. Wittgenstein. Oxford, UK: Wiley-Blackwell, 2011.
- Smith, Justin. <u>The Problem of Animal Generation in Early Modern Philosophy</u>. Cambridge, UK: Cambridge University Press, 2006.
- Soellner, Rolf. <u>Timon of Athens, Shakespeare's Pessimistic Tragedy</u>. Columbus, OH: The Ohio State University Press, 1979.

- Sokol, B. J. <u>Art and Illusion in The Winter's Tale</u>. Manchester, UK: Manchester University Press, 1994.
- Spencer, Colin. <u>The Heretic's Feast: A History of Vegetarianism</u>. London, UK: Fourth Estate Limited, 1993.
- Spenser, Edmund. <u>The Faerie Queene</u>. Thomas P. Roche ed. New York, NY: Penguin Books, 1978.
- Sullivan, Garrett, Alan Stewart, Rebecca Lemon, Nicholas McDowell, and Jennifer Richards eds. <u>The Encyclopedia of English Renaissance Literature</u>. Oxford, UK: Blackwell Publishing Ltd., 2012.
- The Geneva Bible. London: Christopher Barker, Printer to the Queenes Maiestie, 1586.
- Theis, Jeffrey. Writing the Forest in Early Modern England. Pittsburgh, PA: Duquesne University Press, 2009.
- Thomas, Keith. Man and the Natural World: Changing Attitudes in England 1500-1800. Oxford, UK: Oxford University Press, 1996.
- Tillyard, Eustace M. The Elizabethan World Picture. New York, NY: Vintage Books, 1959.
- Topsell, Edward. The Historie of Foure-footed Beastes. London, 1607.
- Uglow, Jenny. <u>A Gambling Man: Charles II and the Restoration</u>. New York, NY: Farrar, Straus, and Giroux, 2009.
- Vives, Juan Luis. <u>The Instruction of a Christian Woman</u>. Trans. Richard Hyrde. London: 1529.
- Volkov, Alexander. <u>Plant Electrophysiology: Signaling and Responses</u>. Berlin, DE: Springer, 2012.
- Waage, Frederick. "Shakespeare Unearth'd." <u>Interdisciplinary Studies in Literature and the</u> Environment. 12.2 (2005): 139-64.
- Weisman, Alan. The World Without Us. New York, NY: St. Martin's Press, 2007.
- Whitman, William, David Coleman, and William Wiebe. "Prokaryotes: The Unseen Majority." <u>Proceedings of the National Academy of Sciences.</u> 95.12 (1998): 6578-6583.
- Williams, Howards. The Ethics of Diet: A Biographical History of the Literature of Humane Dietetics, From the Earliest Period to the Present Day. London, UK: Hurst Bros., Ltd., The Old Time Press, 1907.

- Williams, Terry Tempest. <u>Finding Beauty in a Broken World</u>. New York, NY: Random House, Inc., 2009.
- Wittgenstein, Ludwig. The Blue and Brown Books. New York, NY: Harper & Row, 1958.
- Wolloch, Nathaniel. <u>Subjugated Animals: Animals and Anthropocentrism in Early Modern European Culture</u>. Amherst, NY: Humanity Books, 2006.
- Yogev, Gedalia. <u>Diamonds and Coral: Anglo-Dutch Jews and Eighteenth-Century Trade</u>. New York, NY: Holmes & Meier Publishers, Inc., 1978.