LEAF, BARK, THORN, ROOT:
ARBOREAL ECOCRITICISM AND SHAKESPEAREAN DRAMA

by

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DISSERTATION

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ABSTRACT

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Leaf, Bark, Thorn, Root traces the appearance of trees and their constituent parts in five Shakespearean plays: *Macbeth*, *The Tempest*, *3 Henry VI*, *Richard III*, and *As You Like It*. The dissertation shows how these plays reveal arboreal agencies intra-acting with the characters of the play-texts by assessing the mergings of human and arboreal bodies, as well as instances of hacking and hewing inflicted across these bodies. Taking a posthumanist approach informed by ecomaterialism, critical plant studies, and affect theory, I argue that these sites of painful human-arboreal encounter in Shakespeare's plays initiate potentials for thinking-with *and* feeling-with, across not only species (in the spirit of Donna Haraway's *Companion Species Manifesto*) but also across biological kingdoms. Throughout the dissertation, I complicate philosopher Michael Marder's theories of plant-thinking via these early modern depictions of and relations to trees, whose complex existences inform the texts in multiple registers. The trees of Shakespeare offer ways into theorizing plant-being that not only reflect early modern preoccupations but also resonate across the centuries, potentially serving as a bridge between historicist and presentist methodological concerns, a useful nexus for facing looming ecological issues like climate change, the effects of which long-lived trees bear bodily witness in their annual growth rings and in the shifting of leaf longevity. Using a version of Jeffrey Jerome Cohen and Lowell Duckert's

“veer ecology,” the chapters of the dissertation represent both arboreal body parts and action verbs (leaf, bark, thorn, root), and illuminate a number of “arborealizations.” Four conceptual tools that I develop from these Shakespearean arborealizations are deciduous-sense, inter-missing time, thornition, and queer rhizosphere. In a coda, I apply these four theoretical eco-tools in a brief reading of *A Midsummer Night’s Dream* to assess speculative possibilities of vegetal pleasure and desire.

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My debt to Stacy Alaimo is evident from the first pages of the dissertation, the seeds of this project having been sown while I was in her graduate seminar titled "Thinking with Plants, Animals, and Materialities" in the spring of 2015. I cannot stress enough how much I value her unwavering advocacy for graduate students and her commitment to the development of scholarly community.

Jackie Fay has been a great help and supportive colleague to me as well, particularly in the emerging field of critical plant studies, and especially in our sharing of work in the English Department's Posthumanist Research Cluster. Her exciting research in medieval plant studies and her keen eye have contributed significantly to the shape of my work. I also want to thank the other members of the Posthumanist Research Cluster who gave me feedback on portions of the dissertation: Erin Murrah-Mandril, Neill Matheson, and Ned Schaumberg.

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To Jeff Marchand, I owe special thanks. As he knows, this dissertation is in large part a product of our many spirited conversations. I also thank Mimi Rowntree, my office mate and fellow traveler in the highs and lows of dissertating, for her solidarity and encouragement. We got this!

DEDICATION

I dedicate this dissertation to my parents, James and Julia Hogue. Their love and long-suffering support have allowed me to invest the necessary time and resources required for this kind of research. My dad's theatrical recitations of poetry for my brother and me has stuck with me through the years and definitely steered me in the direction of writing projects such as this one. My mother's unceasing prayers for me have equally propelled me in my scholarly endeavors. I love you, Mom and Dad.

I also want to acknowledge Chelsea Dye, another long-sufferer who has been on this journey with me. I thank her for her love, support, and sacrifices, as well as her willingness to listen to early drafts of chapters with interest and give invaluable feedback.

Finally, it seems appropriate that my project on trees should acknowledge the pecan, sweetgum, and linden trees that looked in on my work from three respective bedroom windows over the course of the dissertation's composition. They are silently present in the pages that follow.

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INTRODUCTION: ARBOREALIZATIONS

> What might a responsible 'sharing of suffering' look like in historically situated practices? … Sharing pain promises disclosure, promises becoming.
> – Donna Haraway, *When Species Meet*[1]

> The life of plants is situated on the brink of death, in the zone of indeterminacy between the living and the dead. Those who share in its anarchic principle will not escape this predicament of being on the verge, suspended between life and death, the predicament common to all living beings.
> – Michael Marder, *Plant-Thinking*[2]

Donna Haraway's concept of "sharing pain" is, from an animal rights perspective, troubling at best.[3] She does not disavow the unequal instrumental relationships that often exist between humans and animals, her primary example being the relationship between researchers and laboratory animals, suggesting that "Staying with the complexities … [means] learning to live and think in practical opening to shared pain and mortality and learning what that living and thinking teach."[4] While I find some of Haraway's conclusions on the issue of animal experimentation problematic, her notion of "staying with the trouble," as her more recent book phrases it, opens the door to thoughtful and speculative engagements with questions related to sentience and the experiential quality of pain in more-than-human settings.[5] Indeed, the basic human experience of pain and its apparent analogue in the animal world prompt further investigation into the extent to which humans and nonhuman others already "share pain," in a fundamental, biological sense. By mere virtue of having a body, the sensible being moves in the

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[1] Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 72, 84.
[2] Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University Press, 2013), 53.
[3] The modern-day animal rights activist movement owes its existence largely to Peter Singer's foundational study, *Animal Liberation* (New York: HarperCollins, 2001 [1975]). See also Tom Regan, *The Case for Animal Rights* (Berkley: University of California Press, 1983); Melanie Joy, *Why We Love Dogs, Eat Pigs, and Wear Cows: An Introduction to Carnism* (San Francisco: Conari Press, 2010); and Tobias Menely, *The Animal Claim: Sensibility and the Creaturely Voice* (Chicago: The University of Chicago Press, 2015).
[4] Haraway, *When Species Meet*, 83.
[5] Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016).

world with respect to a myriad of potential pleasures and pains. Furthermore, if Michael Marder is correct that "being on the verge" of life and death is a common orientation for "all living beings," then we should begin to think of plants too as having bodies that share with humans and animals sensibilities, aversions, affects, even pain.

This dissertation begins with an assumption that the plants of Shakespearean drama, namely its trees, can contribute to recent ecocritical, philosophical, and botanical discussions about vegetal ontology. In *Words That Matter: Linguistic Perception in Renaissance English* (1996), Judith H. Anderson discusses the "arborealizing narratives" of Edmund Spenser's *The Faerie Queene* and William Shakespeare's *The Tempest*, both of which involve characters who are imprisoned within the form of a tree.[6] Unlike Spenser's knight Fradubio, Shakespeare's Ariel does not so much turn into a tree as he finds himself trapped inside of one. Nonetheless, Anderson still calls both instances "arborealizations," playing on her theory of the materialization of language. She suggests that the literature of the Renaissance gradually takes on weightier rhetoric than that of the Middle Ages, becoming more reified, or "grounded," in nominal sentences and an increased emphasis on visual character.[7] I borrow Anderson's term "arborealization" as a keyword throughout the dissertation, but I apply it with a modified meaning. Within the neologism "arborealization" is, of course, the word "realization," and it is a combination of the first and third definition in the *Oxford English Dictionary* (hereafter, *OED*) of "realization" that I apply to the trees of Shakespeare in using the term "arborealization": 1) "the action of making real," and 2) "the action of apprehending with the mind."[8] For Anderson, an

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[6] Judith H. Anderson, *Words That Matter: Linguistic Perception in Renaissance English* (Stanford: Stanford University Press, 1996), 155.
[7] Ibid., 23.
[8] In citing definitions from the *OED*, I indicate the part of speech, noun (*n.*) or verb (*v.*), followed by its specific usage and listing as indicated in the *OED*.

"arborealization" in literature suggests an allegorical relation between characters and the material objects into which they "arborealize." Concerned with the ways in which Shakespeare's drama elucidates the ontology of living plants, in the early modern period as well as today, the arborealizations I sketch herein refer to speculative possibilities for an overlapping of human and plant sentience made thinkable by Shakespeare's representation of painful human-tree interactions. My gambit is to suggest that the reciprocal movements in Shakespeare's plays between the worlds of plants and humans allow for a dynamic push beyond mere allegorical relation. Rather, reading the trees of Shakespeare as trees, I argue that the biological dimensions of the play, especially in relation to the capacity of the living for physical pain and associated affect, "make real" these sensations as well as signal a cognitive apprehension of interacting worlds within the imaginary realm of early modern drama.

Past studies on forests and wilderness spaces within early modern cultural and literary studies have been varied and often vibrant.[9] Much of this work is ecocritical, concerned with modern problems of deforestation, pollution, and related environmental issues, looking to early modern literature either to identify and critique the onset of industrial attitudes that have led to current predicaments or to locate proto-environmentalist thought lurking amid condemnations of "wild" spaces and calls for mankind to subdue nature. The agenda of ecocriticism in this context

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[9] Among early modern environmental studies, see the pioneering work of Keith Thomas, *Man and the Natural World: Changing Attitudes in England 1500-1800* (London: Penguin Books, 1983); Paul Alpers, *What is Pastoral?* (Chicago: University of Chicago Press, 1997); Robert N. Watson, *Back to Nature: The Green and the Real in the Late Renaissance* (Philadelphia: University of Pennsylvania Press, 2006); Gabriel Egan, *Green Shakespeare: From Ecopolitics to Ecocriticism* (New York: Routledge, 2006); Simon Estok, *Ecocriticism and Shakespeare: Reading Ecophobia* (New York: Palgrave Macmillan, 2011); Thomas Hallock, Ivo Kamps, and Karen L. Raber, eds., *Early Modern Ecostudies: From Shakespeare to the Florentine Codex* (New York: Palgrave Macmillan, 2008); Lynne Bruckner and Dan Brayton, eds., *Ecocritical Shakespeare* (Burlington: Ashgate, 2011); and Todd Borlik, *Ecocriticism and Early Modern English Literature* (New York: Routledge, 2011). On forests in particular, see especially Robert Pogue Harrison, *Forests: The Shadow of Civilization* (Chicago: University of Chicago Press, 1992); Corinne J. Saunders, *The Forest of Medieval Romance: Avernus, Broceliande, Arden* (Cambridge: D.S. Brewer, 1993); Jeffrey Theis, *Writing the Forest in Early Modern England* (Pittsburgh: Duquesne University Press, 2009); Vin Nardizzi, *Wooden Os: Shakespeare's Theatres and England's Trees* (Toronto: University of Toronto Press, 2013); and Anne Barton, *The Shakespearean Forest* (Cambridge: Cambridge University Press, 2017).

is to analyze literary forests with the perspective that forests are an important part of the environment or the natural world, upon which human culture and innovation has unfortunately wreaked havoc.[10] Posthumanist scholarship, however, has demonstrated the importance of non-anthropocentric interpretations of literature that eschew traditional understandings of the culture/nature binary and that do not ignore nonhuman perspectives present in textual artifacts.[11] Working within this framework, I engage with not only forests in literature but also with the individual trees in texts and texts made from trees, arguably objects (or perhaps subjects) in their own right worthy of critical investigation. Attending to this arboreal material, my posthumanist approach complicates ecocritical thinking about representations of forests by thinking with and across the physical presence of plants in early modern drama, acknowledging them as active agents in a more-than-human world.[12]

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[10] On the association between hunting and "havocking," see Barton, *The Shakespearean Forest*, 18-19.
[11] Posthumanism has become ubiquitous in the discourse of the humanities. In addition to the work of Haraway, I have paid attention most closely in this field to the comprehensive work of theorists Bruno Latour, Michel Serres, Stacy Alaimo, Rosi Braidotti, Karen Barad, and Cary Wolfe, among others. Posthumanist thinking often overlaps with and enfolds various related and (sometimes) complementary fields such as science and technology studies (STS), critical animal studies, the new materialism, material feminism, ecocriticism, systems theory, and affect theory, to name a few. For representative work in STS and the development of "actor-network theory," see Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993); Michel Serres, *The Natural Contract*, trans. Elizabeth MacArthur and William Paulson (Ann Arbor: The University of Michigan Press, 1995); N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: The University of Chicago Press, 1999); and Cary Wolfe, *What Is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010). The so-called new materialism intersects with posthumanism across different sectors, ranging from feminist science studies to the philosophical OOO school (object-oriented ontology). For representative work of new materialist scholarship, see especially Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007); Stacy Alaimo, *Bodily Natures: Science, Environment, and the Material Self* (Bloomington: Indiana UP, 2010); and Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010). The originator and leading theorist of OOO (or "Triple O") theory is Graham Harman, who articulates principles of the theory in *The Quadruple Object* (Alresford: Zero Books, 2011). For a feminist new-materialist response to OOO, see Alaimo, "Thinking as the Stuff of the World," in *O-Zone: A Journal of Object-Oriented Studies* 1 (2014), 13-21.
[12] The idea of "thinking across bodies" comes from Alaimo, following her theory of "trans-corporeality." I borrow the term "more-than-human" from eco-philosopher David Abram. Regarding "agency," I agree with Bruno Latour that "To be a subject is not to act autonomously in front of an objective background, but to share agency with other subjects that have also lost their autonomy," in "Agency at the Time of the Anthropocene," *New Literary History* 45 (2014): 5.

On this basis, then, *Leaf, Bark, Thorn, Root* traces the appearance of trees and their constituent parts in five Shakespearean plays, revealing arboreal agencies "intra-acting" with the characters of the play-texts.[13] I emphasize that the representation of painful engagements between humans and trees in Shakespearean drama allows for a speculative thinking- and feeling-with across biological species and kingdoms. Attending to pre-Linnaean modes of vegetal organization evident in Shakespeare's plays facilitates a more capacious understanding of our relationship with plants, inviting modern readers and audiences to "brush upon the edges" of vegetal ontologies operant in early modern England.[14] Drawing upon ecofeminist/materialist methodologies, I trace the arboreal matter of *Macbeth*, *As You Like It*, *The Tempest*, *3 Henry VI*, and *Richard III*, to identify sites of other-than-human storytelling that inform the plays. Through this type of analysis, I demonstrate how Shakespeare's plays inform, complicate, and build upon cutting-edge theories in the fields of posthumanism and critical plant studies.

Ultimately, I suggest that the variegated forms belonging to trees and texts about trees in the early modern period outline a more capacious and fluid relationship between not only plants and humans but also between plants and nonhuman animals, as well as between plants and other plants. In doing so, I hope to create conversation between scientific disciplines and the humanities, insisting upon the value of historical and literary records that contribute crucial insights that aid our ability to address ecological issues in the Anthropocene. While I hope to complicate our understanding of earlier times with these new ecocritical readings of Shakespeare plays, these readings should also give us insight into possible ways of relating to plant-kind in

[13] The term "intra-action" comes from Barad's theory of agential realism. She defines intra-action as "the mutual constitution of entangled agencies," in *Meeting the Universe Halfway*, 33.

[14] Marder, *Plant-Thinking*, 13. On the transition from classical categorical thinking to modern scientific taxonomies, see Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1994 [1970]).

our own time that acknowledge a certain kinship and companionship that nonetheless often involves a mutual suffering inflicted by both parties.

Although this research owes a large debt to advances made in the field of critical animal studies, my dissertation troubles what now seems to be a bias in the humanities toward the human-like animal, especially the mammal, at the expense of relating to *all* kinds of life on earth, including protozoa, fungi, reptiles, insects, arachnids, and trees.[15] Additionally, because of the ubiquitous familiarity of plants appearing as passive background, most people tend to experience "plant-blindness."[16] An ecological approach, in my mind, should not exclude certain nonpreferred lifeforms in order to lift up familiar companion animals like dogs and cats. This is not to suggest that we should not listen to what dogs and cats have to say, but my experience has been that people's familiarity with these animals too easily allows for an imposed anthropomorphism that speaks over the animal voices. If we try to listen to stranger beings and to those beings that seem almost wholly alien to our own way of being, our chances of actually hearing them increase because we must truly strain to make that effort consciously. Greta Gaard laments, "Euro-Western culture is so permeated by Cartesian rationalism that children are taught

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[15] Critical animal studies scholarship (which often intersects with biopolitics) is now voluminous and far-reaching. Influential and representative studies include Jakob von Uexküll, *A Foray into the Worlds of Animals and Humans: With a Theory of Meaning* (Minneapolis: University of Minnesota Press, 2010 [1934]); Jacques Derrida, "The Animal That Therefore I am (More to Follow)," trans. David Wills, *Critical Inquiry* 28, no. 2 (2002): 369-418; Cary Wolfe, *Zoontologies: The Question of the Animal* (Minneapolis: University of Minnesota Press, 2003); Richard Twine, *Animals as Biotechnology: Ethics, Sustainability and Critical Animal Studies* (London: Earthscan, 2010); Atsuko Matsuoka and John Sorenson, *Critical Animal Studies: Toward Trans-species Social Justice* (London: Rowman and Littlefield, 2018). Investigations of less mammalian animal studies include Mel Y. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham: Duke University Press, 2012); and Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015). Early modern animal studies is also a blossoming area of research. See, for example, Bruce Boehrer, *Shakespeare Among the Animals: Nature and Society in the Drama of Early Modern England* (New York: Palgrave Macmillan, 2002); Erica Fudge, *Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England* (Ithaca: Cornell University Press, 2006); and Laurie Shannon, "The Eight Animals in Shakespeare, Or, before the Human," in *PMLA* 124, no. 2 (2009): 472-79.
[16] See Mung Balding and Kathryn Williams, "Plant Blindness and the Implications for Plant Conservation," *Conservation Biology* 30, no. 6 (2016): 1192-99.

from an early age not receive—and certainly not to trust—the information being sent continuously by the animate world that surrounds us … In contrast, indigenous cultures around the world have stories of trans-species communication and even kinship, ancestry with earthothers."[17] The subtle voices of plants speak in and from early modern texts; sometimes they cry out in anguish, at other times they wither up, but at all times they matter.

Toward a Critical Plant Studies in Posthumanist Renaissance Scholarship

This project brings together a disparate (sometimes divided) range of fields and interrelated concerns. Throughout my dissertation, I employ various formations of a three-pronged approach of eco-materialism, critical plant studies, and affect theory to contribute to the project of Renaissance posthumanist scholarship from different vantage points.[18] This approach embraces the concept of *bricolage*, using, combining, and creating tools as necessary, allowing for multiple intersecting theories to converge rather than limiting my lens to a single theoretical mode or version of posthumanist thinking.[19] Generally, I interpret posthumanism not to mean a negative anti-humanism or an anti-human position but rather an affirmative and creative theoretical lens through which to critique the errors and shortcomings of humanism.[20] There is much good to be said for a humanism that works against racism, sexism, and other oppressive modes of thought that deny people their essential humanity; however, I disagree with a

[17] Greta Gaard, *Critical Ecofeminism* (Lanham: Lexington Books, 2017), xix.
[18] On posthumanism and Shakespeare/Renaissance scholarship, see especially Stefan Herbrechter and Ivan Callus, eds., *Posthumanist Shakespeares* (New York: Palgrave Macmillan, 2012); Joseph Campana and Scott Maisano, eds., *Renaissance Posthumanism* (New York: Fordham University Press, 2016); Dionne, Craig. *Posthuman Lear: Reading Shakespeare in the Anthropocene* (New York: Punctum Books, 2016); and Karen Raber, *Shakespeare and Posthumanist Theory* (London: Bloomsbury, 2018).
[19] On "bricolage," see Jacques Derrida, "Structure, Sign, and Play in the Discourse of the Human Sciences," in *Writing and Difference*, trans. Alan Bass (London: Routledge, 1967), 278-94.
[20] My definition of posthumanism resonates with Braidotti's definition: "Posthumanism is the historical moment that marks the end of the opposition between Humanism and anti-humanism and traces a different discursive framework, looking affirmatively towards new alternatives," in *The Posthuman* (Cambridge: Polity Press, 2013), 37.

humanism that posits “the human” as superior to “the animal” or “the plant” or as the “measure of all things.”[21] Ecocritical and posthumanist theorists alike have shown thoroughly and compellingly how this view of humans as the superior form of life on earth leads to destructive environmental practices and unjustifiably instrumental attitudes regarding the lives of other life forms. Finally, while all of these -isms make my dissertation sound decidedly presentist, I also read Shakespeare and his representation of trees within the historical context of sixteenth- and seventeenth-century England, moving back and forth between past attitudes and those people hold today.

Ecocriticism, Medieval and Early Modern Forests, and Ecomaterialism

My dissertation participates in what is now the well-established field of ecocriticism, which in its early days tended to prescribe a narrow vision of what is considered an “ecological” or “environmental” text.[22] Early ecocritics were preoccupied with nature/landscape writing from the nineteenth and twentieth centuries, but the ecocritical canon has been expanded and more or less exploded as studies have troubled notions of pure or pristine nature/wilderness as well as called into question a narrowly limited time period/set of texts that might be viewed ecocritically. Karen Raber’s annotated bibliography “Recent Ecocritical Studies of Renaissance

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[21] The concept of “man” (*anthropos*) being the measure of all things is attributed to the ancient Greek philosopher Protagoras, and it appears most famously in Plato’s dialogue *Theaetetus*.

[22] For an accessible introduction to ecocriticism, see Greg Garrard, *Ecocriticism* (New York: Routledge, 2004). See also Cheryll Glotfelty and Harold Fromm, eds., *The Ecocriticism Reader: Landmarks in Literary Ecology* (Athens: University of Georgia Press, 1996). Some of the landmark studies in the field include Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (Cambridge, MA: Belknap Press, 1995); William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: Norton, 1996); Karla Armbruster and Kathleen R. Wallace, *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism* (Charlottesville: University Press of Virginia, 2001); Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Malden: Blackwell, 2005); Ursula K. Heise, “The Changing Profession: The Hitchhiker's Guide to Ecocriticism,” *PMLA* 121, no. 2 (2006): 503-16; Graham Huggan and Helen Tiffin, eds., *Postcolonial Ecocriticism: Literature, Animals, Environment* (New York: Routledge, 2010); Louise Westling, ed., *The Cambridge Companion to Literature and the Environment* (Cambridge: Cambridge University Press, 2014); and Greg Garrard, ed., *The Oxford Handbook of Ecocriticism* (Oxford: Oxford University Press, 2014).

Literature" in 2007 already showed increasing evidence that scholars of earlier periods had much to contribute to the environmental humanities.[23] Since then, many monographs and edited collections have been dedicated to ecocritical readings of Shakespeare alone, not to mention the many other studies on a variety of early modern texts.[24] Some scholars working within the ecocritical tradition have focused specifically on forests and/or trees in the early modern period. They have all contributed significantly to the general field of ecocriticism in different ways with their respective studies. Jeffrey Theis's *Writing the Forest in Early Modern England* (2009) builds upon Lawrence Buell's theories of space/place to suggest that what Theis calls "sylvan pastoral," a narrower subset of pastoral literature, "presents a broader frame through which to analyze the relationship between human beings and nature, where tensions between preservation and destruction of nature are only two of many ways to respond to the material world."[25] Also concerned with pastoral literature and aesthetics, Todd Borlik suggests in his chapter "Mute Timber? Environmental Stichomythia in *The Old Arcadia* and *Poly-Olbion*" that Philip Sidney's pastoral contribution to literature "celebrates the serenity, beauty, and cultural value of non-human nature … undermines the reductive readings of the landscape … [and] problematizes the re-visioning of trees as mere timber."[26] In a similar vein, Vin Nardizzi has looked at the use and

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[23] Karen Raber, "Recent Ecocritical Studies of English Renaissance Literature," *English Literary Renaissance* 37, no. 1 (2007): 151-71.

[24] For recent overviews of these research areas, see Jennifer Munroe, "Shakespeare and Ecocriticism Reconsidered," *Literature Compass* 12, no. 9 (2015): 461-70; and Gwilym Jones, "Environmental Renaissance Studies," *Literature Compass* 14, no. 10 (2017): 1-15. Some representative studies include Jean Feerick and Vin Nardizzi, eds., *The Indistinct Human in Renaissance Literature* (Palgrave Macmillan, 2012); Bruce Boehrer, *Environmental Degradation in Jacobean Drama* (Cambridge: Cambridge University Press, 2013); Gabriel Egan, *Shakespeare and Ecocritical Theory* (London: Bloomsbury Arden Shakespeare, 2015); Jennifer Munroe, Lynne Bruckner, and Edward J. Geisweidt, eds., *Ecological Approaches to Early Modern English Texts: A Field Guide to Reading and Teaching* (New York: Routledge, 2016); Charlotte Scott, *Shakespeare's Nature: From Cultivation to Culture*. (Oxford: Oxford University Press, 2014); Tom MacFaul, *Shakespeare and the Natural World* (Cambridge: Cambridge University Press, 2015); and Lowell Duckert, *For All Waters: Finding Ourselves in Early Modern Wetscapes* (Minneapolis: University of Minnesota Press, 2017).

[25] Theis, *Writing the Forest in Early Modern England*, 25-26.

[26] Borlik, *Ecocriticism and Early Modern English Literature*, 83.

representation of timber in early modern drama with his book *Wooden Os: Shakespeare's Theatres and England's Trees* (2013), which he claims "presents a fuller picture of early modern woodland ecology and its stage representations by contemplating the darker shades of green in the contested, felled, fatal, logged, and razed trees of early modern drama."[27] With this darker version of green studies, Nardizzi's study resonates with Simon Estok's theory of "ecophobia."[28] This "darker" direction that Nardizzi and Estok tread informs my theorizing of a more-than-human pain that I read in early modern texts, identifiable across the bodies and body parts of both humans and plants.

My dissertation is also indebted to the pioneering work of medieval studies scholars investigating textual trees and forests. Corinne Saunders gave us the first full-scale study of the romance forest with her *The Forest of Medieval Romance: Avernus, Broceliande, Arden* (1993). Saunders emphasizes a "medieval reality," claiming that the forest in literature is "linked to the geographic, economic, and legal concepts of the forest in the Middle Ages."[29] Ecocritic Gillian Rudd criticizes Saunders for being too symbolically focused, and her important study, *Greenery* (2007), is unapologetically presentist and non-anthropocentric,[30] analyzing late medieval texts as "sites where modern 'green' concerns with how humans relate to, construct and inhabit the world coincide with how these things ['literary borderlands where human and non-human meet'] are

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[27] Nardizzi, *Wooden Os*, 28.

[28] Estok, *Ecocriticism and Shakespeare*, passim.

[29] Saunders, *The Forest of Medieval Romance*, xi.

[30] Leaders in the move toward a self-conscious presentist approach to medieval/early modern texts include many of the literary scholars associated with the Babel Working Group, founded in 2004, self-described on its website as "a non-hierarchical scholarly collective and para-institutional desiring-assemblage with no leaders or followers, no top and no bottom, and only a middle." Despite this definition, however, one of Babel's leading voices is the well-known medievalist Jeffrey Jerome Cohen, whose seemingly tireless original and editorial work has put this group into the scholastic spotlight. A major pioneer of Shakespearean presentism is Sharon O'Dair, who asks, "Is It Shakespearean Ecocriticism if It Isn't Presentist?" in the collection *Ecocritical Shakespeare* (see note 8).

articulated by medieval literary texts."[31] Rudd avoids interpretations of animals, trees, and landscapes that automatically assert symbolic or metaphorical meaning to those entities; instead, she advocates attempts to inhabit a non-anthropocentric space of interpretation that acknowledges their physical being as animals and trees who at one time interacted with medieval writers and texts and who now interact with us as modern readers of those texts.

From Nardizzi's meditation on the wooden material of Shakespeare's theatre spaces to Rudd's call for non-anthropocentric green readings of medieval literature, the movement toward ecomaterialist approaches has led me to pursue a similar approach with Shakespeare's plays and other early modern texts. The concept of "material ecocriticism" is relatively new, developed by Serenella Iovino and Serpil Oppermann in their edited collection by that name, published in 2014.[32] This approach attempts to synthesize a number of converging theoretical trends within the field of ecocriticism, relying heavily upon new materialist models put forward by feminist science studies scholars like Stacy Alaimo, Karen Barad, Jane Bennett, and Donna Haraway, among many others. Iovino and Oppermann bring together an at-times dizzying array of approaches, including postmodernism, systems theory, cultural ecology, biosemiotics, and posthumanism; key among all of the contributions, however, is the unifying concept of "storied matter," which suggests that there are elements of nonhuman storytelling happening all of the time and that these agential forces act upon human textual production even as we act upon said forces. Oppermann claims, "The premise that the world is 'a dense network' of agencies constitutes the leading idea of both the new materialisms and ecological postmodernism."[33] She

[31] Gillian Rudd, *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester: Manchester University Press, 2007), 4.
[32] Serenella Iovino and Serpil Oppermann, eds. *Material Ecocriticism* (Bloomington: Indiana University Press, 2014)
[33] Serpil Oppermann, "From Ecological Postmodernism to Material Ecocriticism," in *Material Ecocriticism*, eds. Serenella Iovino and Serpil Oppermann (Bloomington: Indiana University Press, 2014), 22.

refers to the "world's stories" and how we can rewrite our narratives with respect to the stories of nonhuman agency because doing so "opens up multiple intersections between the processes of materiality and discursive practices that shape social ideas, cultural artifacts, artworks, literature, ethics, and epistemology."[34] Oppermann stresses the idea of both-and, also seen in Donna Haraway's concept of the "material-semiotic."[35] Emphasizing "discursive practices," a focus of Michel Foucault's work, ecomaterialists analyze material engagement with "real-world" activities among bodies that include humans and animals but also scale up to governmental institutions and bodies of water and scale down to the level of microbes, while hanging on to the idea that those bodies signify and that discourse is taking place. Plants also have bodies, and the matter that makes up those bodies partakes in the more-than-human storytelling that takes place in Shakespeare's drama.

Before moving into a discussion of critical plant studies, I should also mention an important study by medievalist scholar Karl Steel titled *How to Make a Human* (2011). Although exclusively an animal studies book, Steel's introduction summarizes a thorough history of the rise of critical animal theory and makes a compelling argument for applying this theory to medieval texts. Steel wants to make the correction to the oversimplification sometimes applied among ecocritics, feminists, and posthumanists that marks Descartes' mechanical animal as the start of "modern attitudes of human distinctiveness from animals" as well as the idea that "European thought between the Skeptics and Montaigne unrelentingly considered animals to have only instrumental value to humans."[36] Steel's research paves the way for similarly nuanced and considered approaches to medieval and early modern vegetal worlds.

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[34] Ibid., 35.
[35] Haraway, *When Species Meet*, 26.
[36] Karl Steel, *How to Make a Human: Animals and Violence in the Middle Ages* (Columbus: Ohio State University Press, 2011), 11.

Critical Plant Studies and Ecofeminism

The most prolific writer working to theorize a critical plant studies is philosopher Michael Marder, whose 2013 monograph *Plant Thinking: A Philosophy of Vegetal Life*, along with Matthew Hall's *Plants as Persons: A Philosophical Botany* (2011), may be said to have ushered in this relatively new approach.[37] Since *Plant Thinking*, Marder has produced a host of subsequent texts devoted to developing this new theoretical territory.[38] His books have been helpful guides for my analysis of the interactions of human and arboreal bodies in Shakespeare, particularly since Marder aims to "encounter the plants" via his theorizing.[39] Many of his ideas show up in this dissertation in various ways: the body of plants, the obscurity of vegetal life, barely perceptible motion, and the time and freedom of plants, for example. Marder's collaboration with Luce Irigaray, *Through Vegetal Being* (2016), adds a much-needed female voice to the discussion.[40] Also working in this territory is Elaine Miller, whose *The Vegetative Soul: From Philosophy of Nature to Subjectivity in the Feminine* (2002) argues, "The plant is not the form of the world but the possibility of reforming the world; by taking a closer look at another possibility of bodily formation, we may perhaps regain some of the wonder that is the condition of all science, philosophy, and art."[41] While I also rely on early modern ecofeminist

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[37] Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University Press, 2013); Matthew Hall, *Plants as Persons: A Philosophical Botany* (New York: SUNY Press, 2011). Other key works in this emerging field include Patricia Vieira, Monica Gagliano, and John Ryan, eds., *The Green Thread: Dialogues with the Vegetal World* (Lanham: Lexington Books, 2016); John Charles Ryan, *Plants in Contemporary Poetry: Ecocriticism and the Botanical Imagination* (New York: Routledge, 2018); and Prudence Gibson, *The Plant Contract: Art's Return to Vegetal Life* (Leiden: Brill Rodopi, 2018). On early modern plant studies, see especially *postmedieval* 9, no. 4 (2018), eds. Rob Barrett and Vin Nardizzi.

[38] See, for example, *The Philosopher's Plant: An Intellectual Herbarium* (Ithaca: Cornell University Press, 2014), and *Grafts: Writings on Plants* (Minneapolis: Univocal, 2016).

[39] Marder, *Plant-Thinking*, 13.

[40] Luce Irigaray and Michael Marder, *Through Vegetal Being: Two Philosophical Perspectives* (New York: Columbia University Press, 2016).

[41] Elaine P. Miller, *The Vegetative Soul: From Philosophy of Nature to Subjectivity in the Feminine* (Albany: State University of New York Press, 2002), 17-18.

theory (discussed below), Miller's philosophical approach complements Marder's work in my analysis of Shakespeare as a site for plant studies work. Finally, Jeffrey Nealon's *Plant Theory: Biopower and Vegetable Life* (2015) asks why animal studies is so popular in the humanities now and what the exclusion of plant lives means. Nealon returns to the "high theory" of Foucault, Derrida, and Deleuze & Guattari "to suggest genealogical continuities, breaks, and roads not taken with the recent theoretical past."[42] In returning to the literary past, my dissertation travels in the direction of such "roads not taken," in order to begin to articulate a Renaissance posthumanist plant studies.

Crucial in this articulation is the plant studies scholarship of ecofeminists who have been influenced by cultural and environmental thinkers like Carolyn Merchant, Val Plumwood, and Greta Gaard, among others.[43] Building on the work of Renaissance ecofeminist Sylvia Bowerbank, Jennifer Munroe and Rebecca Laroche have made advances toward a critical plant studies by studying the representation of plants and plant morphology in early modern literature. In particular, Laroche's essay "Roses in Winter: Recipe Ecologies and Shakespeare's Sonnets" engages in thinking about how early modern people (especially women) were constantly engaged with the "stuff" or material elements of the world as a result of their household practices as represented in "receipt" book collections.[44] Laroche finds the new materialist vitalism espoused by sociologist Jane Bennett useful to a certain extent but cautions against applying it thoughtlessly or in a simplistic way that ignores the proximity of early modern women to plants, animals, and other materials that they made use of in their preparation of food, drinks, and

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[42] Jeffrey T. Nealon, *Plant Theory: Biopower and Vegetable Life* (Stanford: Stanford University Press, 2015), xv.
[43] See, for example, Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: Harper & Row, 1980); Val Plumwood, *Feminism and the Mastery of Nature* (New York: Routledge, 1993); and Greta Gaard, ed., *Ecofeminism: Women, Animals, Nature* (Philadelphia: Temple University Press, 2010).
[44] Rebecca Laroche, "Roses in Winter: Recipe Ecologies and Shakespeare's Sonnets," in *Ecological Approaches to Early Modern English Texts: A Field Guide to Reading and Teaching*, eds. Jennifer Munroe, Lynne Bruckner, and Edward J. Geisweidt (New York: Routledge, 2016), 51-60.

medicine. Additionally, Munroe and Laroche's collaborative *Shakespeare and Ecofeminist Theory* offers helpful ideas and frameworks for theorizing a critical plant studies. They contend that "ecofeminist enquiry views plant personification as a kind of cross-species impersonation in which the speciesist voicing is attenuated and interrupted by a multi-layered embodiment such that the notion of animate/inanimate, human/nonhuman, subject/object is shown to be elusive, untenable."[45] Plant personification and "cross-species impersonation" are major foci of my dissertation, and Munroe and Laroche's gesturing toward a "multi-layered embodiment" touches upon my interest in affect theory. Furthermore, while Munroe and Laroche tend to focus on sonnets rather than plays and on flowers rather than trees, their object-oriented chapter in *Shakespeare and Ecofeminist Theory* discusses trees and plays in Shakespeare with considerable depth, arguing that the female characters of plays like *All's Well That Ends Well* "employ this link between themselves and plants in such a way that more overtly highlights their mutual embeddedness as co-agentic."[46] Munroe and Laroche also take part in the move of some ecofeminist early modernists to investigate the previously unseen and undervalued labor performed by the bodies of early modern women in domestic spaces and in gardens, through the analysis of botanically related texts such as herbals, gardening manuals, and recipes.[47] This type of scholarship often has a botanical focus, sometimes specifically arboreal in nature, when, for example, the instruction in recipes call for ingredients like bark or nuts.

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[45] Rebecca Laroche and Jennifer Munroe, *Shakespeare and Ecofeminist Theory* (London: Bloomsbury, 2017), 122.
[46] Laroche and Munroe, *Shakespeare and Ecofeminist Theory*, 118.
[47] See, for example, Rebecca Bushnell, *Green Desire: Imagining Early Modern English Gardens* (Ithaca: Cornell University Press, 2003); Jennifer Munroe, *Gender and the Garden in Early Modern English Literature* (Burlington: Ashgate, 2008); Leah Knight, *Of Books and Botany in Early Modern England: Sixteenth-Century Plants and Print Culture* (Burlington: Ashgate, 2009); Rebecca Laroche, *Medical Authority and Englishwomen's Herbal Texts, 1550-1650* (Burlington: Ashgate, 2009); and Amy Tigner, *Literature and the Renaissance Garden from Elizabeth I to Charles II: England's Paradise* (Burlington: Ashgate, 2012).

In addition to these eco-cultural literary studies, my dissertation is informed to an extent by texts of popular science on plants as well as academic studies in ecology, forestry, climate science, and recent studies in plant cognition. Among the writers of popular science, Michael Pollan has inspired my thinking with his "plant's-eye view" perspective, which he has developed in several books, especially in *The Botany of Desire* (2002) and *The Omnivore's Dilemma* (2006).[48] Three other writers popularizing this concept, whose work I cite herein, are Peter Wohlleben, Daniel Chamovitz, and Monica Gagliano. Wohlleben's fascinating *The Hidden Life of Trees* (2016) is particularly anthropomorphic in its treatment of trees and their "communities," but his accessible writing style opens up the life of the forest's trees like no other source I have found.[49] Chamovitz's *What a Plant Knows* (2012) is concerned with the possibilities of theorizing plant sentience, based on scientific botanical knowledge, which is indeed increasing rapidly.[50] Monica Gagliano and other science writers are spreading the word about recent discoveries in plant signaling, behavior, and cognition.[51] The more that we learn about plants and trees and how they live in the world, the more we might be able to bring to the study of these beings as they are represented in literary texts like Shakespeare's plays.

Affect Theory and Bodily Pain

Because this dissertation works closely with plant bodies, I employ ideas from affect theory, which, though unfamiliar ground to me initially, complements the approaches of

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[48] Michael Pollan, *The Botany of Desire: A Plant's-Eye View of the World* (New York: Random House, 2001), and *The Omnivore's Dilemma: A Natural History of Four Meals* (New York: Penguin Press, 2006).
[49] Peter Wohlleben, *The Hidden Life of Trees: What They Feel, How They Communicate - Discoveries from a Secret World* (Vancouver: Greystone Books, 2016).
[50] See, for example, Paco Calvo, "The Philosophy of Plant Neurobiology: A Manifesto," *Synthese* 193, no. 5 (2016): 1323-1343.
[51] See Monica Gagliano, John C. Ryan, and Patricia Vieira, eds., *The Language of Plants: Science, Philosophy, Literature* (Minneapolis: University of Minnesota Press, 2017).

ecocritical plant studies, new materialism, and ecofeminism.[52] To take one example of this approach in literary studies, Heather Houser's *Ecosickness* (2014) engages both with "darker" green readings I mentioned as well as delving into affects such as discord, disgust, and anxiety. The texts that she works with (primarily contemporary U.S. literature) use affective strategies to "promote alternative epistemologies of emotion and narration," a goal that meshes well with the ecomaterialist notion of "storied matter."[53] My dissertation addresses the affects of fear-terror, distress-anguish, anger-rage, and shame-humiliation, which I read as operant in the spaces of painful human/tree encounter in Shakespeare plays. These affects represent the bulk of the "negative" affects of Silvan Tomkins's affect theory, which, unlike positive or neutral affects, tend to be associated with various degrees of pain and suffering.[54] The literary study of affect corresponds with an increasing number of medieval and early modern studies that interrogate embodiment and humoral theory (i.e., the ancient cosmology, carried forward into the early modern period, that understands humans to have four bodily humors, the mixtures of which correspond to four primary temperaments: sanguine, choleric, melancholic, and phlegmatic). Gail Kern Paster has written extensively on this subject as it relates to the drama of the early modern period.[55] Closely related to this approach are early modern studies that emphasize the human senses and sensations as well as cognition.[56] Combining insights from these various

[52] A good introduction to the field of affect theory is Melissa Gregg and Gregory J. Seigworth's *The Affect Reader* (Durham: Duke University Press, 2010). See also Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London: A&C Black, 2004); and Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham: Duke University Press, 2002).

[53] Heather Houser, *Ecosickness in Contemporary U.S. Fiction: Environment and Affect* (New York: Columbia University Press, 2014), 7.

[54] Silvan S. Tomkins, *Affect Imagery Consciousness: The Complete Edition* (New York: Springer Publishing Company, 2008).

[55] See, for example, Gail Kern Paster, *The Body Embarrassed: Drama and the Disciplines of Shame in Early Modern England* (Ithaca: Cornell University Press, 1993), as well as *Humoring the Body: Emotions and the Shakespearean Stage* (Chicago: University of Chicago Press, 2004).

[56] On sensation, see Katharine A. Craik, *Reading Sensations in Early Modern England* (New York: Palgrave Macmillan, 2007). On cognition, see Mary Thomas Crane, *Shakespeare's Brain: Reading with Cognitive Theory* (Princeton: Princeton University Press, 2001).

approaches to embodied ways of knowing and being, I see affect theory as a productive partner with ecomaterialism and critical plant studies.

Another important work on bodies, outside of affect theory, is Elaine Scarry's influential *The Body in Pain*. Scarry's study is indispensable in thinking about human pain, as she theorizes structures of torture and war, the relationship of pain and imagining, and other crucial insights. However, Scarry's brilliant work on bodily pain shows signs of its age with its unassuming allegiance to a humanist exceptionalism that recognizes "bodies" only in the form of human bodies. With the posthumanist turn in literary studies, we must acknowledge the possibilities of reading nonhuman pain, not only in the sentient bodies of nonhuman animals but also in the vegetal kingdom, especially in light of the advancing science of the cognitive behaviors attributable to "plant-thinking," to use philosopher Marder's term. I contend that paying attention to vegetal affect in texts and in the world opens interpretative doors toward re-theorizing bodily pain in more-than-human contexts. In her discussion of tool-making, Scarry considers the human body "sentient" but the body of a tree as "nonsentient surface."[57] She sees the "marks on a series of trees" to alter human sentience "without hurting," as human sentience is projected into these "intentional objects" that, from a botanical perspective, are actually living beings. Marder's notion of vegetal "non-conscious intentionality" helps us to think/feel the possibly painful sensations plants might experience as a result of their entanglement with human activity.[58] Additionally, Steven Shaviro's view diverges from that of both Scarry and Marder, perceiving that "living organisms, beyond and beneath their cognitive accomplishments, exhibit something like nonintentional sentience."[59] Scarry emphasizes the importance of human "voice" in relation

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[57] Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World* (New York: Oxford University Press, 1985), 175-76.
[58] Marder, *Plant-Thinking*, 153-62.
[59] Steven Shaviro, *Discognition* (London: Repeater Books, 2015), 18.

to constructions of “self” and “world,” but her claim that physical pain “annihilates language and consciousness” must be re-evaluated with respect to nonhuman language and consciousness, which, though perhaps unheard by human ears, still constitute the making of sentient selves and worlds within our shared spaces of existence.[60]

This subject may seem a grisly one, but I believe that interrogations into this affective realm are important in the ongoing projects of both animal and plant studies because relating to others in the world ethically means acknowledging them *as* others who co-constitute the world with us. The common experience of pain that appears to exist across species and even kingdom lines suggests that not one but many voices are crying in the wilderness. Estok has noted, “Although pain is obviously the essence of our own embodiment, scant attention has been focused within ecocritical circles on theorizing of pain as constitutive of our ontological and material boundaries and realities (and the processes sustaining them).”[61] My study takes up Estok’s challenge but hopes to extend this theorizing beyond notions of human and animal pain to a broader speculative sense to apprehend the pain that is expressed upon and across all living bodies (admittedly to varying degrees). Analyzing more-than-human pain in early modern literary representation, I reflect on moments of a possible shared pain in the spaces and places of Shakespeare’s forests, where hewn arboreal bodies cut into and across the bodies of humans. This analysis affords for what Houser calls “the intimacy not only of planetary and bodily injury but also of narration, affects, and ethics,” imaginatively envisioning a space for alternative (including non-humanist or posthumanist) narratives about suffering and justice emanating from

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[60] Scarry, *The Body in Pain*, 54. On plant communication, see especially Gagliano, Ryan, and Vieira, *The Language of Plants* (see note 49).
[61] Estok, *Ecocriticism and Shakespeare*, 137-38.

Shakesperean drama, as well the emotional contours of pain in the shapes of fear, anguish, rage, and shame, staged and performed in intimate theatrical settings.[62]

Arboreal Veering

Applying a version of Jeffrey Jerome Cohen and Lowell Duckert's "veer ecology," I have organized the chapters of my dissertation to represent both arboreal body parts and action verbs (*leaf*, *bark*, *thorn*, *root*). Cohen and Duckert write, "An actively contemplative response to contemporary and historical states of emergency, *Veer Ecology* attempts to complicate understandings of human entanglement within a never-separable nature, emphasizing a material enmeshment perceived long before the Anthropocene arrived."[63] They draw their idea of veering from Nicholas Royle's veering theory of literature, which is "not only human … The theory of veering is nonanthropocentric. It gets away from the supposition that we human animals are at the centre of 'our' environment."[64] Royle points out that the French verb *virer*, "to turn," is found in the middle of the word "environment," and Cohen and Duckert pick up the verbal nature of veering with their version of veer ecology: "Although at their secret interiors nouns are words in motion, they have a habit of obscuring the eventuation of the world, its ongoingness. Ecology is a doing, emergence more than structure, housemaking more than household … To verb is to find the motion in the noun, the play in the preposition, the transport of the metaphor, the intensification of the adverb, the escalation of the adjective, the doing of the word."[65] In my dissertation, I approach specific body parts of trees represented in Shakespeare's plays to think of them as veering in the textual environment as nouns and verbs but also bearing mimetic

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[62] Houser, *Ecosickness in Contemporary U.S. Fiction*, 8.
[63] Jeffrey Jerome Cohen and Lowell Duckert, eds., *Veer Ecology: A Companion to Environmental Thinking* (Minneapolis: University of Minnesota Press, 2017), 2.
[64] Nicholas Royle, *Veering: A Theory of Literature* (Edinburgh: Edinburgh University Press, 2011), viii.
[65] Cohen and Duckert, *Veer Ecology*, 4.

resemblance to these bodies and action as much in Shakespeare's England as around the world today. In each chapter, I veer with a different arboreal verb/body part to develop a theoretical concept that works respectively with the affects of fear, distress, anger, and shame to engage speculatively with the worlding capacities of Shakespeare's sentient trees.

Beginning with "leaf/leave," my first chapter reads the famous battle scene from *Macbeth* that involves the "animated" forest of Birnam Wood (Malcolm's army carrying severed tree boughs to disguise themselves) alongside Macbeth's figuring of himself as a yellow leaf, fallen into "the sere," moments before his beheading. I sketch in this composite image of severed arboreal and human parts a shared suffering that anticipates humanity's falling into the "sere" of the Anthropocene. Macbeth also alleges that he can read "pains" in the faces of his men as one reads a book, turning the leaves each day to read them. This opening chapter performs my veering methodology that informs the following chapters, reading not only "leaf" and "leaves" in the play but specifically *turning* leaves, investigating the "pains" involved in both the practice of reading books and in the falling of deciduous leaves in the autumn. Throughout the chapter, I follow *Macbeth*'s veering leaves to develop the idea of "deciduous-sense," in order to grapple with the deciduous natures that manifest in arboreal as well as human bodies: a senescent movement toward death and the unknown that implies the possibility of reading leaves not only as gloomy predictors of our planet's changing climate but also reading what *the leaves'* fear of that future might look like.

The following chapters of my dissertation move from tragedy into other dramatic genres. Chapter 2 veers with the "bark" of the trees on the island in the romance-comedy *The Tempest*. Concerned with vegetal temporalities, this chapter connects macro-instances of embarking and disembarking in the play to micro-environments and ecosystems of the island: the spaces under

tree bark, which contain the annual rings of pine and oak tree interiors, dendro-chronological domains of hidden substance that can be read backward before Elizabethan times and forward to the Anthropocene. The centerpiece of this reading is the anguished body of Prospero's servant-sprite Ariel, whose confinement within a pine tree for twelve years significantly defines his being and becoming in relation to other arboreal presences in the spatio-temporal layers of the play. In imagining with Ariel what it might feel like to be trapped in such a position of prolonged distress, I posit the notion of "inter-missing time," a double "missing" of time: the human time that Ariel "misses" while stuck in the tree and the vegetal time that he "misses" because he does not ever become fully vegetal or come to accept this slowed-down temporality. The missing time of intermission, then, the "pause" of dramatic "reality," resonates with Ariel's approximation of arborealized existence and illustrates the distressing incongruity of Anthropocenic time superimposed onto cyclic vegetal rhythms.

Chapter 3 moves through the "thorny woods" of *3 Henry VI* and *Richard III*, respectively the third and final plays of Shakespeare's first history tetralogy. In this chapter, I reinterpret Shakespeare's popular version of the Wars of the Roses, to reassess the centrality of the staged roses (and thorns) of these history plays. Veering with early modern "thorn," I follow the oft overlooked vegetal bodies of thorns through the plays, insisting that the thorn is at least as influential as the throne in exerting influence and agency with respect to warring bodies. Specifically, I engage with Richard's vegetalized body, an image that he conjures of himself during an extended soliloquy in *3 Henry VI* but that, I argue, persists in subtle ways throughout the tetralogy. The more-than-human affect of anger-rage that finds expression in the movement of sharp points into fleshy substances, what I call "thornition," follows not only Richard's body but the bodies of other noble members of the appropriately named Plantagenet family. Richard's

self-concept, which sees his body and arm as "trunk" and "shrub," also complicates the discourse surrounding his body as a "disabled" or "deformed," allowing for the possibility of seeing vegetal agencies within human capacity that in fact counter certain aspects of human agency, in-formed by the vegetal thorn. The chapter considers the material presence of roses on the early modern stage as well, proximally near the human actors who wear them, bearing symbolic visual import but, beyond that, bearing witness to the physical withering of actual roses and thorns onstage, alongside the "act" of human deaths and witherings.

The fourth chapter traces the "antic roots" of *As You Like It* to Greenwood and Golden World forests. To "root," or dig, into this play and the subtle homoerotics buried below its heteronormative marriage plot is to veer into a territory that I identify as the "queer rhizosphere" of Shakespeare's Arden. This chapter examines the more-than-human sexual energies at play under the greenwood trees, which bear the marks of Orlando's love poetry to Rosalind but simultaneously engage in vegetal acts of sexual and asexual reproduction, traces of this sexual matter in the form of pollen and mast passing by and through the human characters, their unacknowledged presence queering the plot in significant scenes that suggest the potential for thinking/feeling beyond human shame toward the hidden sex lives of the forest's arboreal beings. By re-envisioning classical scenes of shame and exposure at watery sites of bathing within the tension of homoerotic gaze, *As You Like It* portrays a vegetal landscape that blurs distinctions between humans, animals, and plants to suggest possible kinships and couplings that far exceed and complicate the presumed heteronormative relations at the play's close. Therefore, its depiction of tree parts simultaneously works to expose a queerness beneath the surface of the play and to expose the reproductive capacities of the characters as being enmeshed within messy arboreal histories that blend ancient biological matter with freshly sprouted seedlings the

characters trample underfoot, a scenario that itself exposes the Anthropocene as the st(age) of life for the earth in which the possibility of imagining vegetal fantasies and desires may or may not ultimately intersect with those of humans. This reading of Arden's forest, then, sets up the dissertation's concluding coda, a final veer into the Shakespearean forest of *A Midsummer Night's Dream* that incorporates aspects of deciduous-sense, inter-missing time, thornition, and queer rhizosphere into its reading. The coda veers at last not to a positive affect but to a neutral one: surprise. Although my focus through the dissertation is on the possibility of sensing arboreal pain, I move in this direction toward affective surprise with the hope that what we might discover in spending time with Shakespeare's trees will startle and change us, the analysis of moments of shared pain reaching toward a horizon of inhuman pleasure.

CHAPTER ONE: LEAF
MAKING DECIDUOUS SENSE OF *MACBETH*

> The mystery of this life does not lie in the deep recesses of the seed and of the earth, for it resides right on the surface, that which is given to sight and turned toward the light, the trope of being-exposed, the leaf.
> – Michael Marder, *Plant-Thinking*[1]

> ... Kind gentlemen, your pains
> Are register'd where every day I turn
> The leaf to read them.
> – *Macbeth* (1.3.153-55)[2]

> Shakespeare is, if I may put it like this, the greatest turner in the English language.
> – Nicholas Royle, *Veering*[3]

Introduction

Turning and returning are the provenance of leaves, turning shades of red, yellow, orange, or brown before they fall from branches in the autumn; re-turning in the spring, leaves become a vibrant green yet again. Via phototropism, leaves also turn toward the sunlight, orienting their surfaces in order to best soak up the sun's energy. Ubiquitous in early modern literature, "leaf" appears across textual surfaces in multivalent turnings, as tree part as well as book part, reciprocally referring to and reflecting one another in their foliar twinhood.[4] When English poet George Gascoigne facetiously apologizes for a bawdy sonnet that "treateth of a straung seed," he gives readers an option out: "he that liketh it not, turn over the leaf to

[1] Marder, *Plant-Thinking*, 82.
[2] Line numbers of Shakespeare plays are cited parenthetically in-text throughout. All quotations come from *The Arden Shakespeare Complete Works* (third series), eds. Richard Proudfoot, Ann Thompson, and David Scott Kastan (Walton-on-Thames: Nelson and Sons, 1998).
[3] Royle, *Veering: A Theory of Literature*, 57.
[4] On the material connections between plants and books, see especially Leah Knight, *Of Books and Botany in Early Modern England: Sixteenth-Century Plants and Print Culture* (Burlington: Ashgate, 2009).

another."[5] The turning leaf, in arboreal terms, evokes the particular mode of vegetal being that botanists call "deciduous," meaning that trees of this type shed their foliage for a certain period of time during the year. Robert Greene, Elizabethan playwright and Shakespeare's well-known contemporary critic, famous for referring to him as an "upstart crow," references the discoloring effect of autumn in the leaves of deciduous trees in his *Greenes neuer too late* (1590). In the prologue to the poem, a palmer looking back on his life believes that "his prime hath his Autum, his faire blossomes turnes to tawnie leaues, age will shake him by the shoulder, and nature will haue his due."[6] A common feature of autumnal early modern English landscapes, the deciduous leaf's turning "tawnie," or brownish-yellow, partakes in Michael Marder's concept of "being-exposed," turned toward illumination, and toward sight, the color-changing deciduous leaf registering more dynamically with human vision than the unchanging surfaces of evergreen leaves.

The many leaves of Shakespeare include myrtle-leaf (*Antony and Cleopatra*), leaf of eglantine (*Cymbeline*), and plantain-leaf (*Romeo and Juliet*), among non-vegetal leaves such as the "title-leaf" of a "tragic volume" (*2 Henry IV*). Both arboreal and codexical leaves—and their turnings—are relevant to my ecomaterialist reading of *Macbeth* (1606). The word "leaf" appears twice in the play, once near the play's beginning and once near its end. The play's first instance of "leaf," quoted above, refers to the figurative leaves which record the "pains" or exertions that

[5] George Gascoigne, *A hundreth sundrie flowres bounde vp in one small poesie Gathered partely (by translation) in the fyne outlandish gardins of Euripides, Ouid, Petrarke, Ariosto, and others: and partly by inuention, out of our owne fruitefull orchardes in Englande: yelding sundrie svveete sauours of tragical, comical, and morall discourses, bothe pleasaunt and profitable to the well smellying notes of learned readers* (London, 1573. Early English Books Online, Huntington Library), 249.

[6] Robert Greene, *Greenes neuer too late. Or, A powder of experience: sent to all youthfull gentlemen to roote out the infectious follies, that ouer-reaching conceits foster in the spring time of their youth. Decyphering in a true English historie, those particular vanities, that with their frostie vapours nip the blossoms of euery ripe braine, from atteining to his intended perfection. As pleasant, as profitable, being a right pumice stone, apt to race out idlenesse with delight, and follie with admonition* (London, 1590. Early English Books Online, Huntington Library), quoted from image 47 on EEBO.

Macbeth claims he can read in his men like reading pages in a book. The second "leaf" in the play is also figurative but decidedly arboreal: the "yellow leaf" to which Macbeth compares himself shortly before his demise, an arborealization into senescence. Additionally, Malcolm's reference in the play's final act to "leafy screens," the branches Malcolm's soldiers cut from trees in Birnam Wood, attests to the considerable *physical* presence of leaves involved in the play and potentially on the stage. I take the two arboreal "leaf" references at the end of the play, the yellow leaf and the leafy screens, to reflect and interact with Macbeth's earlier figuration of "leaf" as a turning, readable (sur)face that is able to register or record a kind of pain. From this vantage point, I contend that the more-than-human turnings of leaves in *Macbeth* open a space for speculatively conceiving of what I call "deciduous-sense," a vegetal affect that corresponds with human notions of the fear and even terror of approaching death, traceable across multiple foliar interfaces, but legible only fleetingly in moments of turning.

"Leaf" takes turns in discourse as both noun and verb. The action of "leaf" is simply to "put out new leaves," a function proper to all arboreal and most vegetal beings.[7] Never one to shy away from using grammar-bending wordplay like anthimeria in his work, Shakespeare nonetheless uses "leaf" in *Macbeth* and in his other plays exclusively as a noun—that is, he never "leaves" *leaf*. However, the verb "leaf," which derives from the noun "leaf," appears in Cotgrave's Dictionary of 1611 (with both "leaf" and "leaue" spellings), so it may well have been in use when *Macbeth* was composed.[8] A person may also "leaf" in the transitive sense of leafing through/over a book or set of pages.[9] Although the book "leaves" that the historical King Macbeth of Scotland might have turned would have been parchment pages, composed from

[7] *OED*, *v.* 1.a.
[8] Cotgrave's definition is the first to appear in English as a verb, according to the *OED*.
[9] *OED*, *v.* 2.

animal skin rather than from vegetal matter, the fact that the age of print was well under way during Shakespeare's time temporalizes the characters of *Macbeth* anachronistically into seventeenth-century England, in which the vegetally composed leaves of books like the First Folio (where *Macbeth* was first seen in print) materially intra-act with the foliar figurations in the play, anticipating the nearly exclusive arboreal material of the leaves and pages of today's books.[10] And while the etymological connection between the words "book" and "beech" by way of the Germanic "boc" is not settled among linguists, the semiotic relationship between the "leaves" of books and those of trees has long been entangled, instances of "leaf" being used for both tree part and book part since the Anglo-Saxon period.[11] The similarity of the two physical objects is self-evident in their comparably thin two-sidedness, but the *OED* also proposes a further arboreal connection: "the semantic development [of "leaf" *n*[1]] is probably linked to the practice of stripping bark, bast, and foliage from plants for use as raw materials and animal feed."[12] From early on in England, "leaf" was thus understood as being involved in human processes, albeit the destructive processes of early modern industry, in addition to natural cycles.

As the main site of photosynthesis, leaves are, in the words of Andreas Feininger, "among the most important structures in nature."[13] Tree leaves occur in a large variety of shapes, sizes, and colors, but one main distinction between leaf types are those of broad-leafed trees (which are usually flowering angiosperms) versus the needle-like leaves of conifers (usually non-flowering gymnosperms). Broad-leafs, like the oaks and sycamores of Birnam Wood, are typically deciduous, losing their foliage in the winter; conifers, on the other hand, such as the

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[10] Until the industrialization of the nineteenth century, when paper began to be predominantly made from wood pulp, paper in Europe was most often made from used textiles ("rags") made from hemp, flax, and other materials. See Sarah Werner, *Studying Early Printed Books, 1450-1800: A Practical Guide* (Hoboken: Wiley Blackwell, 2019).
[11] As the *OED* indicates, Bede refers to "þara boca leaf" in his *Ecclesiastical History of the English People*.
[12] See Chapter 2 for further discussion on the "barking" of trees.
[13] Andreas Feininger, *Trees* (New York: Rizzoli, 1991), 99.

Scots-Pine, are usually evergreen, retaining needles on their branches throughout the year. These opposing foliar habits represent two differing arboreal ontological orientations, with respect to the earth's changing seasons as well as long-term climate.[14] A much newer adaptation than the evergreen habit, the arboreal behavior of shedding leaves and going dormant during the colder seasons (*deciduousness*), is very effective for weathering winter storms.[15] The yellowing of leaves indicates a slowing/cessation of photosynthesis, a process known as *leaf senescence*. (The actual act of shedding leaves is called *abscission*.) For most deciduous trees, the growth of new leaves occurs in the springtime, but with the approach of autumn, trees begin to "budget" their resources, drawing on energy reserves from the leaves and beginning the process of breaking down their chlorophyll (green coloring), which gets recycled for new leaves in the spring.[16] In the process of going dormant, trees withdraw nutrients from their leaves, altering their pigmentation.[17]

Ecologically, the death and fall of leaves is just as important as bud-burst in the spring. A pair of old trees—a sycamore and a sessile oak—are all that remain of the old-growth forest of Birnam Wood in Scotland today, having weathered hundreds of years of annual cycles of shedding and regenerating leaves.[18] The average lifespans of the individual leaves of trees worldwide, however, are shifting as a result of warming trends, observable through

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[14] Botanists represent this difference in terms of "phenology," the study of life cycles in plants and animals, especially as related to seasonal and climatic variation. See Mark D. Swartz, ed., *Phenology: An Integrative Environmental Science* (Dordrecht: Kluwer Academic Publishers, 2003).
[15] Wohlleben, *The Hidden Life of Trees*, 139.
[16] Ibid., 137-144. According to the OED, "spring" referring to the season is apparently not used to refer to the season between winter and fall until after 1400 (*n.*[1] III.17.a), used in reference to leaves about 1538, with the first recorded "spring of the leaf" (*n.*[1] III.16.b). The "fall of the leaf" is a phrase listed under "fall" *n.*[2] (P.4) that dates to 1537 when the Duchess of Norfolk complains of being sick during this time (as well as in the spring). The "falling of the leaf" dates a little earlier, possibly as early as 1504 (*n.*[1], P.1).
[17] Colin Tudge, *The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter* (New York: Three Rivers Press, 2005), 273.
[18] According to UK organization Ancient Tree Forum (ATF), the oak is estimated to be at least 600 years old, while the sycamore is about 300 years old, despite being a larger tree. URL: http://www.ancienttreeforum.co.uk/wp-content/uploads/2016/01/Birnam-oak-and-sycamore-Pro-Arb-June-2015.pdf. Accessed 25 March 2019.

climatological data studies.[19] (In a very general sense, broadleafs benefit from the increase in temperature, while conifers suffer.) Like one who turns the pages of a book to read its contents, the reader of tree leaves must watch and monitor the leaves' turnings to decipher the slow movements and processes of the trees' life cycles. Furthermore, like the avid reader who returns to a favorite book, the scientists who are readers of climate change must return to the same trees each year, to witness the nearly imperceptible rhythms and cadences of arboreal becomings and un-becomings. With the visible turning of the leaf from green to yellow, the process of biological senescence charts in our world as much as in Macbeth's, across human and arboreal bodies, touching human senses with the changing colors and the fluttering descents.

Therefore, I read the movements of "leaf" and "leaves" in *Macbeth*, focusing on the "turning" of leaves, primarily in two senses: 1) "to reverse (a leaf of a book) in order to read (or write) on the other side (or on the next leaf)," and 2) "to change colour, become of a different colour (as ripening fruit, fading leaves, hair in old age)."[20] These examples of turning leaves in *Macbeth* illuminate a vegetal agency that moves through the play, alongside the more obvious plant movements of the "moving grove" transported from Birnam to Dunsinane. Furthermore, this chapter focuses on a "negative" movement of leaves, that is, the "reverse" movement of leaves required for reading and the movements of senescing deciduous leaves away from (literally) life and limb. In becoming a specifically yellow leaf, Macbeth-as-leaf is not only becoming but un-becoming. That is, Macbeth is "leafing" but also "leaving," and for a leaf to

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[19] See, for example, Xavier Morin, Jacques Roy, Laurette Sonié, and Isabelle Chuine, "Changes in Leaf Phenology of Three European Oak Species in Response to Experimental Climate Change," *The New Phytologist*186, no. 4 (2010): 900-10; Carla A. Gunderson, Nelson T. Edwards, Ashley V. Walker, Keiran H. O'Hara, Christina M. Campion, and Paul J. Hanson, "Forest Phenology and a Warmer Climate – Growing Season Extension in Relation to Climatic Provenance," *Global Change Biology* 18, no. 6 (2012): 2008-2025; and Marc Estiarte, and Josep Penuelas, "Alteration of the Phenology of Leaf Senescence and Fall in Winter Deciduous Species by Climate Change: Effects on Nutrient Proficiency," *Global Change Biology* 21 (2015): 1005-1017.

[20] *OED*, *v.* III.11.a; and VI.47.a, respectively.

leave (its branch) is, for the tree, an un-leafing. Tracing Macbeth's trajectory into yellow leafiness, I suggest that the play's leaves, leavings, and un-leafings position human actors—actors in the theatrical sense as well as in the broader sense of humans capable of action—in the midst of arboreal un-becomings that intertwine with Macbeth's inevitable death and with that of the (likely) inevitable death of humankind, spurred on more quickly in recent time as a result of climate change. Today, we occupy Macbeth's yellow world(view), reading the (sur)faces of leaves to understand our position in it, but like Macbeth finally forced to accept the fate we have ourselves enacted, seeing and reading ourselves in the yellow leaf. Ecofeminist Carolyn Merchant writes about the "death" of nature, resulting from the Renaissance mindset of mastering nature; similarly, Bill McKibben reflects on the "end" of nature, already having arrived.[21] Shakespeare's representation of nature in *Macbeth* understands the world as postlapsarian, in a fallen state, producing both falling leaves and fallen kings. In the dramatic and hermeneutic spaces of the play, the turning leaves of *Macbeth* gesture toward more-than-human momentums that orient both trees and humans toward senescence and ultimately biological death, micro- and macro-cosmically, from the cellular level of chemical movements to the bio-mass of forests within the global biosphere, which is affected by the presence and type of tree canopy. The emergent age of the Anthropocene entails the paradoxical death of humanity at the moment of its birth, a falling from our own grace, akin to Macbeth's fall, ultimately brought on by his own actions.

In a movement toward a speculative feeling- and thinking-with deciduous trees, this chapter also follows some of the many un-doings, un-makings, and un-sensations of *Macbeth* in an attempt to approach arboreal sensations that might take place in the moments of un-becoming,

[21] Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: HarperCollins, 1980); and Bill McKibben, *The End of Nature* (New York: Random House, 2006).

the yellowing into senescence. Including the concept of senescence but working to imagine beyond it, deciduous-sense combines the turning of autumn color with the ongoing turnings of the book folia, attempting to find sense in the sensation of arboreal death (un)expressed through its loss of leaves, as well as loss of its body when transformed into the leaves of books today (like the Arden edition of *Macbeth* I cite from). Macbeth's declaration that he can read his soldiers' "pains" when he reads the "leaves" of their faces "every day" anticipates the continuity between the falling leaf and the felling of trees to make the "leaves" of books. The deciduous-sense of leaves is a certain kind of non-sense, or better, an un-sense. In thinking with the deciduous trees of *Macbeth*, with its many "leaves," we might move closer to a feeling-with between the human and the vegetal, through a shared affective fear of the unknown after death, a fear that affects the changing body. In particular, Macbeth's deciduous disposition affectively enters into more-than-human spaces of terror at the prospect of future self-annihilation, a dormancy approaching death, or, in Macbeth's words, a falling "into the sere," a dis-positioning in relation to biological life that locates a deciduousness in humankind's proclivity toward self-destruction. This shared suffering associated with deciduous being(s) urges for a consideration of the potential exit of human life from the world's "stage" in the Anthropocene as a result of climate change, mirrored in the small-scale deaths of autumn leaves poised to leave their arboreal bodies. The animacies of the leaf exist in a rhythmic relationship to the sun and the seasons, but this predictability does not necessarily render null the affect of fear-terror that accompanies animal bodies for the bodies and body parts of plants, speculatively considering deciduous trees as individuals whose annual loss of leaf, regardless of its regularity and iterability, may induce something akin to fear for a being that experiences something very close to vegetal death in its dormant state. Thinking with the leaves of *Macbeth*, then, particularly its

yellowing leaves, invites a dive into the depths of speculative vegetal terror. If the animal, evolutionarily speaking, avoids its predator by running, aided by a strong sense of fear or even impending doom, one might wonder if the tree "senses" the deprivations of the winter, among other threats to its ongoing existence.[22] Considering that botanists understand trees and other plants to have a memory, do deciduous trees remember enough not to be afraid every winter? Macbeth prompts us to consider, via his arborealization, the human and the leaf in the same frame. The age of the deciduous tree overlaps more closely with the age of the human, the Anthropocene, than that of the ancient coniferous family, whose needle-like leaves persist throughout all seasons. That humanity might have an element of deciduousness suggests that, conversely, deciduous trees may share a degree of the kind of terror Macbeth experiences in seeing himself "in the sere." If humanity does leave the stage of the world, there is no promise it will return to that stage, like the deciduous leaf in spring, or like the head of Macbeth, in a different form. I begin this descent into deciduous-sense with a comparison of Macbeth and Banquo in vegetal terms, their differentiated vegetalizations in the play prioritizing Macbeth's arborealization into yellow leafiness over Banquo's non-arboreal vegetalization into agricultural crop plant. I then discuss the specific significance of Macbeth's "yellowing" into leaf, before analyzing the implications of his and Lady Macbeth's apparent ability to read pain in faces, particularly human faces infoliated and the humanistic foliar faces of book leaves. Following these investigations, I theorize the speculative concept of deciduous-sense, as the play's depictions of un-sensation might allow for it. Finally, I "leave" the chapter with a foray into the nature of exits in theatrical staging and the implications of deciduous-sense for humanity's exit from nature.

[22] See Wohlleben, *The Hidden Life of Trees*, 6-13.

Folio-Macbeth vs. Agro-Banquo

Reading the leaves of *Macbeth* grounds this chapter in what would seem to be a "green," if somewhat dark green, ecocritical orientation to Shakespeare's drama and to literature more generally.[23] Much of this ground has been covered, however, with William Pogue Harrison's reading of Birnam Wood in his influential book *Forests: The Shadow of Civilization* (1992), marking an early and formidable ecological take that sees the wood marching on Macbeth as a kind of revenge-of-nature scenario. Steve Mentz, on the other hand, interprets the play against Harrison's "almost traditional eco-reading" of a troubled land nourished by King Duncan, upset by the Macbeths, and restored by Malcolm.[24] Mentz prefers a "blue" reading of the play, positing, "The green and blue in *Macbeth* represent different visions of how humans live in the natural world, with green sustainability first displaced by Macbeth's oceanic ambitions and then finally re-asserting itself after the tyrant's death."[25] Mentz positions "cultured pastures" as well as "marginal forests" as zones of "green" in *Macbeth*, opposed to oceanic forces subtly influencing the text.[26] The "green" in the play represents, for Mentz, Harrison's more traditional humanist position, based on Romantic and Heideggerian environmentalist insights: "To cultivate retainers as growing things requires a vision of kingship as natural stewardship. Duncan's organic kingdom bridges the separation between human culture and natural cultivation."[27] And while Mentz insightfully observes Banquo's "agricultural" acquiescence to Duncan's pastoral visions for his kingdom, Macbeth's connection to the "marginal forests" through his association

[23] Martin characterizes social ecological movements such as bioregionalism and ecofeminism as "dark green" (*Shakespeare and Ecology*, 61). Nardizzi similarly contemplates "the darker shades of green" of early modern drama (*Wooden Os*, 28).
[24] Steve Mentz, "Shakespeare's Beach House, or The Green and the Blue in *Macbeth*," *Shakespeare Studies* 39 (2011): 85.
[25] Ibid.
[26] Ibid.
[27] Ibid., 86.

with leaves has not been investigated. While I certainly welcome a "bluer" ecocriticism that does not overlook the largest of earth's ecosystems, Macbeth's alignment with the deciduous in opposition to or in conjunction with Banquo's orientation toward the annual crops of agriculture necessities a more prismatic approach to the play beyond a green/blue dichotomy.[28]

It is not only marginal forests but, specifically, marginal leaves—dying/turning leaves—that we need to read Macbeth as/through, advancing a green-turning-yellow ecocriticism. While I do not dispute the oceanic presences Mentz identifies in the play, Macbeth's arborealization contrasts more sharply with Banquo's vegetalization than do his oceanic influences. Mentz refers to "the steady progress of Duncan and Banquo's green agricultural time," but, like the progression of leaf from bud to senescence, the "greenness" of agricultural or seasonal temporality is one that descends into other shades, particularly in the case of the leaves of England's and Scotland's oaks, changing color to yellow or brown.[29] A seasonal prismatic ecology of such temperate zones would include these shades of deciduousness that relate to both silvi- and agri-cultural biomes. Also relevant is the fact that early modern people probably "saw" colors somewhat differently than people do today. While Shakespeare's texts favor the colors, in ranked order, black, white, red, and green, these colors also come, as Armelle Sabatier points out, "in a variety of shades. If we take into account all the shades of red, for instance, it appears as much as black with hues such as scarlet, crimson or even purple (which was perceived as red in Elizabethan times)."[30] To make matters more complicated, Elizabethan writers represented both forest and sea as green,[31] a fact made apparent in *Macbeth* when Macbeth melodramatizes

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[28] See Jeffrey Jerome Cohen, ed. *Prismatic Ecology: Ecotheory beyond Green* (Minneapolis: University of Minnesota Press, 2013).
[29] Mentz, "Shakespeare's Beach House," 88. Mentz discusses brown ecologies in *Prismatic Ecology*, 193-212.
[30] Armelle Sabatier, *Shakespeare and Visual Culture: A Dictionary* (London: Bloomsbury, 2017), 9.
[31] Sabatier, *Shakespeare and Visual Culture*, 109.

his just-committed murder: "No, this my hand will rather / The multitudinous Seas incarnadine, / Making the green one, red" (2.2.62-64). Deciduous trees, of course, are at times filled with a conglomeration of colors, some leaves hanging onto their green hues when others have already turned. In *Twelfth Night*, Viola speaks of a "green and yellow melancholy" (2.4.114), perhaps also an apt description for the arboreal foliar arrangement of advancing death.

I return to the forest of *Macbeth*, then, not to reiterate a green reading of Macbeth and Birnam wood but to tease out the hues of senescence, yellow and brown, in relation to Macbeth's foliar identity. In *Forests*, Robert Pogue Harrison claims, "We see in the image of Birnam Wood the law of genealogy—the family tree, as it were—vanquishing its sterile enemy. We see the law of kinship and kingship avenging itself. We see the law of the *land* in a strangely literalistic guise."[32] But trees are not tantamount to the land, though of course they generally need "land," or soil, to thrive. Harrison sees not trees but their shadows, in which humans are able to invest their fears and fantasies. Unremarked upon in Harrison's statement is that it is the boughs of trees that show up on the battlefield, *parts* of the trees, freshly cut, whose leafy appendages conceal the approaching army. This fact of arboreal anatomy corresponds with Macbeth's pronouncement that his way of life is "fall'n into the sear, the yellow leaf" (5.3.23). I return to the greenwood of Harrison, while acknowledging Mentz's argument about the blue, because Harrison does not see the trees of Birnam so much as the forest, not even that, but its "shadows," so it is necessary to re-turn to Birnam to read not only the green leaves of trees but the yellow ones as well, not to mention the missing leaves, the un-leaved. Arboreal shadows, too, *are* relevant to *Macbeth*, but the real shadows of trees might be considered, the changing of these in relation to a deciduous canopy in winter, the forest becoming a very different place without its

[32] Harrison, *Forests*, 104.

leaves. Furthermore, as Peter Wohlleben explains, discussing the concept of "green shadows" in forests, "shadows are not all the same color. Although many shades of color are filtered out in the forest canopy … the forest is transfused with a subdued green light."[33] The combination of multihued shadows and shadowless winter canopies facilitates the forest's changing foliar composition, the material of deciduous beings moving and thus altering their relationship to humans and animals in the landscape, changing the way they read it.

Macbeth's association with the leafy is an arborealization, as opposed to Banquo's agriculturalization, his children en-seeded, rather than en-seated, into royalty. This ascension speaks to a different kind of kin(g)ship than the one Harrison sees *Macbeth* disavowing with its hewn trees wreaking nature's revenge. It is a kinship among highly disparate forms of living beings, whose movements converge even as they differ in quality and scope. The deciduous being that inheres humanity, including the tendency to fall or to allow parts of itself to fall, emphasizes differences in particular forms of perennialism in relation to the earth and sun, different beings *more* or *less* deciduous depending on the situation, flowering or withering in their season.[34] This implied loss of physical arboreal substance transforms Macbeth's en-leaved body, a partial leav-ing, a becoming-leaf that cuts across the respective fates and becomings of Macbeth *and* Banquo. During the interaction at the beginning of the play between King Duncan and his honored subjects Macbeth and Banquo returning from battle, Duncan begins his speech directed toward Macbeth, then shifts to address Banquo, as follows:

> [To Macbeth] Welcome hither:
> I have begun to plant thee, and will labour
> To make thee full of growing. Noble Banquo,
> That hast no less deserved, nor must be known
> To have done so, let me enfold thee
> And hold thee to my heart. (1.4.27-32)

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[33] Wohlleben, *The Hidden Life of Trees*, 229.
[34] See Kihachiro Kikuzawa and Martin J. Lechowicz, *Ecology of Leaf Longevity* (New York: Springer, 2011).

To which, Banquo responds, picking up on the vegetal rhetoric meant for Macbeth, approximating plant-being in an offered plant-ability: "There if I grow, / The harvest is your own" (1.4.32-33). Duncan, figuring himself as gardener-king, reminiscent of the same figure of the king portrayed in *Richard II* by the queen's gardener, suggests that he has "begun to plant" not Banquo but Macbeth, though it is Banquo who takes up this figuration in his reply, and it is Banquo, of course, who will actually have royal heirs. In this pivoting, Banquo insinuates an explicit, if utterly incongruent, modesty, giving credit to the gardener-become-harvester King Duncan, emphasizing that *if* he grows, all of that growth will belong to the king. Conversely, Macbeth only pays lip service to Duncan, acknowledging in an aside, Machiavellian-like, that Duncan is an impediment to his prophesied kingship (Lady Macbeth later uses the word "impedes" in 1.5), so perhaps Duncan has "begun" to plant Macbeth even more than he realizes, in his praises of him. Banquo, self-agriculturalized, however, listening to Duncan's praises of Macbeth as Macbeth exits, is not only harvested by Duncan but also consumed by him at a "banquet" (playing on his name) of Macbeth's "commendations."[35] Duncan suggests that he is "fed" by these praises, ironically calling his soon-to-be-murderer a "peerless kinsman." In becoming the "harvest" for Duncan, Banquo listens to the misplaced praises of Macbeth at this banquet of words, then, not as a fellow feaster but as part of that feast, destined to be "consumed" eventually by Macbeth himself. Banquo's response to Duncan moves across the spectrum of plant-being as perceived in its crop-oriented relationship to humans, the process of sewing, planting, growing, and reaping of annual or semi-annual varieties of plants, fulfilling very specific human-directed purposes. This agricultural imagery, then, is not congruent with the

[35] On consuming food in Shakespeare plays, see Joan Fitzpatrick, *Food in Shakespeare: Early Modern Dietaries and the Plays* (Burlington: Ashgate, 2007); and David B. Goldstein and Amy Tigner, eds., *Culinary Shakespeare: Staging Food and Drink in Early Modern England* (Pittsburgh: Duquesne University Press, 2016).

arboreal rhetoric found elsewhere in Shakespeare and particularly in this play, wherein the arboreal is focused primarily at the play's end in the striking images of arboreal senescence and death occurring in the midst of and in analogy with the devastations of warfare. If Banquo is planted as agricultural crop, which he makes explicit in his response to Duncan's generalized vegetal expression by referring to harvest, then Macbeth's figuring of himself as a leaf is appropriate in his *non*(agri)cultural relation to others in the play, an expression of that which grows and persists through cycles, *despite* human activity, complemented by the naturalcultural image of the soldiers-become-trees bearing leafy boughs. The "reaping" of Banquo, which foreshadows his death, will occur with his descendants, "planted" only to be "harvested" in the future.

When Macbeth returns to the Weird Sisters seeking further divination, he conjures them against his own better judgment, "Though bladed corn be lodged and trees blown down / … / … though the treasure / Of Nature's germen tumble altogether …" (4.1.54, 57-58). In his hyperbolic rhetoric, Macbeth joins agricultural plant images, being harvested, with that of reckless, wild nature senselessly knocking over trees. Banquo has already been "lodged" at this point in the play, and Macbeth is on his way to being "blown down," the seeds of his demise ready to be planted in this very scene, with the final prophecies of the three apparitions. As Clark and Mason note, "germen" is a collective noun that means seed or "life-forming elements," to which the term "germinate" corresponds.[36] During Macbeth's encounters with the witches, his fate appears to be "in germination," planted, by himself or the witches, in himself, his mind and body, but certainly not in the royal "soil" of the kingdom. This scene also unveils the prophecy of Great

[36] *Macbeth*, eds. by Sandra Clark and Pamela Mason (London: Bloomsbury Arden Shakespeare, 2015), 239. In their note, Clark and Mason cite David Crystal and Ben Crystal, *Shakespeare's Words: A Glossary and Language* Companion (2003).

Birnam Wood and its relocation to Dunsinane Hill, spelling out Macbeth's doom. Macbeth's response is one of perceived invulnerability, scoffing at this image:

> That will never be.
> Who can impress the forest, bid the tree
> Unfix his earth-bound root? Sweet bodements, good.
> Rebellious dead, rise never till the Wood
> Of Birnam rise, and our high-placed Macbeth [high-placed leaf, about to fall]
> Shall live the lease of nature, pay his breath
> To time, and mortal custom. (4.1.94-99)

Referring to himself in the third person (a byproduct of tragic hubris), Macbeth pre-figures himself as the yellow leaf into which he will arborealize a few scenes later; he is "high-placed," untouchable in his sense of confidence and assurance that the forest could not be impressed, made to move and participate in the battle waged against him. He still believes that he will not fall prematurely from the tree, thinking he "shall live the lease of nature." Though he is probably thinking of the murdered Macduff and Banquo with the phrase "rebellious dead," this phrase can also describe the rising forest, branches hacked off but rising into the battle, in-withering but collaborating with humans to bring about Macbeth's demise.

In differentiating Banquo's vegetal orientation from Macbeth's, we observe that both involve cycles related to the seasons that result in the death of vegetation. Banquo figures himself not as plant so much as seed, that which contains/anticipates a future plant, something "planted." Macbeth refuses this initial figuring from Duncan but self-figures himself as an alternative form of vegetal life, playing an arboreal part. The seed is inherent to virtually all vegetal life, trees included, but the deciduous leaf is proper only to certain kinds of trees and bushes, evolved to shed their foliage in response to the cold season. Deciduous trees turn their leaves so that they may return them the next season, a *version* of the annual crop cycle that Banquo is associated with, that Duncan draws out. But, as seed, Banquo represents a kind of

death that becomes something new, while Macbeth as leaf will not return as individual leaf, even if something like him (another tyrant) will return eventually. In this way, Macbeth and Banquo are akin, somewhat alike, vegetalized into cyclic temporalities, but they embody these cycles in different forms. Banquo is a haunting of this vegetal form of life, of deciduousness, since the annual plant survives in the leaves of perennial plants, a form of dying that occurs each year, a movement toward death that parallels the "finality" of annual life-forms whose ongoing life is preserved only in subsequent generations (figured as his son, Fleance), though perhaps both of these vegetalities persevere in the human. It is Macbeth becoming leaf rather than Banquo becoming seed that stares into this abyss of the Anthropocene, arborealized poignantly in the fading leaf (of humanity).

"Into the Sere, the Yellow Leaf"

This section discusses the yellow autumn leaf as a special temporal marker of deciduous-sense, treating Macbeth-as-yellow-leaf, who sees himself in that formulation just moments before the leafy screens arrive, bearing yellow (or at least yellowing) leaves themselves. Steven Connor reports a "growing eclipse of yellow between the twelfth and fifteenth centuries in Europe, until it eventually became a colour associated with degradation and discredit."[37] On the other hand, yellow is also the color of luminosity and gold, "conventionally employed to represent the sun."[38] Shakespeare uses the word "yellow" some twenty-nine times throughout his works. Referencing the "yellow leaves" of Shakespeare's Sonnet 73, Robert Markley remarks, "The metaphoric linking of winter and old age is familiar enough that, beyond undergraduate classrooms, it can almost go unremarked," this idea being "second nature to those readers of

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[37] Steven Connor, *The Book of Skin* (Ithaca: Cornell University Press, 2004), 164.
[38] Ibid., 166.

Sonnet 73 accustomed to temperate climates and the deciduous trees of England and North America."[39] But what *is* remarkable of the sonnet's "yellow leaves" is that before Shakespeare the connection of the color yellow with autumn leaves in particular is virtually non-existent. In 1678, Anne Bradstreet wrote, "The fruitless Trees all withered now do stand, / Whose sapless yellow *leavs*, by winds are fan'd."[40] In 1660, John Boys's translation of Virgil's sixth book of the *Aeneid* mentions a tree that has lost its verdure "In winters cold; as that its yellow leaves / Around its tender branches interweaves."[41] But Shakespeare's 1609 quarto of *Shake-speares sonnets Neuer before imprinted* contains the first print appearance of both "yellow leaves," as well as "yellow autumn," both from Sonnet 104. The "yellow leaf" of *Macbeth* in the 1623 Folio is its next appearance. As mentioned in the introduction, Robert Greene figured the blossom as turning "tawnie," but the specific image of green-becoming-yellow is apparently Shakespearean, the yellow leaf of *Macbeth* preceded and informed primarily by the "old age" sonnets.

Ecostudies in a vibrantly prismatic register might attend more carefully to deciduous ontologies, the turn and the fall important vectors in situating the fate of humans, trees, and the earth in the Anthropocene. Although Shakespeare usually follows the British convention of using the term "autumn" or "harvest" rather than the "fall" of American/Canadian conventional usage, *Macbeth* is preoccupied with the theme of fall or falling, notably in the concept of the fallen

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[39] Robert Markley, "Summer's Lease: Shakespeare in the Little Ice Age," in *Early Modern Ecostudies: From Shakespeare to the Florentine Codex*, eds. Thomas Hallock, Ivo Kamps, and Karen L. Raber (New York: Palgrave Macmillan, 2008), 133.

[40] Anne Bradstreet, *Several poems compiled with great variety of wit and learning, full of delight wherein especially is contained a compleat discourse, and description of the four elements, constitutions, ages of man, seasons of the year, together with an exact epitome of the three by a gentlewoman in New-England* (Boston, 1678. Early English Books Online, Huntington Library), 66.

[41] John Boys, *Æneas his descent into Hell as it is inimitably described by the prince of poets in the sixth of his Æneis. / Made English by John Boys of Hode-Court, Esq; together with an ample and learned comment upon the same, wherein all passages criticall, mythological, philosophical and historical, are fully and clearly explained. To which are added some certain pieces relating to the publick, written by the author* (London, 1660. Early English Books Online, Huntington Library), 9.

king.[42] The pre-winter season, when styled as "fall," nominalizes the physical action of leaves falling from trees. The act of falling seems an unconscious one, a mere letting go of one's self or body and surrendering to the forces of wind and gravity. Macbeth does not surrender his body until he is realizes his mistake, sees his death before his eyes, incarnate, in the form of Macduff, "become death" before his eyes. He faces the one who he knows *must* destroy him, as he believes the witches' prophecies for all their supposed accuracy up to this final event. Macbeth's expression of leafy ontology illustrates a way of living inherent to deciduous trees that populated Birnam Wood, before being cut down by Duncan's soldiers. In realizing his own imminent death and comparing his life to the withering of arboreal vegetation, Macbeth names an important aspect of deciduous embodiment. For the tree, whose leaves wither and yellow with the coming of colder weather, this process of "dying" is perhaps but the sleep of hibernation, going dormant until the spring brings warmth again. On the other hand, one might even think of it as a kind of shedding of part of the tree's exterior, a kind of skin differing from its barky exterior, that interacts with the sunlight in the environment variously depending on the season.

Shakespeare's autumn trees are worth investigating a bit further. As Markley notes, Sonnet 73 talks about yellow leaves as an analogue to a person's passing into old or middle age:

> That time of year thou mayst in me behold
> When yellow leaves, or none, or few, do hang
> Upon those boughs which shake against the cold,
> Bare ruin'd choirs where late the sweet birds sang (1-4)

Opposed to Macbeth, who views himself as a solitary leaf, perhaps the only leaf left on the tree, the sonnet's speaker conceives of multiple scenarios: "yellow leaves, or none, or few." These

[42] Shakespeare does use the term "fall of leaf" in *Richard II* to refer to the autumn season in a conceit that mirrors Macbeth's situation: "He that hath suffered this disordered spring / Hath now himself met with the fall of leaf" (3.4.48-49). Furthermore, as "fall" is in usage meaning "autumn" as early as 1550, the coincidence of the fall season and falling in *Macbeth* as originally staged would probably have carried that resonance then as now (*OED*, "fall" *n*. VI.40.a).

possibilities affirm that winter itself is not a fixed seasonal event, beginning on a certain date and ending on the first of spring; rather, it is a process all its own, a continuum of coldness that begins with withering leaves and proceeds to their fallings, one by one until none remain. Even the few yellow leaves, contrasted to the barest of boughs, present a kind of accompaniment or refuge against the bleakness and onslaught of the cold weather. The yellow leaf announces a dying but has not yet come to this final destination. The passage also suggests a nonmetaphorical, physical presence of the weather, actively affecting the speaker, when the winter season, "that time of year" materially presses itself onto his face so that others may read it or "behold" it there. The depopulated or bare boughs come into contact with the sheer force and power of the cold, shaking, like but not necessarily like the shaking of a freezing human body. All of this imagery is transferred into the visage of the speaker's "ruin'd" face, imbued with the cold season in its multiple natural impressions of leaving / (un)leafing that affect human bodies as a result of this activity and their absence from the tree: they come into closer contact with those bodies, either in descent or in the dense foliar piles that increase over time; and the laying bare of trees resulting from their departure touches the human affectively with the visual starkness of defoliation. The sonnet itself contains multiple "leavings," ending with the couplet: "This thou perceivest, which makes thy love more strong, / To love that well which thou must leave ere long" (13-14). The "love" Shakespeare promotes is of one human for another, but the sentiment might be taken in an ecological register as well: the yellow leaf is not only a symbol of old age but a physical marker of temporal "ere long" that climate change threatens hoveringly. In an image similar to that of Sonnet 73, Shakespeare's comedy *Much Ado about Nothing* mentions an oak "but with one green leaf" remaining on it (2.1.226), suggesting not necessarily an image of a barren oak with a single leaf blowing in the wind but rather an oak with brown and yellow

leaves, in various stages of deciduous senescence, among the last leaf to turn. In this play, Shakespeare portrays a clear sense that the green leaf is alive and in such life has a different ontological status compared to the rest of the tree; or perhaps, Benedick implies that the oak itself has life or agency, not the leaf, when he says that an oak with just one green leaf would have spoken to Beatrice; the leaf is a sign of life in the tree, and the leaf's color signifies the health or condition or status of the tree itself, the external signifying the internal.

In the scene of the advancing army of Birnam, Macbeth sees himself in the yellow leaf, but he becomes the dismembered body, like the severed boughs the soldiers bear, freshly cut, still green (the march from Birnam to Dunsinane requiring only a few hours), but having been cut, their leaves will already be starting the wilting process, also denied their senescence; rather it will be a quick progression to brown. Randall Martin argues, "The [Weird] Sisters' famous riddling chants and verbal enigmas establish a rationally estranging discourse which opens imaginative space for a deep ecological equation between war's human losses and its abuses of non-human and physical landscapes."[43] Macbeth's understanding of himself as the yellowed leaf similarly comes as a revelation during the midst of battle, although, rather than the potent images of axe-hewn trunks that widely populate Shakespeare's early histories, the image of the solitary leaf, suspended between its own senescence and its inevitable dislocation from the tree, evokes not the imposed actions of humans upon nature to its detriment, the deforestation of Birnam a prime example, but rather the natural course of arboreal life, succumbing and responding to the rhythms and dictates of the seasonal world. Time, in this figuring, is not out of joint, but has arrived at its naturally appointed endpoint, for Macbeth and leaf. However, the image is not true to the events depicted on stage, for Macbeth does not, like Henry IV and other long-lived kings,

[43] Martin, *Shakespeare and Ecology*, 106.

die a “natural” death; he is slain, hewn like the boughs of Birnam. Therefore, Macbeth’s arborealization into leafiness is fanciful, unrealistic: his passing away from the world is a falling of sorts, but not of gradual release and floating descent. His fall is rapid, decapitated offstage by Macduff, his head re-entering shorn of trunk in Macduff’s hands, no yellow leaf but bloody, severed body part. The progression into yellow anticipates the leafy leaving that Macbeth approaches throughout the play. To become leaf is to inhabit a suspended existence, between life and death, inevitably moving toward senescence (as climate science now reads leaves), a gradual senescence that Macbeth misreads in believing himself akin to it.

Macbeth’s body is not literally a leaf, of course, nor does it transform into one as the soldiers arrive, but the physical presence of the leafy branches in the scene correlates with and enhances the effect of his yellow leaf metaphor and draws attention to those branches’ own process of dying and withering, having been lately disconnected from their arboreal bodies in Birnam. Furthermore, Macbeth’s arborealization into leafiness is two-fold, juxtaposed in his own imagined yellowing and in the material entrance of the freshly hewn “leafy boughs” accompanying Malcolm’s army. Surrounded by transported forest, Macbeth’s “return to nature” is forced upon him. He is en-leafed, about the same time he sees himself in leaf. He does not leave the world or the stage; he is taken from it, forcibly removed, as the trees in Birnam were, but ultimately is not allowed to leave. His arborealization is left incomplete. When Malcolm, Siward, Macduff, and their army arrive at Macbeth’s castle, Malcolm commands the men to throw down their “leafy screens,” revealing their true identities not as trees or boughs but as men, as human, though still combatants to Macbeth’s forces. Malcolm tells them to “show like those you are,” acknowledging a common humanity among the warriors even as he more selectively speaks to his kin, singling out his “worthy uncle,” who “Shall with my cousin / your

right noble son, / Lead our first battle." (5.6.2-4) This marking of kinship prior to rushing in to slay other humans comes/falls in the wake of the revealing of human identity differentiated from plant being, reduced to "leafy screens" rather than living beings.

To conclude this section, I briefly touch on the critical plant studies work of Michael Marder and Luce Irigaray, whose respective approaches to plant leaves intersect with Macbeth's becoming-leaf in different registers. Marder theorizes the leaf in response to Goethe and Deleuze and Guattari, adopting the latter's concept of a "body without organs" to emphasize the variability of leaves: "The assertion that vegetal being is essentially superficial presupposes the idea that the plant, whose forms and functions are fluid, is not an organism but what Deleuze and Guattari term a 'body without organs,' a mode of dis-organization, 'a pure multiplicity of immanence.'"[44] This "mode of dis-organization" that Marder understands in D&G's figure of a body without organs corresponds to the deciduous-sense that occurs in *Macbeth*, in the self-terminating poise of the yellow leaf, posturing toward the ground, already begun its descent while still tethered to the bough. However, as Marder stresses, "Deleuze and Guattari forget that the leaf is not an organ of a larger whole and that it is far from being a derivation from the original stem-root structure [though Goethe thinks so]. In and of itself, it is an infinitely iterable and radically egalitarian building block of the tree, for it is at once the source, the product, and the minute reproduction of vegetal being, from which it may at any time fall away."[45] Marder explains Goethe's metaphysical belief that "the basic building block of plants is the leaf, rarefied into fragrant petals or condensed into the seed,"[46] but he ultimately finds Goethe a "poor field guide to plant world" in this respect, turning instead to the ambiguity of plant-body as explained

[44] Marder, *Plant-Thinking*, 84.
[45] Ibid., 85.
[46] Irigaray and Marder, *Through Vegetal Being*, 153.

by Aristotle's student Theophrastus.[47] Following Theophrastus, Marder suggests that plants' ever-changing morphology "does not reach closure and completion in any plant part, least of all the leaf. Vegetal life retains its indeterminacy, vibrancy, and diversity."[48] This morphological indeterminacy, however, elides the ontological differences between deciduous beings and other types of plants. Deciduous leaves do not fall away "at any time"; rather, as part(s) of deciduous un-becoming, they are, indeed, closed off at a certain temporal moment of seasonal cooling. Deciduous-sense offers leaves as part of the body that slowly dies, sacrificed to rest of the tree, what is left. The deciduous leaf is detachable and killable in a manner differing from the evergreen leaf and needle. Unlike Marder and his predecessors, Irigaray is more in tune with the changing coloration of deciduous leaves in autumn, changing not only themselves but also humans whose senses interact with those turnings. She argues for a natural presence in the nonhuman world that interacts with and affects humans in differing capacities as the forms of arboreal bodies change with the seasons. She thus figures nature as a "kindly magician," altering these bodies for the sake of humans and a sharing of "living energy."[49] She describes the autumnal transformation as follows: "In the autumn, when the sun disappears, the leaves of some trees become yellow and this way create a solar atmosphere in the garden."[50] Furthermore, autumnal arboreal harvests vary in color and texture, "more nourishing and of a darker color" than the bright fruits of spring, and as the spring lengthens into summer and fall, fruits progress from almost skinless varieties to those which must be peeled to the hard shells of nuts. While the idea of a "solar atmosphere" might not have been shared by Renaissance writers in the sense that Irigaray intimates, this vision of "yellow" is perhaps not so far off from Shakespeare's gesturing

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[47] Ibid.
[48] Ibid.
[49] Irigaray and Marder, *Through Vegetal Being*, 43.
[50] Ibid.

toward the yellowness of autumn, in the fall, or decrease, of not only leaf but also sun(light), a green-turning-yellow that accompanies the tawny.

Foliar (Sur)face Reading

Similar to the way that Shakespeare's Sonnets 73 and 104 portray the yellowing of aging autumn leaves, Sonnet 17 talks of "papers yellow'd with their age." Connor claims that the experience of early modern papermakers with rags and other vegetal substances affected them deeply and sensorially: "the yellowing to which not only vellum but also the rag-based and woodpulp papers which succeeded it are subject helped to establish the poetic association between the leaves of trees and the leaves of books. Books decay into colour, and the colour of that decay is the yellow of aged skin."[51] As books and leaves are intimately bound, *Macbeth* evinces this relationship not only in Macbeth's turning of himself rhetorically into a yellow leaf but also in the ways that the play represents alternative modes of reading deciduously, that is, how other surfaces, like the leaf, are readable in their turnings. Every face has two sides, and every recto has its verso. But the construction of "faces" as something more than material surfaces involves the interaction of human inter-faces with the world, sites at which our perceptions make "faces" of surfaces, seeing ourselves in(to) the inhuman, such as in trees and in animate objects. Stuart Kane discusses the architectural figure of the medieval Green Man, the embodied foliate "face" of the forest, decorating churches and cathedrals throughout Europe: "The figure was typologically presented as a frontally arrayed face with foliage, commonly oak or ivy, erupting from its many orifices—its nose, mouth, ears—, often bearded or tressed with leaves, and with eyes directed straight ahead toward a presumed viewer and viewing position."[52] In this

[51] Connor, *The Book of Skin*, 165.
[52] Stuart Kane, "*The Outlaw's Song of Trailbaston*, the Green Man, and the Facial Machine," in *Images of Robin Hood: Medieval to Modern*, eds. Lois Potter and Joshua Calhoun (Newark: University of Delaware Press, 2008), 43.

configuration, the foliate face of the Green Man corresponds to the yellowing deciduous-sense of Macbeth's being able to read faces as they turn. As Kane explains, the Green Man figure is "less a personification of the forest as such than it is an intersection of language and the face."[53] This description is equally apt for the leaves of books, surfaces of inscription and interpretation, that Macbeth then superimposes on the "surfaces" of his men, whose facial expressions turn in relation to his own. The pressures on surfaces implicit in early modern printing parallel the lines and crevices of human facial anatomy, etched by social interaction. Sara Ahmed relates that social pressures "can feel like a physical 'press' on the surface of the body, which creates its own impressions. We are pressed into lines, just as lines are the accumulation of such moments of pressure."[54] In reading these moving lines, Macbeth reads the "pains" exerted by his men, articulated through their faces. Leah Knight suggests that "reading itself is a paradoxically changeful yet lasting process … both people and the green nature often seen as the backdrop to our drama, are equally impressionable, exerting pressure on one another and so subject to each other's transformations for better and worse, owing to our shared, contentious powers to hurt and heal."[55] In the senescent progression of deciduous foliage, humans orient (unconsciously, for the most part) to the turnings of leaves, turnings that communicate a kind of pain and uncertainty, a turning-away-from that corresponds to the act of "reading itself," or more specifically, in Knight's words, "certain ways of reading" that analogize with "green wounds" inherent in the structure of deciduousness itself, the green-turning-yellow of its leaves, that inhere the arboreal surface even in its paper form, given enough time.

[53] Ibid., 42.
[54] Sara Ahmed, *Queer Phenomenology: Orientations, Objects, Others* (Durham: Duke University Press, 2006), 17.
[55] Leah Knight, *Reading Green in Early Modern England* (Burlington: Ashgate, 2014), 6.

In reading leaves, Macbeth establishes his own position as oriented toward other humans, at the time that he initiates a foliar surface reading practice. According to Kane, "The figure of 'face' requires a face in order to be brought into intelligibility: we must speak through it in order to articulate it; once we articulate it we have already engaged the figural face-to-face relation. It marks an effort to expel a self from itself, to articulate an 'I' that can overspread all foundational articulations, an 'I' that can then pose as preexisting the site of its own production."[56] The "I" of subjectivity, like leaves, is two-sided. The nature of the leaf, or two-sided surface, is that it generally can be read only one side at a time. At any rate, this practice is the convention or ideal, since a thinness of the paper may give it a translucid quality that permits an unintentional, intra-corporeal palimpsest.[57] However, if we stick with convention, to face one side of the leaf is to turn away from the other, to read an inversion, always already turned away and toward at the same time. Ahmed states, "Orientation involves aligning body and space: we only know which way to turn once we know which way we are facing."[58] She also indicates, "Orientations are about how we begin; how we proceed from 'here,' which affects how what is 'there' appears, how it presents itself. In other words, we encounter 'things' as coming from different sides, as well as having different sides."[59] This type of orientation relates to the act of "reading," whether one is reading books, leaves, or faces; these are all surfaces that can be read and written upon and "daily," as Macbeth emphasizes, such that one's "pains" are visible to the perceptive reader. As the naturalcultural rhythms and changes of human-caused climate change write upon arboreal leaves, they reveal that the human is always post-human, or rather, the human becomes human *as*

[56] Kane, "*The Outlaw's Song of Trailbaston*," 44.
[57] On palimpsests, see Jonathan Gil Harris, *Untimely Matter in the Time of Shakespeare* (Philadelphia: University of Pennsylvania Press, 2009).
[58] Ahmed, *Queer Phenomenology*, 7.
[59] Ibid., 8.

post-human, in a looking back / away from itself, a turning, like Macbeth in his turning toward / away, not exactly a falling so much as an orientation toward falling, a "fell" demeanor or (dis)orientation: that of the tyrant, he who has spoiled his kingdom with excess and ambition and progress *toward* something that will destroy itself and others who are in proximity. The looking/feeling/sensing away (while also approaching *the end*), the turning, is where the possibility for a shared suffering exists, in the paradoxical movement in relation to one another's physical senses, something arborealizable in the repetition of deciduous leafy forms as distant cousins of annual plants, that which thoroughly intersects with humankind. Craig Dionne remarks, "For all of its sophisticated philosophical evacuations of the old epistemic critical categories, perhaps the greatest challenge of the 'new' materialism is that it demands that we rethink causality, ideas of agency, and reexamine the present in the context of a doubtful posthuman future. Imagining the end is where ecomaterial posthuman theory begins."[60] Thus, even if we can see ourselves in Macbeth's yellow leaf, we still must orient ourselves to decide how proceed from here, to read ourselves in and with the dying of the world we have caused.

Disorientation of the body contributes to an understanding of deciduous-sense. In defining postmodern disorientation, Dara Downey follows Yi Fu Tuan's example of getting lost in the woods: "with no workable correlative in the external environment, the subject is lost, no matter which way he or she turns. The ability to isolate some object from which one creates direction brings into being a 'non-I', an Other, which allows the subject to retain a sense of where he or she is, by knowing where it is that he or she is not, even if location in the wider sense cannot be determined."[61] The deciduous-sense of Macbeth is a kind of un-sense related to

[60] Dionne, *Posthuman* Lear, 29.
[61] Dara Downey, "Don't Turn Around: The Embodiment of Disorientation in Mark Z. Danielewski's *House of Leaves*," in *Fear: Essays on the Meaning and Experience of Fear*, eds. Kate Hebblethwaite and Elizabeth McCarthy (Portland: Four Courts Press, 2007), 166.

its un-becoming, in both knowing and being, a movement in time and space toward being as other or being-other-than-myself. Macbeth's fear is suspended, leaf-like, by his belief in the witches' prophecies. This suspension of fear does not avert the turning of leaf, however, and Macbeth must confront it, come to "face" it, in the face of urgent (arbor)realization of his reoriented locatedness in space and time. As Ahmed notes,

> One becomes a subject through 'turning around' … this 'turning' takes the form of hearing oneself as the subject of an address: it is a turning that is not really about the physicality of the movement.… Depending on which way one turns, different worlds might even come into view. If such turns are repeated over time, then bodies acquire the very shape of such direction. It is not, then, that bodies simply have a direction, or that they follow directions, in moving this way or that. Rather, in moving this way, rather than that, and moving in this way again and again, the surfaces of bodies *in turn* acquire their shape.[62]

Ahmed's reformulation of Althusser's interpellation á la Judith Butler emphasizes the repeated and repeatable nature of turnings "over time," during which habits of turning begin to inscribe surfaces with "shape." In *Macbeth*, the first instance of Macbeth's association with "leaf" combines the turnability of reading book leaves to an apparently turning or changing of faces, the faces of Macbeth's men, which he reads each day as they alter. When Banquo prompts Macbeth to stop tarrying, interrupting his multiple asides, Macbeth responds:

> Give me your favour: my dull brain was wrought
> With things forgotten. Kind gentlemen, your pains
> Are register'd where every day I turn
> The leaf to read them. Let us toward the king. (1.3.152-155)

The workings of memory are suggestive here, with two opposing ideas: first, "things forgotten," by Macbeth's "dull brain," Macbeth's excuse for being distracted by his thoughts about the witches' prophecies; second, a registry of "pains" in a "book" of memory that Macbeth implies he accesses on a daily basis when he reads the pages, or "leaves," of the "pains" of the men who

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[62] Ahmed, *Queer Phenomenology*, 15-16.

follow him into battle and wait on his commands, evidently written on their faces or bodies in such a way as to be legible to Macbeth. Presumably, this notion of pain is not that of an acute sense of physical pain or discomfort so much as a sense of social etiquette invoking strained patience that puts someone "at pains." However, the presence of turning leaves at the beginning of the play, associated with Macbeth in this figurative instance, resonates with the physical turning of arboreal leaves (from green to yellow) at the end of the play. The image of leaves being "turned" in order to read someone's daily experiences and "pains" evokes a linear progression of events that move from one leaf in a book to the next, analogous to the repetition of "every day" living that we all experience; this image of linear action, a hand turning the leaves of a book and eyes reading the meanings therein, or better, thereon, corresponds to a much different image in the yellow leaf, isolated, not specified as being among other leaves, not in motion in the sense of perpetual, linear turning, but in motion in the sense of subtle progression from a green-ness to a yellow-ness in sync with seasonal and cyclical time, a still image that nonetheless signifies a kind of (other-than-human) movement across time. This last leaf is not being turned; it *has been* turned (has turned), inexorably, such that it *is* turned, verb become adjective; thus, though poised, hovering, only apparently still, Macbeth "*is* fall'n into the sere" (my emphasis); his state is one of fallen-ness, ir-redemption, permanently altered in hue.

Further, Macbeth's contemplative, ruminating trance state, while Banquo attempts to wake him from it, approximates a vegetal "state," in which, though there may be a "dullness" of sensation and perception, nonetheless, there *is* sensation, even if impressions, "things," are not remembered or registered in the way that written texts are, recording for posterity memories or histories of human events. The "pains" of the leaf, the actual leaf, not yet yellow at this point in the play, are registered in a different fashion than the human pains that Macbeth claims to be

capable of reading. Even if Macbeth were able to read his men in the way that he boasts, what the play represents, as in his interaction with Duncan, is irony—that is, Macbeth's asides, his musings on ambition and advancement contrast wildly to the "face" that he shows to the world, to the men and to the king. The only ones with access to Macbeth's "inner" intentions are the audience (and Lady Macbeth), who are made early to know that the "leaves" of expression withdraw and hide their meanings, that the green is as inscrutable as the yellow, that a turning implies a different kind of movement than a linear one; it is a cyclicality, a rotation, a veer.[63] An exterior, whether text or arboreal projection, leaves actively turn (colors) as they are turned (passively); not "leaves" really at all, but modified arboreal substance nonetheless, the leaves of books continue to transmit, however residually, an element of their arboreal nature in their "turnings" and consequent transmissions of meaning; despite their transformation into another form, their disoriented, disarticulated status in book forms, they continue to arborealize those with whom they come into contact, engaging intercorporeally, across the two surfaces/faces of external projection.[64]

In conjunction with the play's reading of faces, Lady Macbeth's "floral" writing of her husband's face also resonates with deciduous-sense. Like leaves, the flowering bodies on angiosperms (like oak trees) are deciduous arboreal becomings. In fact, flower petals were called "leaves" during this time period, the earliest record of the word "deciduous" applying to flowers rather to the leaves of trees.[65] Like deciduous leaves, flowers flourish for a certain time before fading and falling. Appropriately, then, Lady Macbeth likens her husband to a flower in an

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[63] See Harman, *The Quadruple Object*, on the withdrawal of "objects," from human conscious awareness.
[64] Rune Tveitstul Jensen observes, "Even books that are *not* made from trees, often keep their linguistic connection to them in terms such as 'e-book' or 'audio book,'" in "The Role of Trees in Shakespeare, Tolkien, and Atwood," (Master's Thesis, University of Oslo, 2016), 1, DUO Research Archive.
[65] Henry More, in *Enthusiasmus triumphatus, or, A discourse of the nature, causes, kinds, and cure, of enthusiasm* (London, 1656. Early English Books Online. British Library) writes: "That the Lightnings without thunder are as it were the deciduous flowers of the *aestivall* Starres" (45).

anticipatory gesture of deciduous becoming before he arborealizes himself at the play's end. Lady Macbeth urges her husband to deception and beguilement in the following floral terms:

> Your face, my thane, is as a book, where men
> May read strange matters; to beguile the time,
> Look like the time; bear welcome in your eye,
> Your hand, your tongue; look like the innocent flower,
> But be the serpent under't. (1.5.62-66)

A major theme of *Macbeth* is this ability or inability to "read" a person from the outside, the internal versus external bodily expression; it is apt, then, that Lady Macbeth wants Macbeth to be plant-like, to take on the exernality of a flower. Lady Macbeth emphasizes the physical senses, that is, the gestural and the intercorporeal, drawing attention to Macbeth's eyes, hands, and "tongue." The snake in the grass evokes the subtle serpent hiding in the Garden of Eden, but the notion of approximating innocent florality while maintaining, simultaneously, the characteristics of a snake *beneath* the flower, an over-extended metaphor by today's standards, draws out in the conceit a sort of early modern micro-ecosystem, pairing animal and vegetable in the single body of Macbeth. Snakes "hide" under vegetation to facilitate their successful predation of animals like rats and mice. The image thus posits a relationship between two "natural" entities, one animal and one plant, both nonhuman, situating the analogy in the more-than-human drama of *Macbeth*. This image also connects to the play's themes of the Fall, falling, and fallenness. Freya Mathews discusses the Fall of Man in psychoanalytic terms, reading "repression" as a flight from the (human) realization of the body's susceptibility to pain.[66] This "rational" realization, as Mathews explains, corresponds to a rejection of the body, possibly leading to a sense of disembodiment, as it apparently does for Macbeth, his attempted rejection of his senses pre- and

[66] Freya Mathews, *For Love of Matter: A Contemporary Panpsychism* (Albany: State University of New York Press, 2003), 96.

post-murder eventually manifesting in horrible and visceral hallucinations.[67] If Macbeth is to *appear* as the flower while *being* the snake below, he is both tempter and temptation, the Edenic economy of Lady Macbeth's analogy translating Duncan's sacrificial body into the forbidden fruit, while the "bite" of the snake, or the consequences of the error of picking the "flower" (without at least looking underneath) will thus manifest later in Macbeth's disembodied dagger of the mind. Lady Macbeth's figuring of Macbeth's face like a book which may be read also resonates with Macbeth's claim, two scenes earlier, that he can read the "pains" of his men like a book. Apparently, she too is able to read the "pains" registered on faces, since she perceives "strange matters" written across Macbeth's face-text.

Lady Macbeth attempts to goad Macbeth into altering the emotions and meanings that are being expressed externally, on his face, or "surface," banishing them into an inner dimension of limbo, but this proves an impossibility. This attempted banishment of emotion corresponds to the psychic or spiritual banishment that Adam and Eve suffer as a result of their eating of the Tree of Knowledge, as Mathews indicates, when they truly "see" each other for who they are, becoming frightened of this exposure, and resultingly covering up, dissembling, and withdrawing from the other/the world, rather than living and feeling "unreflectively, without awareness that our actions and feelings were anything but a part of the inevitable flow of the world."[68] Additionally, the Macbeth-as-flower is not "innocent" if it acts as a screen, like the leafy screens of Malcolm's soldiers, decoys or distractions from the harsh, deadly reality behind those screens. The "screen" of innocence in the floralized face of Macbeth, then, acts as a projected surface for reading/writing that nonetheless "screens" its own meaning, not hidden behind it, positionally, on the reverse side of the leaf/surface, but projecting a falsehood or "false face," an attribute

[67] Ibid., 97.
[68] Mathews, *For the Love of Matter*, 95.

potentially of every readable surface. As Richard Meek indicates in his reading of *King Lear*, "Shakespeare reveals the potential duplicitousness of written texts, spoken narratives and visual signs," these various modes of reading and writing as likely to reflect accurate "truths" as they are to deflect them, these surface points of inscription (written or otherwise) acting only as pivot, or turning, points, implicitly holding more content on the reverse side but also gesturing toward other bodies of intertextual leaves.[69] In the instance of the leafy bough-screens, these bodies of leaves represent faceless faces, the soldiers obscured by the face of the forest, inhuman but also in humans, their presented turning-away from Macbeth the obverse of his own turning-away as yellow leaf. Tzachi Zamir compares Spenser's arborealized Fradubio to Adam after the fall, who attempts to use a tree as a screen: "In this reading, exposure in sin is manifested not in being perceived, but consists of an attempt to avoid looking at others. From the perspective of this reading of the image as emblematic of guilt, the transformation into a tree articulates the loss of the sinner's capacity to reciprocate another's look."[70] For Macbeth, turn and fall coalesce into a single fluid motion, his face turned toward others in a "fell" disposition as others facing him withdraw from his perception as a result of becoming what amounts to mere object, blending into the scenery, readable as surface only, like all texts.

The second time the play floralizes Macbeth, it is in the conversation of his enemies, Lennox addressing Caithness, in a dense vegetal play of words that brings together flowers, weeds, and the trees of Birnam Wood:

> Or so much as it needs,
> To dew the sovereign flower and drown the weeds.
> Make we our march towards Birnam. (5.2.29-31)

[69] Richard Meek, *Narrating the Visual in Shakespeare* (Burlington: Ashgate, 2009), 120.
[70] Tzachi Zamir, "Talking Trees," *New Literary History* 42, no. 3 (2011): 442.

Macbeth, no longer an "innocent" flower, is still flower nonetheless, as sovereign, but he is one in need of purgation, a drowning of the flower *along with* the "weeds." Lennox reduces Macbeth's elevated status to a flattened level of bare life of vegetality; worse, the lowest common denominator of plant-hood: the undesirable, undifferentiated weed, no longer worthy of "flower" status.[71]

Ending this section on one final floral note, moving toward a theorization of "deciduous-sense," I briefly turn to the character Ross, a thane of Scotland who references the early modern fashion (among males and females) of wearing flowers in their hats, in this case the caps of soldiers. Ross utters these words:

> …Alas, poor country!
> Almost afraid to know itself. It cannot
> Be call'd our mother, but our grave; where nothing,
> But who knows nothing, is once seen to smile;
> Where sighs and groans and shrieks that rend the air
> *Are made, not mark'd*; where violent sorrow seems
> A modern ecstasy; the dead man's knell
> Is there scarce ask'd for who; and good men's lives
> Expire before the flowers in their caps,
> Dying or ere they sicken. (4.3.164-173, my emphasis)

Ross's plangent speech peaks in the image of human-vegetal entanglement, withering together on the battlefield, both "expiring," though not simultaneously. Ross figures Scotland as a grave, revoking its status of motherhood, transferring womb into tomb. His reference to audible signs of pain, "signs and groans and shrieks that rend the air" carefully designates a "making" as opposed to a "marking." He means that no one takes notice of these sounds, so common is the death knell, akin to today's ambulance siren, that people do not stop to inquire who has died. "Good men's

[71] "Sovereign flower" is a rare phrasing in early modern discourse, used once before Shakespeare by John Lydgate, which he employs thrice in his translated history of the Trojan War (1555), always in connection with chivalry, knighthood, or manhood: "Of chyualry & knighthod ye soueraine floure." Shakespeare uses the expression with respect to Macbeth sardonically, a man whose sovereign flowering is quickly beginning to fade, his days of chivalric knighthood drown in the dew of "all our yesterdays" (5.5.21).

lives" have been reduced to a state on par with the vegetal, nothing more than a withering of floral sartorial flare. However, though tragic in Ross's eyes, this scene allows us to think and feel with the flower in *Macbeth*, even as we think with the leaf, across the play, in a way that brings them closer to human bodies in a productive way, toward a posthumanist ethics that crosses the boundaries of biological kingdom and understands "life," like "leaf," to be a complex arrangement of storied matter, a continuum of beings and becomings that suffer to different extents in the blasted heaths and battlefields of the (more-than) human world. The dying flower in this scene corresponds to the withering of the yellow leaf, representing two deaths, separate but proximate, like that of the humans and trees in the Anthropocene. Additionally, the cries, rendered in three modes of increasing intensity—sigh, groan, shriek—are stylized to "rend" or cut the air, yet they are not mark'd, that is, not observed by others, by hearers. That is, they are un-heard, as in Macbeth's repeated injunctions to humans and nonhumans to "hear not" his steps (the stones, lest they "prate" his "whereabout" 2.1.57-58) nor Duncan to hear the ringing of his death knell. This un-hearing relates to other "un's" in the play, un-senses that convey the descending, fading contours of deciduous-sense.

Sensing Deciduous-sense

In theorizing deciduous-sense, the notion of un-sense is preferable to non-sense because directionally it implies a movement down or away from sense rather than a pure negation of sense, human or otherwise. The "un" words in Macbeth (un-fix, un-sex, un-man, un-make, etc.) are negations of words or actions that convey their opposite or undoing. Daniel Chamovitz explores what a plant might "know" or be able to sense in analogous registers to human sight, smell, touch, hearing, memory, and spatial awareness. On the other hand, in thinking what a plant does *not* know, or perhaps better, what a plant un-knows as it approaches and enters

senescence, I propose that something akin to an un-knowing process may occur with the leaf's retreat into "the sere" of dormancy. With its orientation toward "un," *Macbeth* brings together non-being *and* non-sense, an ability to un-do, reverse, or turn course, a "canceling" of existence and its seeming parameters. The general category of "un-fix," introduced in *Macbeth*, is also useful in thinking/feeling deciduousness, a mode of anti-repair, a throwing overboard of the inessentials. Enfolding the deciduous senses of unseeing, unhearing, unfeeling, and ultimately unknowing, an unfixing of sense suggests the negation of natural sense or sensation, trees that "unfix" their roots being the perfect image of unfixity ("Against the use of nature," 1.3.139).[72] The first time Macbeth sees the Weird Sisters, he complains that their "horrid image doth unfix my hair" (1.3.137). Later, unafraid, his hair stays in place, but it is the trees whose *parts* are unfixed, not uprooted but impressed into Malcolm's service, moving toward Macbeth in a state of un-becoming. Deciduous-sense is the term I use to describe the more-than-human tendency-toward-fall/death, something more than the common biological senescence that also influences the aging bodies of both animals and plants, such as the medical symptoms of going bald or losing memory. While senescence signifies the correlation in bodies losing parts of themselves in response to age and/or weather, "deciduous-sense" is an affective sense of dread at the prospect of turning toward death/away from life, acknowledging oblivion and nonlife/nonexistence; it encompasses the dormancy of humankind, rather than the individual death of the human, which does not entail the holistic death of the species—life will continue after individuals via sexual reproduction and birth/gestation—but the passing of the leaf itself, falling into the sere forever, humanity viewed not as a tree but as a leaf, the head chopped off for good, without the promise of future generation(s). Posthumanist in multiple ways, deciduous-sense helps to make sense of

[72] For a speculative take on the concept of "un-seeing,' see China Miéville's novel *The City & the City* (New York: Del Rey, 2009).

the Anthropocene, since it is Macbeth-becoming-leaf rather than Banquo-becoming-seed that stares into the abyss, arborealized poignantly in the fading leaf (of humanity).

Macbeth showcases a notable amount of un-sense, in senses denied, disavowed, discouraged, or dispelled. This lack of sensation, or low-grade or scaled-back/down sensation, resonates on vegetal and arboreal scales. These vegetal non-sensations or in-sensibilities occur at moments of urgent requests for characters to "not hear," and "not see." These requests are often rhetorical, spoken out loud but not to an actual hearer, spoken *as if* one could hear the request, thus nonsensically insuring compliance to the request. In the play, sometimes characters voice these requests explicitly, and at other times more obliquely. Macbeth begins this type of requested negation of sense(s) in the first act, before murdering Duncan, speaking aside (or rather, *toward* the sky; speaking from below, Macbeth orients toward the heavens): "Stars, hide your fires, / Let not light see my black and deep desires" (1.4.39). This request for darkness personifies the light from stars, conflating their function with their essence; in this instance, however, Macbeth follows it with a secondary request *for* sight: "The eye wink at the hand; yet let that be / Which the eye fears, when it is done, to see." Segregating his parts in this way, eye movements un-seeing hand movements, curiously resembles the functioning of plants with respect to light. As Chamovitz relates, "A plant needs to know if another plant has grown above it, filtering out the light for photosynthesis. If a plant senses that it is in the shade, it will start growing faster to get out."[73] He also explains, "The complex signals arising from multiple photoreceptors allow a plant to optimally modulate its growth in changing environments, just as our photoreceptors allow our brains to make pictures that enable us to interpret and respond to our changing environments."[74] The photoperiodic and photosynthetic nature of plant "vision"

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[73] Daniel Chamovitz, *What A Plant Knows: A Field Guide to the Sense*s (New York: Scientific American, 2012), 23.
[74] Ibid., 24.

yields a type of embodied seeing that moves in time/space with the changing of light and darkness. The sun's periodic "hiding" of its fires casts plants into the darkness of "black and deep desires," during which they might respond to moonlight but for which they might face a temporary sort of deciduous dormancy, like the human in sleep, every night (daily registering pain), anticipating the long night of winter.

Another facet of un-sense that *Macbeth* features is un-hearing. Chamovitz's speculations about plant hearing suggest, "[P]erhaps some plants sense miniscule sounds that might be created by tiny microorganisms. That kind of system may be off the radar screen of most physiological tools," but he concedes, without hard data, "we must conclude for now that plants are deaf and that they did not acquire this sense during evolution."[75] In *Macbeth*'s second act, just before the murder, Macbeth speaks aloud to himself, first addressing 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" (2.1.56-57). A moment later, hearing a bell ring, he addresses an absent Duncan in a similar way: "the bell invites me. Hear it not, Duncan" (2.1.62-63). The repeated injunction to "hear not," first to the un-hearing earth and second to the un-hearing (out of range) Duncan, mimics a vegetal deafness to sound, as it is perceived by humans. The "prating" of the stones, however, recalling those that would "cry out" in the Gospel of Luke, suggests alternative kinds of listening taking place in the environment, where trees in the "firm-set earth" may be able to sense "miniscule sounds" out of the range of human hearing, like Duncan asleep, potentially in relation to imperceptible shifts in earthly vibrations related to the changing seasons.

In another instance of un-seeing, in the play's third act, Macbeth tries to command Banquo's Ghost to leave his presence, or at least his vision:

Avaunt, and quit my sight! Let the earth hide thee.

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[75] Ibid., 88.

> Thy bones are marrowless, thy blood is cold;
> Thou hast no speculation in those eyes
> Which thou dost glare with. (3.4.91-94).

According to Macbeth, Banquo's (un)dead eyes "glare" but do not see, being without "speculation." Macbeth attempts, in his command, to un-see the unseeing Banquo. The future, as described by the witches, is a speculative one, which Macbeth attempts to "see through" on his own behalf, trying to "write out" the corollary prophecy related to Banquo in order to secure his own speculative future. He claims that Banquo is "marrowless," lacking substance, but of course his body is freshly murdered and buried: "safe in a ditch he bides" (3.4.24). In fact, it is Macbeth, via the three murderers, rather than Duncan, who ultimately plants Banquo, whose Ghost will not "bide" in the ditch nor allow "the earth to hide" his corpse, im-planted into Macbeth's mind's eye. Like a buried seed, Banquo does not have eyes, nor can he "see" the future, but he grows into it, toward it. In this example, Macbeth does not tell himself to "see not," because he actually believes in the ghost and tells *it* to "quit my sight," but he does implicitly express an un-seeing, or a "see-not," that resides in Banquo's eyes: "Thou hast no speculation." Banquo's un-seeing eyes also speak to the theme of unfixity in the play that evokes underlying vegetal energies and agencies, unwilling to stay planted in the supposedly dead soil. They are agents of the un-dead, embodied as well in the Weird Sisters, not living as categorical, prototypical, normative human entities but not dead in any complete sense, either.[76]

The deciduousness of dormancy also manifests potentially in the un-seeing movement of human somnambulance in the play. When Lady Macbeth is sleepwalking, the doctor notes that "her eyes are open," but, as the gentlewoman replies, "Ay, but their sense are shut." (5.1.24-25). Here again is an un-seeing, eyes that look but do not see or perceive, a kind of vegetative trance

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[76] For a reading of the Weird Sisters as part of the nonhuman environment, see Malvina Aparicio, "The Non-human as a Character in *Macbeth* (1606)," *Separata Ideas* 2, no. 2 (2016): 9-17.

state. The doctor also speaks of "deaf pillows," incapable of hearing the secrets imparted to them by "infected minds" (5.1.72-73) like Lady Macbeth's. Her nocturnal habits are dubbed "unnatural" by the doctor and the gentlewoman, but her activities draw attention to the state of unconsciousness or unwaking that everyone inhabits when asleep. People's entering into sleep for several hours every night moves them closer to a vegetal kind of consciousness, though sleepwalking interrupts this mode of stillness and even death-like repose, Lady Macbeth simulating the "moving grove" of Birnam as well (Shakespeare talks of sleep as "death's counterfeit" in 2.3.76). This type of motion, then, resonates with the arrival of the "moving grove," a blending of life and death that also appears in Macbeth's threat to the messenger who reports his witnessing of the moving forest. Macbeth promises that "If thou speak'st false, / Upon the next tree shalt thou hang alive / Till famine cling thee" (5.5.37-39). This threat of hanging upon "the next tree," which gestures deictically toward the trees that are on their way, describes not a fatal hanging by the neck but a hanging "alive" until starvation. In his threat, Macbeth enfolds the messenger into his own arborealization, into tree-hanging, suspended between life and death in arboreal grip, even as the impossibly living army of trees marches toward the castle. The messenger on watch, viewing Birnam Wood from afar, indicates that he perceives "The wood began to move," his senses fooled by Malcolm's subterfuge (he sees but sees not). The wood is indeed moving, though not through self-volition; the wood moves in the grips of the soldiers, as the (potentially) hanging messenger would be rendered still in the grip of the "next tree." The "next tree" also speaks more generally to the congregation of trees into woods and groves—these forest spaces become such spaces in the presence of at least two trees, in (group) formation, in which (more-than-human) movement exists as potential between "this" tree and the "next" tree.

These un-seeings and un-hearings correspond with the play's theme of appearances not necessarily lining up with reality and the role of deception vs. honesty in political futures, as when Malcolm mentions an "unfelt sorrow" (this unfelt sorrow belongs to "the false man" 2.3.137-38), a sorrow that exists yet is not felt, an absence of feeling in relation to its potential existence. Donalbain concurs, stating, "There's daggers in men's smiles" (2.3.141), recalling Macbeth's vision of a bloody dagger "of the mind." "Unfelt sorrow" is a particularly useful term in the context of embodied thinking and feeling with / across Shakespeare's texts to locate a proximal nexus of human and nonhuman pain / sensation. The action of un-feeling suggests either an inappropriate reaction to events or circumstances normally warranting emotion or a retroactive application of modified feeling, in order to un-feel that feeling, that sorrow, in effect, a burying of the emotion, repressing it below the surface so that it might not be detected by others (other humans). As noted above, Macbeth is less than successful at this exercise. Lady Macbeth habitually criticizes his attempts, calling attention to his odd, pained facial expressions that bely what is "inside," rising to his surface. By extension, a tree might not technically feel anything on its surface, comprised as it is of "dead" bark cells, protecting its living layer of cambium, the intermediate layer between the bark and the sapwood. On the other hand, the tree's layers function analogously to the various extensions of the human body in that the bark, supposedly dead, protects the internal structures and processes taking place. The tree, like Macbeth, both shows and does not show its "insides" on / through its "outside." The bark is the hardening externalization of the tree's inner layers, yet this crack-prone surface is not impervious to the world, not an air-tight wall of bark refusing all entry, transmission, or contact. It is a surface upon which the interior and exterior intercourse, communicating across, veering and emerging, even as Macbeth's internalities, his fears, doubts, and suspicions, leak out and express

across his facial medium into the world and connect to the eyes, ears, and other surfaces on other human and nonhuman bodies. He is bound to "crack," as Lady Macbeth eventually does, as every *body*, human or not, always does, given time and weather.

Finally, deciduous-sense might progress from un-feelings to the cognitive registers of memory and knowledge, manifesting during senescence in forms of un-remembering and un-knowing. In the context of preparing to march toward Birnam Wood in order to "dew the sovereign flower, Menteith refers to Macbeth's "pestered senses." (5.2.23) Like Lady Macbeth, by the end of the play Macbeth appears to be losing his mind as a result of his guilty conscience. "Senses" seems to encompass both "mind" and "heart," for both king and queen, as in Macbeth's pronouncement, "The mind I sway by, and the heart I bear, / Shall never sag with doubt, nor shake with fear" (5.3.9-10). Lady Macbeth's senses are "shut" when she sleepwalks, though she remains open to her unmediated affective experience of guilt/shame, and her "heart is sorely charged" (5.1.53), while Macbeth "sways by" his mind and "bears" his heart. And though Macbeth is the "sovereign flower" to which Lennox refers, Macbeth calls one of his servants a "lily-livered boy," floralizing his interior self. Referencing the white lily, Macbeth implies the servant is a coward because of a pale liver, figured to be "un-red," without blood, but also un-read in the sense that this site of reading, from within, is only conjecturable without a surface with which to interface (5.3.15). Regarding Lady Macbeth's fatal illness, Macbeth asks the doctor if he cannot "pluck from the memory a rooted sorrow" (5.3.41), imbuing their conspiratorial murder in vegetal terms but ultimately unable to achieve such vegetal unawareness or forgetfulness. The memory cannot be "plucked," nor can it be purged away by the medicinal herbs Macbeth disavows (rhubarb and senna). Macbeth also mentions a "cooling" of his senses, though he apparently would not experience this sensation any longer, if he were to hear a "night-

shriek," and the raising of his hair "as life were in't" if he were startled no longer occurs either—this lack of feeling / sensation effected through his affective desensitization, so that he feels nothing at the announcement of his wife's death. Instead, he waxes eloquent on times past: "the time has been … There would have been a time for such a word," but now signifies nothing (5.5.10, 17). Macbeth gives the criteria of arousal ("rouse and stir") as characteristic of life, but in applying this "as if" to his hair, in response to a shriek or to being frightened, speculatively raises the possibility of this "life," perhaps a vegetal mode of life that grows in perpetuity.

On the other hand, Macbeth's un-seeings, hearings, and feelings cut across the naturalcultural divide of agricultural certitudes and the uncertainties of the wild, "blasted heath." The forest of Birnam is both seen and not seen by Macbeth. He does not acknowledge its presence at first, willing himself to unsee this vision, just as he tries to unsee Banquo. Macbeth tries to but cannot evade the boughs of Birnam, pursuing him across the fields / text, to bring his tragic fate to him. Body parts of the trees of Birnam, then, arrive to impart to Macbeth his senescent vegetality, his en-leavement. Macbeth ultimately cannot un-see, un-hear, un-feel the world; he *will* be en-leaved. The trees in Birnam are not deprived of their entire bodies, not uprooted completely, since only their crowns are hewn. Martin goes as far as to suggest that "Malcolm's order to cut only 'a bough' from Birnam's trees indicates limited rational use rather than clear-cutting … Malcolm might therefore be seen as a kind of conservation biologist in Birnam, making a necessary but controlled intervention to regenerate a landscape that has been savagely degraded by Macbeth's violence."[77] Macbeth, however, loses both head and crown, dis-en-leaved even as he figures himself as leaf, reduced to a trunk, still structurally the body of a tree but no longer the fully living, flourishing tree it once was.

[77] Martin, *Shakespeare and Ecology*, 110.

Leavings

> …Nothing in his life
> Became him like the leaving it.
> -*Macbeth* (1.4.7-8)

What do we learn as ecocritics or as environmentalists from interrogating the leaves of *Macbeth*? Should our ecological orientation be to what is "left" now or to what could be all that is "left" in our planet's foreseeable future. Do we need to turn further to the "left"? Or is left-leaning an adequate response? As Ahmed reminds us, "the distinction between right and left is not a neutral one … This lack of neutrality is what grounds the distinction between right and left: the right becomes the straight line, and the left becomes the origin of deviation."[78] With regard to climate change, it would seem that a "straight line" is the last thing anyone would wish for humanity, considering the path on which we appear to be. In this final section, I take into account a few extra "leavings" that may help answer some of these pressing questions. The "leavings" that occur in the play, in addition to the arboreal and codexical turnings of leaf, relate to "leave" as in "exit" or "abandon," akin to the "leafing" as "un-leafing" of the deciduous leaf, as a departure or movement away from. This motion occurs when characters ask to "take leave" of one another, as well as in (almost) every scene when stage directions prompt certain actors to exit the stage during the scene or, at the end of the scene, when all of the actors *exeunt.*[79] As the possible final "scene" for humans, the Anthropocene prompts an orientation toward exit, to think with the different ways that actors might leave the stage, moving out of their "character" into the oblivion of "off-stage," analogous in this analysis to the manner in which humans orient toward

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[78] Ahmed, *Queer Phenomenology*, 13-14.
[79] The stage direction "all exeunt" appears twice in *Macbeth* (1.1, 1.2), as does "exeunt omnes" (2.4, 5.9).

the end of all leavings. In *Shakespearean Entrances*, Mariko Ichikawa carefully studies patterns of both entrance and exit on the early modern theatre stage, examining the significance of interrupted exits, speeches around exits, combinations of entrances and exits, and the use of stage doors, among other technical considerations.[80] I limit my assessment of exits in *Macbeth* to three cases: 1) exits in which stage directions specify that everyone but/except one or more actors should exit, 2) exits that are accompanied by an action, and 3) solitary exits, in which an actor leaves the stage alone.

Macbeth has a total of thirty-seven exits, by my count. This total does not, however, include the two "vanishings" from the stage of the witches. Additionally, four of these exits have been added to account for their omission in the Folio, deduced by modern editors, so there are thirty-three explicit stage directions for actors to exit the stage in the text.[81] "All but/except" exits occur in *Macbeth* in 2.3 and 5.3. In the first instance, Malcolm and Donalbain are directed to stay behind, following the exit of "all" (of the characters on stage), which includes Macbeth, Lennox, Ross, Macduff, and Banquo. Before they exit, "all" has a couple of lines, the one that precedes their exit being "Well contented" (2.3.135). In the second instance, everyone exits "except Doctor" (5.3.60). Read alongside each other, these two examples of all leaving the stage with some variation of an exception offer two competing versions of leaving that imagine something "left over" after the initial leaving (of most). Of the two, "well contented" is perhaps the most ominous, the idea of leaving complacent while a few stay behind to deal with trouble reminiscent of the unfortunate attitude some have toward the earth and its future inhabitants. The other

[80] Mariko Ichikawa, *Shakespearean Entrances* (New York: Palgrave Macmillan, 2002).
[81] In the interest of developing the idea of "leaving" in the play in a multivalent sense, we might also direct our attention toward these omissions and nonspecific "vanish" exit directions. If one follows the Folio text, these characters do not actually get to exit the scene; rather, they are "left" there indefinitely. The witches, for instance, do not officially or explicitly exit the stage, since they somehow vanish, by special effects, trap door, or some other device.

alternative, everyone leaving except for the doctor is more ambivalent. If the "doctor" represents some sort of cure for the ailing kingdom/planet, then the fact that he remains implies a vague hope for "fixing" all of the un-fixings already in progress. On the other hand, if the doctor is as effective at finding a cure for the planet as he is in curing Lady Macbeth of her madness, then we are hopelessly lost, doomed to an off-stage death, unmourned and "heard no more" (5.5.21).

Exits which accompany actions are equally telling, the three most prominent in *Macbeth* being "exit marching," "exit crying," and "exit dying." Malcolm's soldiers exit marching on three occasions, contributing to a sense of rising action moving toward the final battle scene at Dunsinane. This type of leaving suggests a positive outlook toward the future, marching confidently toward/against tyranny, embodied in Macbeth, but it too is somewhat ambivalent with the hewn branches in tow. The yellow leaf of Macbeth's deciduousness incurs tangential yellowings and un-becomings. Along the same lines, Lady Macduff exits in 4.2 crying "murder," after witnessing the death of her son, whom the Macbeths have assassinated. Banquo exits dying in 3.3, while his son Fleance escapes. Again, two alternatives are presented in these leavings, one in which a parent survives; in the other, the child. The murderer who kills Lady Macduff's son calls him an "egg," similar to the seed of royalty to which Fleance is compared. The future of the kingdom carried by the fate of these respective embryos, then, eschews the animal for the vegetal, the seeds of life potentially save-able for many future generations, to be "planted newly with the time" (5.9.31). Lastly, because Macbeth is slain onstage, Macduff is compelled to exit the stage with Macbeth's body. Macduff returns to the stage in the next scene, carrying the severed head of the tyrant, bearing "newer comfort" for Malcolm's soldiers on the battlefield. This exit and dismembered re-entrance of Macbeth contrast with Siward's proclamation that his son "parted well and paid his score" (5.9.18). Of young Siward's death, Ross solemnly observes,

"Your cause of sorrow / Must not be measured by his worth, for then / It hath no end" (5.9.10-12). The unending nature of this sorrow is not an "unfelt" one, as discussed above, but a sorrow perpetually felt until one's own death, carried or borne as Macduff carries Macbeth's head back into view, a return of the dead, so that everyone, including the audience, may witness the final fall of the yellow leaf.

Taking leave of this chapter, I turn somberly to the pattern of leaving in *Macbeth* of the solitary exit, of which the play has three. One belongs to the Doctor (5.3), and the other two are Macbeth's (2.1, 3.1). Having the stage to oneself at the end of a scene usually gives that character the last word, so to speak, so it is through these "last words" that I filter their solitary leavings as potentially applicable to the un-leafing that the deciduous-sense of *Macbeth* communicates to the residents of the Anthropocene. The Doctor states remorsefully, as the enemy army approaches, "Were I from Dunsinane away and clear, / Profit again should hardly draw me here" (5.3.61-62). This orientation looks toward the future as having already been doomed, and it will play out accordingly without any possible intervention. Alternatively, the conditional "were I" does speculatively attempt to inhabit a different, imaginary past, one in which he is "away and clear." This sort of position advocates a movement between past and future as a means of negotiating with the immensity of approaching global disaster, learning from history and Shakespeare's historical plays that can help us "identify the posthuman in our time, especially in the way it grapples with this idea of imagining the future."[82] Macbeth's closing lines before his solitary exits are both, predictably, rather ominous and gloomy:

> I go, and it is done; the bell invites me.
> Hear it not, Duncan, for it is a knell
> That summons thee to heaven, or to hell. (2.1.62-64)
>
> I'll call you straight: abide within. [Exeuent Murderers.]

[82] Dionne, *Posthuman* Lear, 33.

> It is concluded: Banquo, thy soul's flight
> If it find heaven, must find it out tonight. (3.1.142-44).

Both sets of lines invoke the afterlife as having different coordinates of future possibility, even if their tone suggests a hellish demise rather than a summons to heaven. They also both emphasize the finality of death: "it is done" and "It is concluded" summarizing the lives of Duncan and Banquo into punctuated endings. However, Macbeth gives as Banquo's condition to "find heaven" a short window of time. While the Murderers of Agro-Banquo, who we might equate ecocritically with ourselves, representing humans' relationship with the earth, "abide within," Banquo has an opportunity, albeit a narrow one, of finding heaven. "Within" is a stage direction not entirely understood to scholars of Shakespearean theatre, but it indicates some kind of liminal place or position between the stage and the non-being of "offstage," a nexus between the world of the theatre and our world.[83] We might visualize our own predicament in this hazy, deciduous "within," merging in the fading moments of humanity's twilight with a Banquo who may reach heaven if his urgent flight reaches it in time or, alternatively, with a Macbeth whose own death knell signals "his hour upon the stage" is over (5.5.24).

[83] Ichikawa, *Shakespearean Entrances*, 114.

CHAPTER TWO: BARK
TOWARD ARBOREALIZED TEMPORALITIES IN *THE TEMPEST*

> The skin of Beeches, Oaks, Spruce & Co. is called bark. It fulfills exactly the same function and protects trees' sensitive inner organs from an aggressive outer world.
> – Peter Wohlleben, *The Hidden Life of Trees*[1]

> [T]he bark thy body is.
> – *Romeo and Juliet* (3.5.133)

Introduction

The word "bark" is used only three times in Shakespeare's *The Tempest* (1611), but there is so much more bark in view in the play's islandscape—in the land features of the island setting as well as in the surrounding seascape of coastal and horizonal borders.[2] This chapter looks at two of these "barks," in addition to one of the play's implicit references to bark. I focus on the arboreal barks of the play, excluding (with some reluctance) the "bark" of Prospero's spirit hounds: 1) the bark, or small wooden ship, in which Prospero and Miranda are rushed aboard before being cast out to sea in a lifeboat; 2) the bark of the tree from which Stephano crafts his makeshift wine bottle; and 3) the bark of the "cloven pine," under which Ariel implicitly serves his twelve-year sentence in the play's prehistory.[3] While all of these barks refer to nouns, or objects, Shakespeare and other early modern writers use "bark" as a verb as well, most

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[1] Wohlleben, *The Hidden Life of Trees*, 61.
[2] On the island's seascape, see especially Roland Greene, "Island Logic," in *"The Tempest" and Its Travels*, eds. Peter Hulme and William H. Sherman (Philadelphia: University of Pennsylvania Press, 2000), 138-145. See also Dan Brayton, *Shakespeare's Ocean: An Ecocritical Exploration* (Charlottesville: University of Virginia Press, 2012), 166-95; and Steve Mentz, *At the Bottom of Shakespeare's Ocean* (London: Continuum, 2009), 1-18.
[3] Ariel's presentation of gender in the play is ambiguous. Ariel refers to himself once in the third person using the pronoun "his" (1.2.193), and likewise stage directions use masculine pronouns to refer to him. However, Ariel takes on the female role of a harpy and is possibly meant to play the female role of Ceres during the masque sequence. Likely played by a boy actor in Shakespeare's day, Ariel was predominantly played by women actors from the Restoration until the twentieth century. Following male performer Leslie French's portrayal of Ariel in 1930, both male and female actors have played Ariel. See the entry on "Ariel" in *The Oxford Companion to Shakespeare* (Dobson and Wells 14). Because I am working mainly with the Folio text (1623) of the play rather than any particular performance of it, I retain the use of the pronoun "he" throughout my analysis.

commonly to indicate the stripping off of bark, "to cut off a complete circle of bark from [a tree], so as to kill it."[4] To bark, then, was an act of environmental destruction, if not vegetal homicide. This process was well understood and, in fact, barking was practiced routinely as a means of clearing land for agricultural purposes. As Philemon Holland wrote in 1601, in his translation of Pliny's *History of the World*, "If trees be barked round about, they will die."[5] Early modern people understood trees to be living beings, not necessarily in a mystical, fairy-world sense, but as part of the world of creation, capable of suffering and death. Like the life-sustaining leaves of trees that I discuss in the previous chapter, bark is a crucial site of arboreal bodily experience.

Bark is a nontechnical term, but today it generally means "everything that lies outside the cambium; the inside layers [of bark] consist of living phloem, but the layers beyond that are dead."[6] In the tree trunks of both conifers and broadleaf trees, the wooden interior is made up of two kinds of tissue: xylem, on the inside; and phloem, on the outside, nearer to the barky exterior. Between the xylem and the phloem exists the microscopically thin cambium, the stem-cell tissue that generates new growth. As xylem ages, it dies and eventually becomes the "heartwood" of the tree trunk, while the phloem's death functions to create new bark for the trunk's exterior. Thus, the life of a tree significantly operates in this thin layer of living phloem, cambium, and xylem, transporting water and minerals, facilitating growth, and conducting photosynthesis. Such a space, I contend, is where Ariel "does his time," in the midst of these arboreal life processes prior to the arrival of Prospero and Miranda, under the bark of the "cloven" pine. A 1688 treatise by Randle Holme establishes that the term "cloven" was used,

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[4] *OED v.* 2; 3.a. Also called girdling today, or ring-barking. "Rind" is an older synonym for "bark." "Bark" as a noun dates from the 1300s, while "rind" is in use in early Old English texts. Shakespeare prefers "bark," using "rind" only twice in botanical terms, and not with respect to trees but to the exteriors of nuts and flowers.

[5] Cited from *OED*, "bark" *v.*[2] 3.a.

[6] Tudge, *The Tree*, 79.

along with "sliven" and "shivered," to indicate a tree that "is rent and torn by Winds and Lightnings."[7] Although such a situation does not bode well for a tree, not to mention the fact that Holme provides this definition under the category of "terms used about Trees and Wood when they cease to have life in them," neither wind-damaged nor lightning-damaged trees necessarily die immediately. In fact, about half of the trees struck by lightning survive the blast.[8] From a speculative point of view, then, the play allows for the more interesting possibility that the pine tree survives and that, for twelve years, Ariel exists in the midst of the slowly expanding arboreal material, amongst the xylem, phloem, and cambium—xylem becoming wood, phloem becoming bark—with Ariel's body subject to these becomings.

Despite some ecocritical study of the natural environs of *The Tempest*, a striking lack of attention has been given to the island's sylvan and arboreal contours, considering that the play portrays an island populated with a variety of trees in addition to pine, including oak, linden, crab-apple, and hazelnut, which accent the landscape in groves and clusters, presumably producing substantial quantities of bark and other arboreal material.[9] Taking an eco-historical approach, Vin Nardizzi reads the trees of *The Tempest* as the stuff of Utopian fantasy, interpreting the legions of logs that Caliban and Prince Ferdinand are forced to carry as "the vital matter of *The Tempest*'s eco-fantasies of colonialist extraction."[10] While Nardizzi's argument

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[7] As an adjective, "cloven" appears around 1200; as *v*[1] from after 1100 (*OED*). The word is typically associated with humans cutting of trees, timber, for firewood. In 1688, Randle Holme's treatise on coats of arms, *The academy of armory*, provides chapters on "Terms of Herbalists used about Trees and Fruit" as well as on "the Excrements of Trees and Fruit there is," the latter of which lists and gives brief descriptions of mushrooms, moss, etc. There is a reference to "green bark," from which birdlime is made (holly tree).
[8] I take this statistic from the professional organization Schneider Tree Care, whose website describes care for trees struck by lightning at the following URL: https://schneidertree.com/2015/07/07/lightning. Accessed 29 March 2009.
[9] On the island's landscape, see the chapters in Egan, MacFaul, and Nardizzi that treat *The Tempest*. Fitz briefly addresses trees as part of the island environment. Although characters in the play refer to the island on multiple occasions as "desert," this term applies to a perceived lack of human life on the island, i.e. deserted, abandoned, rather than the modern term denoting a dry, sandy region or largely treeless ecotope.
[10] Nardizzi, *Wooden Os*, 112.

about the island's timber makes sense in the context of England's colonial complicities, to say that "the play presents hardly any trees on the island" is something of an exaggeration.[11] In fact, the arboreal bodies and body parts of living trees and their life processes take center stage in a number of instances, the example of Ariel's pine being only the most conspicuous. Accordingly, I emphasize the value in looking at the trees of the island *as trees*, living organisms in various stages of their growth, development, and life cycles, that are represented in the play—in addition to the commodified logs used for firewood and the timber used for constructing sailing vessels.[12] Following the ecomaterialist idea of storied matter, we might see these living (and dying) trees as important actors in the material composition of the play; they inform the narrative with other-than-human temporalities, converging with and diverging from the play's human temporalities.

To further explore the possibility of sharing pain across human and vegetal worlds, then, I take Ariel's arboreal experience in *The Tempest* as a starting point for thinking into and across the deeper times of the world of the play, particularly the arboreal material resonating in the different layers and meanings of "bark." Before coming into the service of Prospero, as the play's back story goes, Ariel serves his long prison sentence, placed into the tree as a punishment for disobeying the witch Sycorax. Ariel finds no pleasure in "becoming one with nature" during his time in the tree; in fact, his tree-immersion experience is very painful. Moreover, the play makes it clear that Ariel does not wish to ever go back into another tree. Prospero's threat to imprison Ariel arboreally a second time, in an oak, for another "twelve winters," prompts Ariel's swift obedience (1.2.296). The many classical depictions of humans turned into trees often associate such an imposed arboreal status with punishment, pain, and suffering, highlighted by

[11] Ibid.
[12] On the distinction between wood and timber during this period, see Oliver Rackham, *Trees and Woodland in the British Landscape: The Complete History of Britain's Trees, Woods and Hedgerows*. Rev. ed. (New Haven: Phoenix Press, 1990), 10.

potent images of severed, bleeding tree limbs.[13] This tradition acknowledges a basic affinity of being between human and arboreal beings, suggesting (especially in Ovid) a fluidity between corporeal shapes and forms; further, it evokes the potential for empathy across species and kingdoms, urging for an attempt not only to think with nonhuman others but to feel with them in some capacity, even if that feeling-with is a suffering-with. Indeed, as Jonathan Bate notes of Percy Shelley's reimagining of Ariel, whose spirit is preserved in a transfer from tree to a wooden guitar: "That the tree died in sleep and felt no pain implies that a tree *might* be killed whilst awake and in that case feel pain."[14] But this Romantic revision, though attractive, overwrites an important distinction in Shakespeare's original: Ariel does not quite *become* the tree, though his body *is* thoroughly fused within it.[15] Ariel's pain is separate from the tree's, just as his experience of time in the tree does not align neatly with an arborealized temporality.

This separation invites speculation about the converging temporalities occurring at this other-than-human site, inhering intra-corporeally under the bark of the tree in its slowly expanding rings.[16] In spite of the pain involved—actually, *because* of the pain involved—Ariel's time of lengthy arboreal confinement, as well as his contemplation of a similar future, presents an opportunity for imagining what it would be like for a human (Ariel is not human but has many

[13] Numerous examples appear in Ovid's *Metamorphoses*. See also Virgil's *Aeneid*, Book III. Dante follows this tradition with his Suicide Forest in *Inferno*, Canto XIII; Spenser does as well, in *The Faerie Queene*, Book I, Canto 2. See especially Joseph Campana, *The Reformation of Pain: Spenser, Vulnerability, and the Ethics of Masculinity.* (New York: Fordham University Press, 2012), 47-74. See also Zamir, "Talking Trees," on tree transformations associated with punishment for sin. Transformation into a tree in classical literature is not always necessarily a punishment, however, as Daphne's transformation into a laurel tree amounted to her salvation, preventing Apollo from raping her.

[14] Jonathan Bate, *The Song of the Earth* (Cambridge, MA: Harvard University Press, 2000) 92, my emphasis.

[15] See Crane Mary Thomas Crane, *Shakespeare's Brain: Reading with Cognitive Theory* (Princeton: Princeton University Press, 2001), 187-88.
(187-88). She notes that Ariel's situation differs from that of tree fairies of traditional British folk tales and songs.

[16] I use the term "intra-corporeal" to specify that which occurs inside the arboreal body, including and incorporating Ariel's body. Thus, intra-corporeality differs from the concept of "intercorporeality," as theorized by philosopher of the body Maurice Merleau-Ponty. On recent theorizations of intercorporeality, see, for example, Christian Meyer, Jurgen Streeck, and J. Scott Jordan, eds., *Intercorporeality: Emerging Socialities in Interaction* (New York: Oxford University Press, 2017).

human features) to indwell a tree for such an extended period of time, inhabiting or approximating a mode of existence that approaches that of arboreal being.[17] As the arboreal body of the pine presses up against Ariel's imprisoned bodily form, they "do time" together in a blend of anthropocentric time and the ultra-slow time of arboreal growth. I theorize this mode of doing time as an "inter-missing" time, in the sense of a theatrical intermission (a sort of "pause") as well as the time that "goes missing" despite humans' attempts to define, measure, and control it. In *The Tempest*, inter-missing time occurs when human and vegetal times do *not* meet; they may appear to overlap or intersect, but they ultimately "miss" one another in various ways. Through the concept of inter-missing time, I interrogate the pain and suffering operating in this shared space by tracing the not-quite-converging temporalities, expressible in varying ontological registers depending on the species (pine or oak, in Ariel's case), temporalities that both exceed and enter into the time of Shakespeare's play. Though temporally divergent, the proximity of these suffering bodies highlights both the similarities and differences of human and vegetal ontologies. Thinking with these temporalities works toward a notion of common sentience among humans and nonhuman others. In the space and time of the play's temporal arborealizations, Shakespeare prefigures a posthumanist ethics that acknowledges a shared materiality in the world while still prioritizing the sentience or "sense-ability" constitutive of organic life forms, capable of feeling something like pain. In this way, Shakespeare's updating of Ovidian metamorphoses retains the commonality of suffering bodies but moves away from literary anthropomorphism and closer to a modern sense of the complex entanglement that exists between the human and nonhuman worlds.

[17] On the difficulty of imagining nonhuman perspectives, see Nagel's famous essay "What Is It Like to Be a Bat?" *The Philosophical Review* 83, no. 4 (1974): 435-50. See also Shaviro, *Discognition*, for more recent considerations of this problematic, through the lens of speculative and science fiction.

In representing Ariel's confinement, imaginable both as play's prehistory in the pine and as a conditional possible future in the oak, the play offers readers and audiences an entrance into thinking before and beyond the Anthropocene's "time of the human," through the "arborealization" of Ariel and the "Arielization" of the tree. Taking inspiration from Aldo Leopold's chapter "Good Oak" in his conservationist classic *A Sand County Almanac* (1949), I read the trees of *The Tempest* as involved in ecological timeframes, traceable in their annual tree-rings, whether the trees still stand in the islandscape in the time of performance or have long before been stripped of bark in the play's prehistory and converted into timber. Leopold begins his chapter with the wood of a "particular" oak glowing in his fireplace, which he dates back to 1865; from the literary present, he moves back to the day when he identified the fallen tree as dead (struck by lightning), then moves forward to his sawing of the tree into timber, then back once again imaginatively through deep time: as the saw moves from the outer bark farther into the tree's interior, it "was biting its way, stroke by stroke, decade by decade, into *the chronology of a lifetime*, written in concentric annual rings of good oak."[18] Shakespeare's island tree-scape in *The Tempest* is imaginary, of course, but nonetheless corresponds to specific kinds of vegetal beings that inhabited the physical world in England at the time—or the Mediterranean or the "New World," depending on where one imagines the island to be—and that still exist throughout the world today, informing our narratives about climate change, deforestation, and other environmental concerns.

Like Leopold, dendrochronologists also "read" the rings of ancient trees to learn about Earth's environment in the distant past, in effect allowing climate scientists to read the "palms"

[18] Aldo Leopold, *A Sand County Almanac* (Oxford: Oxford University Press, 1999), 3, my emphasis.

of the future, a future shared (potentially) by humans and trees.[19] Thus, reading across the growing tree rings of the pine in which Ariel suffers allows for an oblique connection to arboreal bodies and substances in other chronological layers of the play, inter-missing either in its prehistory or between the acts and scenes of stage time.[20] Iovino and Oppermann stress that "the emanating point of the narrative is no longer the human self, but the human-nonhuman complex of interrelated agencies."[21] One such point in *The Tempest* is the inter-missing times of Ariel-in-pine and Ariel-in-oak, intra-acting within the storied matter of the play to communicate "the significance of proximal relations between embodied, performative entities."[22] As in Leopold's imaginative reading of tree rings, backward and forward in time, so too can we imagine that the trees that were cut down for building the ships of *The Tempest* are still alive at some point during the time that Ariel is growing in his circles of vegetal hell, living beings until they are felled and made into sailing barks and other vessels. These arboreal vessels and their vegetal temporalities intersect with the play's, even if some of them are in rotting states of decomposition. In conjunction with this analysis of long-dead arboreal material, I analyze the wine bottle Stephano constructs from the fresh bark of a tree, which is in the midst of arboreal death during its time in the play. The chapter's conclusion returns to a sustained discussion of the time Ariel "does" in the tree. In the instances of the wooden ships, painful moments of arboreal "skin" removal occur

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[19] For an overview of dendrochronology, see James H. Speer, *Fundamentals of Tree-Ring Research* (Tucson: University of Arizona Press, 2010). I feel I should mention that palm trees do not actually have tree rings, since they do not produce cambium. On palms, see Roy Ellen, "Palms and Protoypicality of Trees: Some Questions Concerning Assumptions in the Comparative Study of Categories and Labels," in *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*, ed. Laura Rival (Oxford: Berg, 1998), 57-79.
[20] On stage time versus story time, see Matthew D. Wagner, *Shakespeare, Theatre, and Time* (New York: Routledge, 2012). On this concept as it applies specifically to *The Tempest*, see B.J. Sokol, *A Brave New World of Knowledge: Shakespeare's* The Tempest *and Early Modern Epistemology* (London: Associated University Press, 2003), 25; 28.
[21] Iovino and Oppermann, *Material Ecocriticism*, 9.
[22] Oppermann, "From Ecological Postmodernism to Material Ecocriticism," 35. See also Barad on intra-action, as opposed to interaction, an important facet of her theory of agential realism, which draws on both feminist theory and quantum physics (32-33). Additionally, Barad discusses tree rings in relation to temporality (180-81).

in the play's prehistory, obscured by the stage/narrative time of the play. Stephano's barken bottle, on the other hand, represents the individual action of bark removal in the *midst* of dramatic time, inter-missing only between scenes, just moments prior to Stephano's entrance in 2.2 when his extradiegetic interaction with a tree leads to his fashioning of the bottle.

Because the removal of bark from felled trees to make beams, planks, and masts for ships was part of the process of timber production taking place across Europe and feeding into the expanding shipbuilding industry, the painful enmeshment of Ariel and tree(s) affectively exposes an other-than-human distress persisting throughout the play, accompanying its stormy oceanic setting. This arboreal anguish echoes ahead through the booming age of sail of the seventeenth and eighteenth centuries, amidst *The Tempest*'s temporal unfoldings in performance, up to the present day. From an ecomaterialist perspective, I figuratively read this anguish-distress dendro-chronologically, tracing the tree rings backward (Ariel-in-pine) and forward (Ariel-in-oak) across the relevant proximal bodies suffering together to locate an embodied, posthumanist ethics inhering the arboreal material of the play. In an era when we are approaching the intermission—if not extinction—of the human, this painful interim serves as an example of other-than-human timescales occurring within and alongside human narratives, brought into relief through Ariel's arboreal immersion. Ariel's anguish also serves, for twenty-first century audiences engaging with Shakespearean drama, as an affective register of the more-than-human distress felt by the planet—sensed perhaps more than witnessed—in the incompatible rhythms of bodies inhabiting (or attempting to inhabit) the same physical space.

(Vegetal) Time and *The Tempest*

Although Ariel is not technically human, he approaches humanity at various points in the play, especially in the context of human temporal capacities and limitations. Shakespeare clearly

portrays Ariel as an airy sprite, both magical and musical, and Ariel himself acknowledges his other-than-human status when he addresses Prospero with the conditional statement, "Were I human" (5.1.19). But, as B.J. Sokol observes, Ariel possesses a "peculiar materiality" that argues against "a notion of Ariel as a psychomantic representative of pure thought or disembodied imagination."[23] Indeed, his situation prior to being rescued by Prospero—being lodged or wedged into the "cloven" pine tree—suggests a tight and narrow spatial dimension from which Ariel cannot free his body. The fact that Ariel is a major character in the play (originally played by a boy actor) also adds credibility to this interpretation. Some artists who have depicted Ariel's predicament portray a humanoid fairy-body sticking out of a semi-hollow tree, while others imagine a more thorough fusing of Ariel's being with that of the tree; in either case, the text indicates that Ariel's substance, regardless of its degree of corporeality, adheres *within* the physical arboreal material of the pine tree, confined *inside* it, made to endure both the psychological and physical hardships of this positioning.[24] Furthermore, Ariel is human-like in that during the action of the play, he is bound to an anthropocentric understanding of time, a measured, countable time that contemplates passing moments or intervals, comparable to Jaques' expression of time in Shakespeare's *As You Like It*: "'Tis but an hour ago since it was nine, / And after one hour more 'twill be eleven" (2.7.24-25). The other characters in *The Tempest* also confirm (and conform to) this measured sense of time; for example, Prospero periodically checks the "time o' the day," to remind Ariel that their time "[m]ust by us both be spent most preciously" (1.2.241). Clearly, even though Ariel carries out numerous magical or supernatural acts during the play, he is still confined with all of the other actors/characters to the moment-by-moment duration of stage time, a human time; his time, when outside of the tree (that is,

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[23] Sokol, *A Brave New World of Knowledge*, 178.
[24] See Barton, *The Shakespearean Forest*, on staging that involved actors emerging from trees, 32-33.

throughout the action of the play), is in line with an anthropocentric, measurable time of events taking place one after another (i.e. the plot).[25] Human temporalities, however, are not the only ones present in *The Tempest*.

With its polyvalent title, Shakespeare's Jacobean romance-comedy has long invited contemplations about the nature of time, as it is perceived by humans or by nonhuman others. Sharing an etymological root with the Latin *tempus*, which can mean "time" or "season," the word "tempest" conveys not only the idea of stormy weather but also time and tempo.[26] Thus, it is not surprising that many Shakespearean scholars have interrogated the role of time in the play, thematically, formally, and theatrically, among other approaches.[27] In fact, much of Shakespeare's corpus, both his drama and poetry, has encouraged a large body of scholarship investigating questions related to time and temporality.[28] Yet, despite the influence of ecocriticism and critical animal/plant studies in early modern scholarship, there has been little attempt to engage with nonhuman temporalities such as that implied in Ariel's arboreal imprisonment. Overwhelmingly, scholars have been interested in time as expressed or perceived by humans, whether in the space of textual interpretation or in the moment of dramatic performance. A recent volume exploring Shakespearean genres and different "forms" of time in

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[25] "Moment" was a medieval unit of time, with 40 moments in solar hour. An hour, then, a variable measurement contingent on the season, was equivalent to one-twelfth of the period between sunrise and sunset. See Gerhard Dohrn-van Rossum, *History of the Hour: Clocks and Modern Temporal Orders*, trans. Thomas Dunlap (Chicago: The University of Chicago Press, 1996).
[26] *OED*, "tempest" *n.*, etymology.
[27] See, for example, Douglas L. Peterson, *Time, Tide, and Tempest: A Study of Shakespeare's Romances* (San Marino: Huntington Library, 1973); Evelyn B. Tribble, "The Dark Backward and Abysm of Time": *The Tempest* and Memory," *College Literature* 33, no. 1 (2006), 151-68; Nandini Das, "Islands of Time: *The Tempest* and Cultural Memory," *REAL: Yearbook of Research in English and American Literature* 29 (2013): 1-16; and Jason Hoult, "The Temporality of Eternal Prosperity: Prospero's Labors of Love in *The Tempest*," *The European Legacy* 22, no. 4 (2017): 443-55.
[28] An important foundational source is Ricardo J. Quinones, *The Renaissance Discovery of Time* (Cambridge, MA: Harvard University Press, 1972). For a recent overview, see Sarah Lewis, "Shakespeare, Time, Theory," *Literature Compass* 11, no. 4 (2014): 246-57. See also David Houston Wood, *Time, Narrative, and Emotion in Early Modern England* (Burlington: Ashgate, 2009).

Shakespeare's plays raises but does not follow up the intriguing possibility of exploring nonhuman temporalities. Lauren Shohet, the collection's editor, asserts in the introduction that we cannot be "confident about how time might appear to other people—not to mention to other species, to other orders of beings."[29] But if we are going to attempt speculations about people of other times and cultures, why necessarily stop at the human? A few studies on *The Tempest* have ventured outside the realm of human time to probe its portrayal of time from the perspective of God (divine or eternal time), but completely absent from interrogations of Shakespeare and time is an engagement with his dramatic representation of vegetal time.[30]

Michael Marder organizes his ontophytological interpretation of "the time of plants" into three distinct modes: 1) "the vegetal hetero-temporality of seasons," 2) "the infinite temporality of growth," and 3) "the cyclical temporality of iteration, repetition, and reproduction."[31] Vegetal *hetero-temporality* denotes the aspect of plant-time that entails an absolute derivation of plant-time from the time of the other, "whether this 'other' is a part of the organic world or a synthetically produced chemical mix, whether it pertains to the temporality of nature or to that of culture."[32] Secondly, the *infinite temporality* of vegetal growth corresponds with the hetero-temporality of plants in that the vegetal tends toward proliferation, an extension of the being of plants out to and toward the other *without end*—although *not* without interruption, because plants embody a rhythm that vacillates between energy devoted either to growth *or* to reproduction, but not both at the same time.[33] Lastly, vegetal time is *cyclical*, not only in the reproduction of new plants but also in the vegetal's iterable expressions of itself, in its renewals of non-identical

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[29] Lauren Shohet, *Temporality, Genre and Experience in the Age of Shakespeare: Forms of Time* (London: Bloomsbury, 2018), 2.
[30] Cite studies; check article version
[31] Marder, *Plant-Thinking*, 95.
[32] Ibid., 101.
[33] On arboreal reproduction, see Chapter 4.

forms of roots, flowers, leaves, and other "concrete self-representations of vegetal life."[34] All three of Marder's modes of vegetal temporality feature in *The Tempest*'s imagining of Ariel's arboreal confinement, to varying degrees, but the generalization of the large category "vegetal" tends to obscure the particularities of vegetal entities that exist in more specific instantiations than the broadly conceived category of "plant." The *arboreal* is a specific subset of the vegetal, while pine and oak even more specifically represent different strains or embodiments of arboreal being. Marder claims, "Whenever human beings encounter plants, two or more worlds (and temporalities) intersect: to accept this axiom is already to let plants maintain their otherness, respecting the uniqueness of their existence."[35] However, we must also acknowledge an otherness between different orders of vegetal being, which are more or less similar depending on the beings in question. *The Tempest* affords, through Ariel's (long) suffering body, a means to gauge that difference in his potential encounters with two slightly different experiences of vegetal time. As literary scholar John C. Ryan warns, "Botanical events cannot be reduced to the terms of one mode of time or the other, but rather as the interpenetration of temporalities. By way of their evolutionary constitution, some plant species disrupt the chronos of annualism and biennialism for the kairos of unscripted perennialism at the distant margins of human awareness."[36] Trees, of course, are perennial, but different species experience and weather the seasons in their own distinctive ways. Additionally, individual trees, like humans, are subject to both genetic and environmental factors, and likewise age variously depending on climate and setting.[37]

[34] Marder, *Plant-Thinking*, 115.
[35] Ibid., 8.
[36] Ryan, *Plants in Contemporary Poetry*, 166.
[37] Wohlleben, *The Hidden Life of Trees*, 60-67.

An additional word on the "quality o' th' climate" of the isle is, therefore, in order (2.1.199). Although postcolonial scholars like to frame the island of *The Tempest* in the context of European exploration and colonization of the Americas, usually citing Ariel's debated "still-vexed Bermudas" reference (1.2.231), Shakespeare explicitly sets the play in the Mediterranean, which has a temperate, not tropical, climate.[38] If the island *were* located in the warm tropics, then Prospero's use of "winters," and Ariel howling them away in the oak, would make sense only as a figurative or proverbial throw-away line, but given the island's location somewhere in the Mediterranean Sea, one would indeed expect some variation in seasonal temperatures. Evergreen pines and deciduous oaks alike flourish in temperate climates, deciduous trees going dormant and shedding their leaves with the arrival of colder weather.[39] The Mediterranean is not known for having exceptionally cold weather in its winter season, but, owing to climate change and the effects of the "Little Ice Age," climatologists understand the weather in the Mediterranean around this time (and in the early modern period generally) to have been somewhat erratic and unpredictable.[40] Based on evidence from the text alone, we observe that Shakespeare portrays a Mediterranean island that might actually be cold during the play. Prospero specifically indicates the large store of logs hauled by Caliban and Ferdinand to be firewood, since Caliban "does make our fire" (1.2.312). While this fire would no doubt have been used for cooking, the excessive amount of it that Prospero orders suggests the island's weather might be marginally cold, particularly during the winter season, cold enough at least to warrant the retrieval of reserve firewood—even if Caliban grumbles that "there's wood enough within" (1.2.315).[41] These felled

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[38] See, for example, Peter Hulme, *Colonial Encounters: Europe and the Native Caribbean, 1492-1797* (New York: Routledge, 1992), 107.
[39] On the history of the climate in the Mediterranean region and its effects on flora, see John D. Thompson, *Plant Evolution in the Mediterranean* (Oxford: Oxford University Press, 2005).
[40] On reading the Little Ice Age's effects in Shakespearean sonnets, see Markley, "Summer's Lease."
[41] Islands such as the Aegadian Islands and the Stagnone Islands, off the western coast of Sicily, experience cold winds (https://www.climatestotravel.com/climate/italy/aegadian-islands).

logs providing warmth to the marooned islanders gesture toward the trees still standing in the landscape, affected, like the ensemble of human characters, by the approach of cooler weather and a decreased amount of sunlight. Pines, like the one that holds Ariel for twelve years, hold onto most of their needles despite the winter; however, they do shed about a quarter of their needles each winter, meaning that in the twelve years of his imprisonment, the pine tree would have completely cycled through its old needles for new ones.[42] The island's deciduous oaks, on the other hand, like the one Ariel manages to avoid, would be letting go of their leaves at the time of the play (if approaching winter) or bare (if in winter). Even if we read these trees as standing in for those of England rather than Mediterranean trees, in either case their tree-rings would bear testimony to the intensity of the winter season that particular year, legible to the eyes of dendrochronology.

Admittedly, one should be cautious when applying Marder's ideas about vegetal temporality to Renaissance-era literature, which predates Heidegger's ontological explorations as well as more modern time-keeping/tracking practices. There is disagreement about the extent to which modern inventions like the mechanical clock have altered people's experience of and relationship with time, but generally scholars accept that the rise of capitalism and growth of urban centers have coincided with an increased pace of living, divided into smaller units of time and more frequently dependent upon precise and punctual time-keeping practices in order to sustain day-to-day operations.[43] Some historians and literary scholars see the Renaissance as a period in which humans started to think of time in a countable, linear sense, opposed to a simpler

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[42] Wohlleben, *The Hidden Life of Trees*, 145.

[43] See Jacques Le Goff, *Time, Work, and Culture in the Middle Ages*, trans. Arthur Goldhammer (Chicago: The University of Chicago Press, 1980); David S. Landes, *Revolution in Time: Clocks and the Making of the Modern World* (Cambridge, Harvard University Press, 1983); and G.J. Whitrow, *Time in History: Views of Time from Prehistory to the Present Day* (Oxford: Oxford University Press, 1988).

sense of time perceived as recurring or cyclical, but others have rightly pointed out that the designation of such a paradigm shift from medieval to postmedieval is reductive and insufficient. For example, Michael Bristol challenges the idea that medieval and premodern people generally existed with a nonlinear sense of time, arguing that they were in tune with both cyclical and linear modes of thinking about and experiencing time. He explains,

> Almanac and prognostication represent the two fundamental axes of temporality as cursus and line for the sixteenth century. Time is clearly understood and experienced in manifold concrete forms, natural processes, and practical activities such as the growth of flowers, the preparation of food, the care of the body, and in the more abstract, symbolic commemorative elements of the liturgical calendar.[44]

The players and audience of *The Tempest* during Shakespeare's day would have related to time in these complex ways, thus affecting their perception of the play's reference to Ariel's arborealized existences. Although early modern audiences in London would not have been privy to Marder's Heideggerian assessment that "the meaning of vegetal being is time,"[45] they were certainly capable of differentiating and employing a wide variety of modes and representations of time, linear and circular, which included an appreciation for nonhuman scales of vegetal growth, of long and short duration, coniferous and deciduous.[46]

Although above I use Jaques' hourly measuring of time from *As You Like It* as an example of a sequential, anthropocentric mode of time-keeping, his speech evokes vegetal temporalities as well:

> And so, from hour to hour we ripe and ripe,
> And then, from hour to hour, we rot and rot. (2.7.26-27)

Jaques deploys a metaphor of humans ripening and rotting like fruit, drawing on seasonal rhythms related to vegetal reproduction and the repetition of vegetal form in fruit and flower, to

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[44] Michael D. Bristol, *Big-time Shakespeare* (New York: Routledge, 1996), 157.
[45] Marder, *Plant-Thinking*, 95.
[46] See Wagner, *Shakespeare, Theatre, and Time*, 34-67.

highlight the convergence of cyclical time in the bodies and body parts of humans and plants alike. In *The Tempest*, Ariel's time in the tree also tracks vegetal modes of experiencing time, attuned to celestial and seasonal cycles that resist human attempts to contain or possess time, though his torment ultimately evidences an inability or unwillingness to accept such a nonhuman temporality. Channeling Derridian thinking, Marder speculates the following about the cyclical/circular temporality of plants:

> Vegetal *différance* inscribes the time of plants right onto the spatial register of material sense … or perhaps time is not inscribed but, in a word Jean-Luc Nancy has coined, *ex-scribed* on the vegetal body, which, on the hither side of the metaphysical distinction between interiority and exteriority, marks time in a peculiarly geometrical style, by the accretion of 'rings,' those symbols of eternity and indicators of the tree's inexorable aging. Time does not in fact preexist such ex-scription but derives from the *différantial* 'opening' of the register, where it leaves its traces over and over again.[47]

Marder's application of Nancy's "ex-scription" to vegetal temporality applies to Ariel's arborealization through time. In the prehistory of *The Tempest*, Ariel's body undergoes this peculiar form of materially becoming-with the tree as its (or their) body slowly expands. In these moments, Ariel is both inside and out, trapped inside the tree, but also, in his enmeshment with the tree, moving *outward with* those material traces of time ex-scribed in the repeating circular figures of tree rings. In other words, Ariel's body simultaneously grows with and against the forming grain. *The Tempest* affirms a materiality, then, connected to humans' perception of time via their observations of felled trees' annual growth rings; however, it simultaneously highlights the materiality of other-than-human temporalities occurring *outside* of human observation and experience, preserved and persisting *under* the bark of pine and oak, alive with their own energies. In their unintentional holdings of Ariel in place, the trees contain something *akin* to the human within them, suffering along with *and* because of a human(kind) presence. The circular

[47] Marder, *Plant-Thinking*, 112 (original emphases).

shape of the expanding tree's interior resonates, at the same time, with "circular" energies found in certain dramatic forms. Agnes Heller explains that "Greek drama compresses time geometrically; it describes a circle. Twenty-four hours is a perfect circle, from dusk to dusk, from dawn to dawn, and so on."[48] The "compression" of dramatic time into a circular form corresponds with the annual tree ring. Like Marder, Heller considers such "geometric" or cyclical time to be "the time of repetition and repeatability."[49] In Ariel's fusion of anthropocentrically understood time into the seasonal and cyclical temporality of arboreal growth, *The Tempest* depicts a more-than-human time that coincides with measured time but that always escapes it and moves beyond it in its reiteration, a *missing* time as much as it is *inter*-missing, divisible and halve-able but never have-able: an open, ongoing, and endless experience that Ariel has difficulty even remembering.

(Dis)em-barkment

From Ariel's insular, dendrochronological distress, we can move outward to other sites of arboreal materializations in *The Tempest*, reading its wooden vessels not simply as dead arboreal bodies but also as containers of multiple substances and agencies, human and nonhuman. Specifically, the tree rings visible in the play's wood and timber allow for a figurative cross-referencing of arboreal substance comparing the stuff of the island's living, growing oak and pine to the non-living stuff of the felled oak and pine that composed many sailing ships of this era. These comparisons can be applied to the play's smaller arboreal vessels as well: a floating cask jettisoned from Alonso's ship, as well as Stephano's barken bottle, both of which contain fermented vegetal contents imported from Europe. Pine and oak, the two species of trees into

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[48] Agnes Heller, *The Time Is Out of Joint: Shakespeare as Philosopher of History* (Lanham: Rowman & Littlefield, 2002), 120.
[49] Ibid.

which Ariel's body may be immersed, correspond with two of the most common materials for shipbuilding timber in Europe during the early modern period. Specialized pieces of oak were needed for certain parts of the ship, while pine or similar confiners were preferred for constructing tall masts.[50] Following the idea of storied matter, we can continue to read the tree rings of the play in a dendro-*archaeological* sense. A dendro-chronologist who reads the layers of living trees must core them to discover the stories within; dendro-archaeologists, however, scour the sea-bottoms, searching for shipwrecks composed of wood long dead and far removed from their places of origin, but they do have the advantage of being able to read the rings on the very surface of the rotting timber, the bark having been removed in the process of shipbuilding construction and the rings exposed in cross section.[51] This section traces this arboreal material in the play from its largest quantity to its smallest, beginning with the undoubtedly large and stately "king's ship" caught in the storm in the first scene and ending with Stephano's hand-held barken bottle. In all but the last of these instances, timber is involved and therefore indicates the necessary felling of entire trees to bring about their making, trees whose stories intra-act within the play's running time as well as inter-missing outside of it.

In this section, I also veer slightly from "bark" to the active verb "embark," which has the literal meaning of "in bark." To be in-bark recalls Ariel's enmeshed arborealization inside the tree's bark; it also coalesces around the action of getting on ("embark") and off ("disembark") wooden sailing ships, the embarking and disembarking that large numbers of European bodies were doing at this time. "Embark" can indicate a directionality of movement *into* the bark (ship)

[50] See N.D.G. James, *A History of English Forestry* (Oxford: Basil Blackwell, 1981), 141-45.
[51] Rackham indicates that some timber in this period retained the original sapwood and bark (*Trees and Woodland*, 67). On dendroarchaeology, see especially Brad Loewen, "Recent Advances in Ship History and Archaeology, 1450-1650: Hull Design, Regional Typologies and Wood Studies," *Material Culture Review* 48 (1998): 45-55.

or the capacity of the bark to hold passengers or cargo.[52] In Shakespeare's day, the term "bark" was common for small sailing vessels (he uses it a number of times in this sense in other plays). Various forms of the word "embark" are common across Romantic languages, and their emergence in the mid-sixteenth century attests to the prominence of the "Age of Sail" as well as that of widespread European colonization of the Americas and other areas. The term "bark" used to denote a ship is etymologically related to "barge" rather than to the "bark" that refers to the outer layer of a tree trunk, arriving in English from French in the late Medieval period, but the homonymic overlap of the two words suggests a possible arboreal connection.[53] Despite their etymological divergences, (tree) bark and (sailing/nautical) bark converge, at this time period, in a way that mirrors their overlapping tree rings in time. The presence of bark points to life underneath: the human in the arboreal. Although I do not advocate following shaky etymological explanations that suggest the various meanings of "bark" all refer to types of defense, the arboreal "barks" of *The Tempest* are related in the sense that the bark containing Ariel and the bark containing Stephano's sack are analogous to the barks, ships, and boats containing human passengers: they are all, in a sense, spirits within, temporarily invisible within/under the bark. The ship during this period stylized as "bark" was not made from bark, but rather wood, the interior of a tree. The sailing barks of early modern provenance thus blur the exterior/interior dichotomy of bark/wood, inverting and exposing the tree's interior rings, always already *ex*-scribed in iterable moments of arboreal time, visible in the ship's timber; on the other hand, the action of aquatic, oceanic temporalities, set by the tempos of wind and wave, are simultaneously in the process of obscuring those rings, weathering and warping the arboreal substances and

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[52] See *OED*, "bark | barque" *n.*[2], etymology, as well as "embark" *v.*, etymology. The related term, "barge," of course, is still in use.
[53] See Charles Richardson, *Illustrations of English Philology* (London: Gale and Fenner, 1815), 51.

surfaces. Additionally, the wooden hull of the ship semiotically performs a sort of arboreal exteriority in its shell-like quality of holding the substance (men) inside it. This persistent presence of arboreal matter in the play, via "bark" as well as "embark," points to a substantial loss of arboreal life but also to the ongoing interaction of humans and trees in painful circumstances: these barks have lost all their bark, yet their bodies transport human bodies within them over the often stormy and dangerous sea.

In a sense, the early modern wooden ship is a kind of moving graveyard of arboreal bodies, holding living bodies within. Such vessels represent *composite* arboreal bodies, a fusing of various species of trees into dead, bark-less bodies that retain their wooden characteristics and contain the bodies of their human sailors and passengers. Bark is also, of course, a kind of arboreal skin; therefore, to be in-bark, from a speculative arboreal perspective, is to be in one's skin, or perhaps better, one's body. Steven Connor asserts, "Skin has come to mean the body itself."[54] In noting this conflation, he stresses the independent existence of skin despite its inseparability from a body: "Skin is not a part of the body not because it is separate from it but, surprisingly, because it cannot come apart from it … The skin always takes the body with it. The skin is, so to speak the body's face, the face of its bodiliness."[55] Bark is a crucial facet of arboreal embodiment, whether or not one engages in personification or the analogizing of similarly functional body parts. Thus, extrapolating from the idea of human embodiment, I use the terms "embarkment" and "disembarkment" in this section as a way of expressing the speculatively envisioned lived and/or living experiences of trees. A *dis*embodied experience usually implies a ghostly disorientation or disassociation from the body, but I use "disembarkment" here as a way of trying to understand the experiences of trees whose bark has

[54] Connor, *The Book of Skin*, 29.
[55] Ibid.

been removed to some extent or another, in the course of the play or in its prehistory in inter-missing time, a way of thinking with arborealized temporalities. Having been processed and shaped into boats, the bark of barks, which was stripped away from the wooden timber used to construct them, is long-lost, only distantly bearing some metonymic relation via a common word that referred to small ships of the time, in effect co-*writing* a general "feeling" of disembarkment underlying the explicit "barks" of *The Tempest*. While this reading goes deeper into the core of arboreal "being"(s), it also moves closer to the outer edge, the younger wood, which is closer to the "skin" or bark of the tree, closer to the living cambium, and therefore closer to the time at which the tree was felled and the time in which Ariel suffers under the bark-skin of the pine.

Like humans and animals who leave behind skeletons, these wooden arboreal bodies leave behind a dead structure that haunts the human activities and industries that make use of them, the years of their lives written in and across their very "bones," even if their skin has been stripped long ago. While technically the dead arboreal bodies of ships might consequently represent "skinned" trees, devoid of their bark, the brief mention of the sailing bark in *The Tempest*, while easy to overlook in contrast to the more weighty theatrical presences of the king's ship and Prospero and Miranda's life-boat, still acts as a reminder of the barky ontological origins of these other vessels, the thinnest layer of bodily arboreal semiotic trace scraped away, giving way to the skeletal hybrids of pine, oak, and other wooden materials. Connor remarks, "The skinned body is less a body even than a skeleton … The skinned body is formless, faceless, its face having been taken off with its skin."[56] This bark, floating between the other two seagoing vessels in the (denro)chronology of the play, serves as a reminder of that which is missing from the arboreal bodies that compose the wooden ship, that which presents itself on the body of trees

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[56] Ibid.

to the world, a face of sorts, following Connor. Additionally, the bark's brief appearance simulates a kind of ghostly, dis-embodied arborealization. Plant studies artist Prudence Gibson claims, "The dead tree has a significance now that is different," that is, different from the conventional anthropocentric viewpoint in relation to vegetal others.[57] Gibson explains that many Australian Picturesque colonial painters "used the fallen dead tree across the foreground or mid-ground of the painting to focus the eye as it moves towards the distant background … Humans have literally (and conceptually) used nature as a framing device. It's part of our construction of nature that we have seen it as an inert backdrop to human action: we can see this perception in the way we represent it in art and literature."[58] Rather than a dead, fallen tree in the islandscape, it is the aggregation of dead bodies of trees that structures a dendrochronological, ecomaterialist reading of *The Tempest*, implicating the sailing vessels of colonial conquest, moving human and nonhuman bodies across the ocean, to islands and other lands. The ecological is necessarily bound up in the colonial, the logics at this point in history inseparable.[59] To embark implies a directionality toward colonizing other lands and peoples; to disembark is much more proximate and imminent, human feet setting down on beaches and moving toward exploitation, extraction, and human harvests of other humans as well as "natural" resources like plants and animals.

The play's opening scene begins, of course, on the king's ship amidst the stage direction of "tempestuous noise of thunder and lightning." The audience later learns that Ariel, at Prospero's command, has magically stirred up this foul weather. In one sense, the situation threatening the king's ship is a clear metaphor for "kingship" in a play that interrogates the limits

[57] Prudence Gibson, *The Plant Contract: Art's Return to Vegetal Life* (Leiden: Brill Rodopi, 2018), 163.
[58] Ibid., 164.
[59] See Elizabeth DeLoughrey and George B. Handley, eds., *Postcolonial Ecologies: Literatures of the Environment* (Oxford: Oxford University Press, 2011). See also Rob Nixon, Slow Violence and the Environmentalism of the Poor (Cambridge, MA: Harvard University Press, 2011).

of power and sovereignty in the microcosmic space(s) of the island. However, this "brave vessel," as Miranda describes it, also represents a large arboreal body, containing multiple varieties of arboreal (sur)faces, coming into contact with Ariel, an erstwhile arboreal spirit. Presumably what makes the vessel so "brave" is its intimidating quantity of wood (as well as its guns), but the human souls inhabiting it are anything but brave in the presence of the storm, encased in a kind of hell in a manner mirroring Ariel's confinement. As Ferdinand jumps overboard, he cries out the well-known line: "Hell is empty, / And all the devils are here" (1.2.213-14). Gonzalo associates the human bodies with that of the wood when he begs the elements for mercy, eventually falling into a thrice repeated, "We split, we split, we split!" echoing the repetitive axe fall that would have chopped at the trees to split the wood and make it into the ship's timber, in an unintentional reenactment or memorial of arboreal pain and death. Since this ship is the official vessel of the king of Naples, we are safe to assume that it is a ship of significant arboreal substance. It probably would have been understood as a large galleon-style ship, the most common type of warship among European nations in the sixteenth century, which would be developed in the seventeenth century into even larger ships-of-the-line.[60] In fact, it was in 1610, the year *The Tempest* is believed to have been composed, that the English launched the *Prince Royal*, a massive vessel that boasted three gun decks, the first of its kind, sporting fifty-five canons. Such a ship required timber from many diverse trees. As N.D.G. James explains, "In building a ship of the line, oak, elm, and beech were used in the construction of the hull but the masts and spars were of pine and spruce."[61] He goes on to assert, "The

[60] It was the new, maneuverable "race-built" galleons that helped the English win the naval battle against Spanish Armada in 1588. See Eric H. Ash, *Power, Knowledge, and Expertise in Elizabethan England* (Baltimore: The Johns Hopkins University Press, 2004).
[61] James, *A History of English Forestry*, 142. On more specific instances of the types of timer used for different functions in shipbuilding, see John T. Wing, *Roots of Empire: Forests and State Power in Early Modern Spain, c. 1500-1750* (Leiden, The Netherlands: Koninklijke Brill, 2015). Wing notes, "In addition to oak and pine in Europe,

building of a wooden ship of any size was a formidable task but in the case of a ship of the line it was a tremendous undertaking and completion usually took at least five years."[62] Such a feat required the felling of many trees, amounting to about 2,000 oaks and probably as many pines.[63] Important to note in James's comment is the multi-year process of ship construction; during the time that trees were being continually felled to complete the structure, living trees still standing were adding to their bodies five layers of arboreal material. In the time that Alonso's ship is built, Ariel experiences an indescribably long five years of growth measurable in mere centimeters but also immeasurable in the register of an arboreal experience of passing time.

The merging of spiritual storm and arboreal body also occurs in the moments of the play's opening scene just prior to the shipwreck, Ariel's "time" of arborealization in the play's prehistory now coming into contact, multi-temporally, with the rings of time made evident in the splitting of ship timber brought about by Ariel's magical tempest.[64] As Steve Mentz argues, "Shakespeare's dramatic poetry presents the spirit multiply, in immaterial and material forms. Ariel's account of the storm emphasizes elemental plurality and dynamic pressure."[65] While Mentz also suggests "[t]he spirit's self-description combines all the classical elements except earth, as Ariel starts flying in the air and moves to water and fire before returning to airy clouds," Ariel's "earthiness" harkens back to his period of enrootedness. His arboreal solidity re-members itself in among the ship's planks and joists. With the general acceptance of Descartes' dualistic mind-body philosophies as well as William Harvey's *De motu cordis* (1628), the world at the

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the highly esteemed timbers typically included beech for oars; fir for masts, spars, and planking; larch (in northern Europe) for decks and frames; elm for spars; and walnut for rudders" (8).

[62] Ibid., 143. In early modern shipyards, small ships were also built alongside the larger ones.

[63] Nardizzi, *Wooden Os*, 8.

[64] On multitemporality in early modern literature, see Harris, *Untimely Matter*.

[65] Steve Mentz, "Airy Spirits: Winds, Bodies, and Ecological Force in Early Modern England," in *The Shakespearean International Yearbook 15: Shakespeare and the Human*, ed. Tiffany Jo Werth (Burlington: Ashgate, 2015), 23.

beginning of the seventeenth century was moving toward a more modern conception of human anatomy and physiology, one that recognized the brain as the seat of intelligence and understood the heart as an internal organ of circulation. However, at the turn of the seventeenth century when *The Tempest* was first performed, the general understanding of the heart and human "spirits" conformed more closely to a "medieval" view that conceived of a respiring heart, intra-acting within the physical environment.[66] Miranda expresses empathy when overcome with grief at the apparent suffering of the shipwrecked crew, crying:

> …O, I have suffered
> With those that I saw suffer—a brave vessel
> (Who had no doubt some noble creature in her)
> Dashed all to pieces. O, the cry did knock
> Against my very heart! (1.2.5-9)

The arboreal material of the vessel—a "her" here, in the objectifying nautical tradition of feminizing sailing ships—participates in an elemental cacophony, the various species of trees having suffered a "dashing all to pieces" years ago, contemporary in the play's chronology with the constant "knock" of Ariel's wooden cries. Thus, the sensation implied in affective distress, expressed in shaking and crying, transfers across physical membranes in the world of the play, whether wooden, barken, or human (fleshly) in bodily orientation, through the media of spirits, air, or sounds that echo Ariel's anguished groans elsewhere in time and space.

In addition to the splitting arboreal bodies of this stately vessel, two arboreal "butts" are present in *The Tempest*, which refer to much smaller vessels than the king's "brave ship." The first of these is also a (barely) sea-going vessel: the "rotten carcass of a butt" in which Prospero and Miranda are conveyed to the island before the beginning of the play. With this instance, Shakespeare continues to associate the body of an arboreal vessel with fleshly human parts, in

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[66] See Heather Webb, *The Medieval Heart* (New Haven: Yale University Press, 2010).

this case the rear end (Shakespeare uses “butt” to mean “end” in other plays, and he also uses “buttocks” occasionally). Prospero emphasizes its state of *un*liveliness with the phrase “rotten carcass,” a body not only dead but severely decaying as well. The denomination of the boat/butt as a bodily “carcass,” however, ties this bit of arboreal material to the other two seagoing vessels in the play: the king’s ship as well as the bark that temporarily contains Prospero and Miranda when they are exiled from Milan. Their boat contrasts starkly to the “brave vessel” that opens the first scene, though both are of course made of wood. As a “rotten carcass,” Prospero’s skinny butt is a skeletal object of derision. Although they are “hoist” aboard, Prospero and Miranda nonetheless do “embark” in their little boat, that is, enter the bark. Like Ariel, they are forced into such a situation, em-barked in a rather unpleasant way. Prospero makes the play’s first reference to “bark,” when he is telling Miranda how they were originally marooned on the island:

> … they hurried us aboard a bark,
> Bore us some leagues to sea, where they prepared
> A rotten carcass of a butt, not rigged,
> Nor tackle, sail, nor mast—the very rats
> Instinctively have quit it. There they hoist us
> To cry to th’ sea that roared to us, to sigh
> To th’ winds, whose pity, sighing back again,
> Did us but loving wrong. (1.2.144-51)

Two vessels are mentioned here: a bark and a butt (which some editors emend to “boat”).[67] Prospero and Miranda apparently travel by bark along a river or another body of water until they reach the ocean, at which point they are jettisoned into their little dinghy. Although the word

[67] The word “boat” is used by Shakespeare some 27 times (about 7 of these are in reference to the boatswain of *The Tempest*; one of them is the emended ‘butt’), and the word goes back to early Old English. “Butt” is used 10 times in Shakespeare (11 if you include this one), but rarely in reference to seafaring, though *Othello* seems to in 5.2; generally, it refers to the end of something – Shakespeare even uses the head/butt opposition used in the twenty-first century. The three times in *Tempest* are all in reference to Stephano’s store of wine – not the barken bottle but the original butt of sack.

"butt" is not recorded in the *OED* to refer to a boat, Shakespeare uses it figuratively to do so and also connects Prospero's usage of it here with the later use of the word by Stephano who survives the storm by clinging to the "butt of sack" (2.2.119), relying on the homophonic similarity of boat/butt. Unlike the sailing bark they initially set out in, though, their "butt" apparently has no means of steering or navigation, at the mercy of the wind and the waves. The bark, a sailing vessel, would have had a mast, like that of larger ships usually composed of coniferous species like pine or fir, while Prospero and Miranda's little boat is mastless, without sail or rigging. This situation puts them immediately into the same orientation toward the stormy oceanic weather as the king's ship after having lost its rigging: open and exposed. The "sigh" of winds need not be personified as "pitying" to exert a physical force upon the rotting arboreal material holding barely surviving humans clinging to it. The cries and roars of the sea echo, too, the physical exhalations that Miranda breathes in the direction of the sinking king's ship. A carcass, however, human or arboreal, can neither produce nor harness breath/air, whatever its origins may be.

An even smaller arboreal vessel, the "butt of sack" carried on board the king's ship is a life-saver in the play as well. After being "heaved o'erboard" by the sailors, the cask is evidently what Stephano grasps a hold of to preserve his life, as it simultaneously preserves the sack, or spirits, within it.[68] This butt of sack, in its woodenness, despite having been "disembarked," in more ways than one, nonetheless corresponds to the material of the barken bottle that Stephano crafts, as he drunkenly mixes up wooden "butt" and barken "bottle" when he demands Trinculo explain how he survived the storm:

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[68] "Sack" was the term used for a popular fortified white wine imported to England from Spain or the Canary Islands. On the portrayal of sack in Shakespeare, see Goldstein and Tigner, *Culinary Shakespeare*, especially chapters 2, 4, and 6.

> How didst thou scape? How cam'st thou hither? Swear by this bottle how thou cam'st hither. I escaped upon a butt of sack, which the sailors heaved o'erboard—by this bottle, which I made of the bark of a tree, with mine own hands since I was cast ashore. (2.2.117-121)

Stephano's repetition of "by this bottle" at the end of his line curiously connects three different arboreal objects in one sentence—the wooden butt of sack, the barken bottle Stephano has made, and the island tree recently bereft of some of its bark. Stephano's insertion of his own manner of escape breaks up his question and demand for Trinculo's oath, but the interruption neatly aligns the butt of sack thrown overboard into the same breath as the barken bottle Stephano holds up. His mentioning of the material and method of production is almost an afterthought, yet all three arboreal objects function in the rhetorical space of his dialogue as arboreal containers, or skins, preserving something within. In the case of the tree, its bark preserves the living biological material that still resides beneath, assuming that Stephano does not strip all of the tree's bark. The butt of sack and Stephano's barken bottle both preserve the sack that the three fools consume throughout the play. The annual growth rings that would be evident in the butt's wood hail from trees of European provenance, potentially from trees of the same forest that were felled for timber to construct the ship, bark, and butt aforementioned; the barken bottle, however, composed entirely of bark, would have no tree rings to display at all. The lack of growth rings does not mean that the bottle would show no evidence of the tree's age, as bark does give some indication of the passage of time, if not as precise in record-keeping as its wooden interior.

Essentially, the more that a tree's bark is split and cracked, the older that tree will be.[69] Therefore, even an arboreal object as small as a wine bottle can be read dendrochronologically in reference to the pine and oak trees in which Ariel suffers or might suffer inside. The species of tree from which Stephano makes his bottle is not given, but the possibility exists that it coincides

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[69] Wohlleben, *The Hidden Life of Trees*, 63.

with other pine or oak trees on the island, possibly one of those exact same trees.[70] Assuming Stephano's action of cutting and removing the tree's bark takes place between the first and second scene of Act 2, this pain-inducing entrance into the tree's interior, via the removal of its bark, intersects Ariel's vegetal time in the tree, not in the pine-tree past or a potential oak-tree future, but in the short performative gap between one scene and the next, a moment of time that is unrecorded because of its nonexistence in the world of the play. Stephano's offhand remark in reference to it in the scene exposes anew (and, paradoxically, for the first time) the fresh wound of the tree for the audience. This layer of arboreal time is *not* preserved in growth rings dating years before the play, yet the interruption into this growth process by breaking into the tree's outer body now theoretically allows for a different kind of temporal measurement of arboreal pain in relation to its own un-becoming: the visible sap, oozing slowly out from the tree's wound (particularly thick and sticky, if pine sap) seems to be out of view for Stephano, Trinculo, and Caliban, suffering in this thickly articulated flow just out of frame, or off-stage, in the imaginary islandscape. Just as conceivably, the tree might stand in view, for characters and audience, its dripping sap analogous to (and proximal to) the intoxicating liquid now contained in its separated body part turned into drinking vessel.

The wounded, unidentified tree does more than simply survive; it persists, along with humans, like the characters of *The Tempest*, surviving the shipwreck, surviving despite them, alongside them, and even within them, even as flakes and pieces of the barken bottle infuse its alcoholic contents. If such a bottle were to be constructed, the outer bark would surely serve as the outer part of the bottle, replicating the tree's original structural orientation for the bark. This

[70] Other interesting possibilities include the cork oak and the birch tree, i.e. trees whose bark might be suitable for containing liquid. The birch is not mentioned in *The Tempest*, though it does appear elsewhere in Shakespeare. Birch trees since prehistoric times have been hollowed out and used to create birch bark boats, or "dugout" canoes.

design would keep out the roughest bits, but the configuration would also mean that the inner bark, which contains living cambium, would line the bottle's inner walls, somewhere in the process of dying as a result of being cut off from its body. The "disembarked" tree of the island that Stephano de-faces also relates to the trees felled to construct the vessels that bring the Europeans to this island. Nardizzi's useful reading of *The Tempest* in the context of deforestation resulting from the high demand for wood for shipbuilding, among other industrial applications, attempts to account for the ample piles of firewood depicted in *The Tempest*; however, this wide-lens approach may overlook more personal, small-scale human-arboreal interactions, such as the unique construction of Stephano's barken bottle, harvested from a single tree, not using the bulk of its bodily material, and while almost certainly injuring the tree and inflicting some pain on it, he does not kill it outright by cutting it down.[71] Rather, Stephano's bottle, fashioned through the tree's dis-embarkment, evokes a surviving-with and suffering-with, a shared pain across human and vegetal bodies, bodies not optimally living but certainly "getting by," despite pangs of thirst and hunger, despite being vulnerable, out in the open, and exposed to the elements, like Prospero and Miranda in their carcass-boat. Similarly, as Stephano, Trinculo, and Caliban work together to weather their circumstances, and they manage their survival in part by sharing Stephano's barken bottle.

This bottle is a curious theatrical prop, little commented upon, yet it serves as an analogue for Ariel's confinement inside the pine tree.[72] Throughout this scene and later scenes, the bark-infused sack continually enters the men's bodies, in-bodying them, liquid (though corporeal) spirits trapped in rigid bodies/skins, akin to Ariel in a hell of slow arboreal existence,

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[71] Martin, *Shakespeare and Ecology*, 110.

[72] Andrew Gurr speculates that it is actually leathern rather than wooden, as performance prop, in "Stephano's Leather Bottle," *Notes and Queries* 59, no. 4 (2012): 549-50. See also Mark Taylor, "Prospero's Books and Stephano's Bottle: Colonial Experience in *The Tempest*," *Clio* 22, no. 2 (1993): 101-13.

somewhere between life and death. Speculatively, then, we might remain at the site of the tree's removed bark in a movement to the edge of Ariel's arboreal growth, at the youngest, freshest point of the tree's body, a place of vulnerability, particularly now that it is exposed.[73] Furthermore, the "spirits" in the barken bottle, once part of an arboreal body, are shared among human lips in a more-than human, skin-to-skin encounter that signifies a transfer across physical surfaces. The bottle performs the specific task on stage of being kissed by (and kissing) the performers playing Stephano, Trinculo, and Caliban, as Stephano repeatedly commands the others to "kiss the book," an action of pledging allegiance by kissing the Bible, but semi-blasphemously replacing the Holy Book with the barken bottle of sack.[74] Thus, kissing the book is tantamount to kissing the bark, putting lips to the torn-off surface of the nearby tree. Although Caliban offers to "swear upon that bottle to be thy true subject, for the liquor is not earthly," the bottle itself must indeed be of earthly—and earthy—composition. When Stephano commands Caliban to "kiss the book" and drink, Stephano reassures the group, "I will furnish it anon with new contents," replenished from the butt, which Stephano has stored "in a rock by th' seaside" (2.2.139-40; 131-32). He insinuates an ostensibly eternal source of sack, flowing from the rock, as it were, yet this wine is undoubtedly a nonrenewal resource; the stripped body of a tree, likewise, will bleed for only so long before either surviving the damage to its body or succumbing to death. Caliban's offer to kiss Stephano's foot provides yet another earthly, skin-to-skin contact, spreading the kisses from lips to bottle to lips to foot, marking a fully embodied presence of the fools on the island as they are em-bodied by the barken material and vegetal sack. On the other hand, in his invitation to show Stephano "every fertile inch o'th' island," he renders even more excruciating the nearby tree's open wound, in the potential threat of

[73] Wohlleben, *The Hidden Life of Trees*, 115-16.
[74] Vaughan and Vaughan, *The Tempest*, 214.

Stephano's committing similar acts of defacement on other "fertile" bodies (just as Prospero has used the trees of the fertile land for firewood). Exactly such an act is implied to have happened in a later scene when Trinculo moans: "Ay, but to lose our bottles in the pool" (4.1.208). Fittingly, though, the island apparently reclaims its lost arboreal material, "an infinite loss" in Stephano's reckoning, when Ariel drives them into a swamp. Stephano claims he will go searching for his bottle "though I be o'er ears for my labour" (4.1.213-14). Although it is a few lines later that Caliban worries, "If he [Prospero] awake, / From toe to crown he'll fill our skins with pinches, / Make us strange stuff" (4.1.233-35), the three of them are already filled with such strange stuff of the isle ranging from tree bark to swamp water (not to mention who knows what quantities of sack) that their bodies are becoming virtually new ecosystems of em-barked embodiment, their skins not merely pinched but inundated with elemental air, earth, and water, arborealized into the islandscape's barken temporalities.

Ariel's Arboreal Anguish

Though the "half-time" of the modern intermission was generally not the practice in Shakespeare's theatre, the performative pause functions as an effective framing device for considering the way that Ariel does time while serving his prolonged arboreal sentence.[75] Prospero's reminder to Ariel of the painful experience refers to a time outside of performance time: the play's prehistory, inter-missing not between acts or scenes but residing in long gaps between both human and nonhuman "performances," in this case Ariel's arboreal becomings informing *Tempests* past and *Tempests* to come. Bristol understands the intermission (or "interval," as it is commonly called in British English), to function "as a kind of liminal space-

[75] Graves Thorton Shirley Graves makes the case for short "entr'acts" or "act-intermissions" in between acts, possibly involving singing, dancing, and other carnivalesque entertainments, in "The 'Act Time' in Elizabethan Theatres," *Studies in Philology* 12, no. 3 (1915): 103-34.

time in relation to the spatio-temporal reality mandated by the world of the play text."[76] Implicit in the space-time of this "world" are the individual worlds of pine trees and oak trees, populating the islandscape among other trees like or not like them, holding a potentially infinite number of Ariels wailing for seeming eternity in a purgatory of isolation and a sense of non-being (not the same as death). Ryan's usage of Alfred Siewer's neologism "time-plexity" is relevant here: "Time-plexity marks the co-passage of beings through instances of timing, timeliness, and timelessness, toward the experience of non-time."[77] The preposition "toward" is key in Ariel's situation because Ariel and tree are not *in* timeless limbo or "non-time"; rather, inter-missing time suggests a Zeno's-paradox movement toward absolute stillness, approaching it asymptotically but never arriving. The tree itself is never completely motionless; rather, it grows more slowly than the movement of a clock's hour-hand, Ariel "growing" with it. From a human perspective, the time of the vegetal is imperceptible, unmeasurable, akin to a pause of time, not registered or recorded as passing, only understood as *past* from a nonspecific perspective of future anteriority.[78] Inter-missing time thus makes up another dimension of time-plexity, if a negative one, evoking *un*timeliness, involving rhythms that overlap while being incapable of achieving synchrony or harmony.[79] On the possibility of glimpsing the interior life of plants, Marder maintains, "All we can hope for is to brush upon the edges of their being, which is altogether outer and exposed, and in so doing to grow past the fictitious shells of *our* identity and *our* existential ontology."[80] By taking the time to try to remember, along with Ariel and Prospero, Ariel's traumatic encounter with tree-being, outside of the play's performance or

[76] Bristol, *Big-time Shakespeare*, 167.
[77] Ryan, *Plants in Contemporary Poetry*, 171.
[78] See Wohlleben, *The Hidden Life of Trees*, on the slow tempo at which trees process electrical signals (8).
[79] See Harris, *Untimely Matter*.
[80] Marder, *Plant-Thinking*, 13, original emphases.

"running" time, we might "brush upon the edges" of the slow time of arborealization, lying under the time of the play—when it was first composed and performed—and reaching into our own (twenty-first century) time.

The specific moments in *The Tempest* that describe Ariel's painful arboreal incarcerations highlight the intensity of his experience and his inability to either physically or psychologically inhabit an arboreal ontology, whether pine or oak. His pain in the pine, as described by Prospero, comes across as especially harrowing:

> … she [Sycorax] did confine thee,
> By help of her more potent ministers
> And in her most unmitigable rage,
> Into a cloven pine; within which rift
> Imprison'd thou didst painfully remain
> A dozen years; within which space she died
> And left thee there; where thou didst vent thy groans
> As fast as mill-wheels strike.
> …
> …Thou best know'st
> What torment I did find thee in; thy groans
> Did make wolves howl and penetrate the breasts
> Of ever angry bears: it was a torment
> To lay upon the damn'd, which Sycorax
> Could not again undo. It was mine art,
> When I arrived and heard thee, that made gape
> The pine and let thee out. (1.2.274-81; 286-93)

Despite his escape, the experience of torment Ariel suffers in the "cloven pine" parallels the similarly extensive and painful immersion into an oaken ontology, via Prospero's threats:

> If thou more murmur'st, I will rend an oak
> And peg thee in his knotty entrails till
> Thou hast howl'd away twelve winters. (1.2.294-296)

In both situations (of arborealized past and arborealizable future), Prospero emphasizes the loud vocalizations Ariel makes that attempted to or will attempt to express his pain. This facet of Ariel's arboreal time(s) is important because it translates medieval and early modern discourses

related to pain into the more-than-human world of *The Tempest*'s trees and animals. Early modern audiences would have identified such intense cries of pain and suffering with various traditions depicting suffering people, most obviously that of the passion of Christ. Additionally, the representation of pain appeared frequently in the stories of saints' lives, which include scenes of extreme persecution; the tracts and sermons that describe the horrific tortures of sinners in hell; and the accounts of travailing women, groaning with pain during childbirth. Ariel's constant groaning in the tree is more consonant with the latter two of these associations than with the model of martyrdom, and Shakespeare appears to conflate the two of them in Ariel's arborealizations, bringing together the intensity of pain in childbirth with the severity of eternal suffering in hell. These nonsynchronous rhythms—the first confined to a temporal finitude of human embryonic development, the second stretching into an infinite temporality of eternal time—uncomfortably converge in Ariel's entrance into and exit out of arboreal bodies. Though adjacent to these vegetal temporalities, Ariel can only relate to them in the non-linguistic register of anguish. In both instances, the tree is exposed to distress as well, the pine made to gape in freeing Ariel, the oak potentially rent in order to peg Ariel inside, pointing the way to the possibility for a sharing of that pain in these moments of vulnerable closure and disclosure.

Hell was generally understood in the early modern period as a place that inflicted both psychological and physical harm on the souls and bodies of the damned. Tortured sinners expressed this pain in the form of groans, cries, screams, and howls, a well-established "script of pain behavior" associated with the sufferings of hell.[81] Described as a "torment," Ariel's arboreal time *is* a living hell, a punishment for the "damn'd," and—were it not for Prospero's intervention—an indefinite span of Ariel's ongoing expression of that pain. Vegetal time, in the

[81] Esther Cohen, *The Modulated Scream: Pain in Late Medieval Culture* (Chicago: University of Chicago Press, 2010), 113.

specifically slow time of Ariel's arborealization, blends with eternity, a time that begins with germination but has no end in growth. Unlike Prince Ferdinand, who claims his imprisonment by Prospero allows for "space enough" (1.2.493), Ferdinand's loss of liberty mitigated by being able to see his beloved Miranda at least once a day, Ariel does his time in cramped isolation, his prison not unlike the solitary confinement of today's modern prison system.[82] Such a situation must indeed be a hellish existence for human beings, separated from others, deprived of natural light, and losing track of days, sleep, and of course, time. Writing about the experiences of prisoners in supermax confinement, Lisa Guenther explains that isolated prisoners are "never simply alone but always with themselves—stuck to themselves, even in the absence of all other meaningful relations."[83] In the play, neither Prospero nor Ariel acknowledge the tree as other; it is merely the space in which Ariel is held, and, as a result, his interactions become a self-sustaining feedback loop of his own cries tormenting himself, intermingled with distant animal sounds mimicking or echoing them. That Ariel's anthropocentric temporal orientation cannot reckon itself with the slowness of arboreal time and the stillness of arboreal space in the body of the pine is comparable to the worst possible fate for a human soul, much worse than death: an eternal life of torment. The Catholic echoes of the place of purgatory in theology, however, did not completely disperse with the Protestant Reformation in England. If we understand, as climate scientists remind us, the fate of trees and humans to be interwoven, then this relationship *is* an eternal one, as long as "time" exists. At the same time, if humans are able to achieve some kind of redemption with regard to our relationship to trees and the earth, then we might benefit by understanding our time in the Anthropocene from a "Catholic" point of view—in relation to its

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[82] See Guy Geltner, *The Medieval Prison: A Social History* (Princeton: Princeton University Press, 2008), on the conditions of medieval prisons.

[83] Lisa Guenther, *Solitary Confinement: Social Death and Its Afterlives* (Minneapolis: University of Minnesota Press, 2013), 199.

more lenient doctrines regarding the afterlife as well as the *universal* sense of the word "Catholic"—as a purgatory rather than a hell, with this "purgatory" occurring on a *global* scale, a shared suffering-with in order to be purged of our sin and made ready for the life to come, post-Anthropocene.

Ariel's emergence from the tree can thus imply an escape from a purgatorial ecological eternity, but it is also suggestive of birth from a confining, womb-like space, though his expressions of pain appear to occur only in the midst of arboreal containment rather than in the painful transition (painful for child and mother) out of that space. Ariel's exit from the tree in this way has likely origins in the classical story of Adonis's birth from a myrrh tree, a tree that was formerly a woman. The travailing Myrrha, in arboreal form and unable to speak, expresses her parturient pain through sighs (like Ariel) and the shedding of "tears," or sap, until her midwife Lucinda lays her hand on the tree and comforts her:

> The tree did cranye, and the barke deviding made away,
> And yeelded out the chlyd alyve, which cryde and wayld streyght way.[84]

This "deviding" of the tree's bark corresponds to Prospero's "making gape" the pine tree in *The Tempest*'s prehistory. Feminist critic Diane Purkiss rightly identifies some of the troubling aspects of this substitution of midwives: "Prospero's release of Ariel from the tree enacts a strain of highly gendered imagery implicit in Paracelsian magic and borrowed from its Neoplatonic pre-texts, imagery of the natural world as a womb or pregnant female body which could be opened and brought to birth by the male investigator."[85] However, following the theory of storied matter, one can speculate further about this story of birth. Rather than supposing Sycrorax as

[84] *Ovid's Metamorphoses: The Arthur Golding Translation of 1567*, ed. John Frederick Nims (Philadelphia, Paul Dry Books, 2000), 10.587-88.
[85] Diane Purkiss, *The Witch in History: Early Modern and Twentieth-century Representations* (New York: Routledge, 1996), 268.

representative "mother" simply because she is female, we might give credit to the tree itself in relation to this other-than-human time of containment for Ariel's non-embryonic body. Ariel's distress is not just the "wawl and cry" that King Lear mentions of newborn children first reacting to the open air (4.6.176). Ariel's anguish is structured as *part* of his relationship to the tree/mother that encases his body, *prior* to his birth, during his time in the tree/womb. Theresa Krier defines parturition in an extended sense, as "the long-term maintaining of *space between* mother and child of whatever ages, whether between living characters or within the psyche."[86] Krier insists that "it is in *not* acknowledging parturition that fantasies of fusion with an archaic mother arise; not to acknowledge the dynamic distances between mother and infant in birth is itself the loss."[87] This dynamic of distance relates to the distress-anguish affect and what psychologist Silvan Tomkins refers to as the crying response, an expression of both physical and mental distress (like that of sufferers in hell). Tomkins stresses that "the awareness of the feedback of the crying response *is* the experience of distress or suffering."[88] Ariel's unending, rhythmic sobs correspond to Tomkins' description of this negative affect, a communication between infant and mother, as a self-inflicted punishment that is differentiated from fear:

> [D]istress-anguish is a self-punishing response designed to amplify those aspects of the inner or outer world which continue to stimulate neurally with an excessive, non-optimal level of intensity. So long as this non-optimal state continues, the individual will continue to emit the distress cry and suffer the stimulation of this self-punishing response, added to the already non-optimal level of stimulation.[89]

Along these lines, Ariel's arboreal hell is brought on by himself, in his constant groaning, which perpetuates the intensity of the "non-optimal state" of not being able to sync up with a vegetal

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[86] Theresa Krier, *Birth Passages: Maternity and Nostalgia, Antiquity to Shakespeare* (Ithaca: Cornell University Press, 2001), 11, my emphasis.
[87] Ibid., 13, original emphasis.
[88] Tomkins, *Affect Imagery Consciousness*, 290, original emphasis.
[89] Ibid., 292.

temporality. Analogously, in the time of the human, the Anthropocene, we are unintentionally punishing ourselves, and only recently have we begun to recognize our own distress feeding back and being fed back to us on a planetary scale. In effect, we have already punished ourselves, but we will continue to feel it and sense it so long as a "non-optimal level" of degradation to the earth occurs. Tomkins considers anguish to be a high-intensity form of distress, and this intensified affect encapsulates Ariel's experience of becoming tree just as much as it does the trees' experience of becoming human, affected already by the planetary reaches of human activity.

Following the notion of "deciduous-sense" developed in the previous chapter, we might also consider the difference in potential *future* orientation to winter and death in Prospero's choice of oak for Ariel's punishment. While Prospero and Sycorax are effectively mirrors of one another, their associated trees are nonetheless differentiated, gendered into the masculine oak and the feminine pine, into which the body of the gender-ambiguous Ariel may "fit," though not necessarily in equal capacity. For Ariel, either arboreal (gender)identity is insufferable, but the intensity of Prospero's threat suggests the even greater severity of being "pegged" into the deciduous oak, its dormant body during the winters providing even less warmth than the hell of the pine's body, which at least can take on the semblance of nourishing womb at the same time. The arboreal temporality of slowed-down time in the slowly growing pine tree would approach an inconceivably slower tempo in the "knotty entrails" of an oak. That Ariel "vents" his groans while confined in the pine tree at a quick but constant pace, "as fast as mill-wheels strike," evokes the not-quite-human time of mechanical motion, its cycles blurring with the cyclicality of celestial movements. The beyond-human momentums of huge planetary bodies hurtle through space yet move imperceptibly before human eyes, like the imperceptible growth of the

expanding tree rings in the pine and the oak. At an intersection of two aspects of vegetal temporality—hetero-temporality of seasons and cyclical temporality of repetition—this inter-missing, intra-corporeal growth occurs "where the circulation of sap … obeys the circularity of seasonal changes or indeed the rotations of the Earth."[90] In *The Tempest*, Ariel is caught up in a mournfully affective "circulation of sap," his cries of anguish punctuated in naturalcultural rhythms that intersect at the level of the elemental—namely, the water and air channeled by technologies like wooden mills, constructed from dead arboreal bodies—even as, at the same time, the bodies of *living* trees also channel these elements in the service of their growth and reproduction.[91] The hybridic assemblage of Ariel-tree on the island emits sounds of agitation, groans that reverberate up and down the wooden body of the tree, reaching out to both human and nonhuman animals across elemental substances like mill wheels striking at wind or water. Not unlike human bodies, Ariel composes and is composed of this intra-acting matter in the repetition of his arboreally inflected groans. Additionally, Ariel's animal-like vocalizations of distress, his "howls," summon nearby animals, causing them to howl as well and bringing them to intensified levels of distress. Therefore, "doing time" for Ariel is not totally isolated, since sound "carries" and enables a sort of nonlinguistic communication across and through the arboreal medium with others; it is on all sides an expression of anguish, though, a pain caused by the incongruent enmeshment of bodies and temporalities. This experience of distress intensifying into anguish is a shared experience: that of perceived future pain that feeds back and will feed back onto the present levels of pain, in the inter-missing "predicament of being on the verge,

[90] Marder, *Plant-Thinking*, 113.
[91] On "elemental" ecocriticism, see Jeffrey Jerome Cohen and Lowell Duckert, eds., *Elemental Ecocriticism: Thinking with Earth, Air, Water, and Fire* (Minneapolis: University of Minnesota Press, 2015).

suspended between life and death," a time that includes not only the human and the animal but also the plant and the planet.

Doing (Inter-missing) Time

Finally, significant to theorizing inter-missing time in relation to Ariel's arboreal confinement is the extensive length of time during which he serves his sentence *and* does his time as Prospero's agent. In its representation of Ariel's time on the island, *The Tempest* projects a past, present, and future based on a duodecimal system that mirrors humans' attempted division of the year into twelve months (based on the lunar cycle) and attempted division of the day and night into twelve hours each.[92] Although Prospero frees Ariel from his vegetal prison, he effectively assumes the same master-slave relationship toward Ariel that Sycorax commanded previously, exploiting Ariel for his magical labors. As noted, Prospero uses a threat of an almost identical form of punishment to insure Ariel's ongoing compliance. Prospero indicates that Ariel had been confined in the pine tree by Sycorax for a period of twelve years before he rescued him. When the shipwreck that initiates the play's action occurs, Ariel had been serving Prospero for a second period of twelve years. When Prospero threatens Ariel, he indicates that he will imprison Ariel in the oak tree for yet *another* twelve years. This temporal repetition of twelve years (12-12-12) evokes a symmetrical unit of time that demarcates an extended annual measurement (a total of 36 years, a relatively short amount of time for pine and oak trees), but that also evokes the daily or diurnal, the twenty-four hour period based on the presence or absence of sunlight, divided into two twelve-hour halves, across day and night. In representing Ariel's incarceration

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[92] Twelve-month calendars (corresponding to lunation) have been in common usage among different cultures since ancient times, though it was the Julian calendar that standardized this practice, with more precise refinements introduced to that calendar in 1582 with the Gregorian calendar. On calendar instability in relation to solar and lunar cycles and Shakespeare's engagement with temporality in *King Lear*, see especially Steve Sohmer, "The Lunar Calendar of Shakespeare's *King Lear*," *Early Modern Literary Studies* 5, no. 2 (1999): 2.1-17.

within the pine tree and potentially the oak tree in twelve-*year* (as opposed to hour) increments, *The Tempest* "inter-misses" a human-centered, linear clock time that measures time in intervals, divisible into hours and minutes, alongside an arboreal passage of time that is attuned to the change of seasons over a period of approximately twelve months and attuned to the changes in sunlight concentration, the nourishing agent of photosynthesis. The extended nature of these repeated years corresponds to the long lifespan of trees, in which years blur into succeeding years with little distinction.[93] Moreover, the lengthy timespan emphasizes the glacial physical growth of these long-established trees, reckonable in human accounting only in the visible traces of a year or more's worth of tree-ring growth, and *track*able only by humans if they make a cut into the tree (which Prospero does, of course) to count the rings, intervening and entering into the paused time of intermission by enacting pain into, onto, across, and out of the more-than-human bodies of Ariel, trees, and the affected surrounding beings.

Furthermore, Ariel's potentially ongoing cycle of a twelve-year iteration vacillates between the numbers of 12 and 13 in an inter-missing time that never reaches the thirteenth floor but always begins again on the first of twelve more. Ariel does time *between* the human and the vegetal, time halved by the diurnal/nocturnal cycle *and* interspersed into the not-quite even lunar cycle, usually repeated twelve times in a year but, once in a blue moon, thirteen. The duration of Ariel's term gestures toward the lost time that human "intercalation," the compensative correction of calendars, works to remedy via adding a "leap year" to the counting of time. During Ariel's pineaceal confinement, merged unwillingly into arboreal space-time, Ariel's experience of time via Sycorax *approximates* twelve years, with the imprecise "dozen years" of Prospero's

[93] On arboreal lifespan, see especially Jessica Rosenberg, "Before and After Plants," *postmedieval* 9, no. 4 (2018): 467-77.

description indicating estimation: like a baker's dozen, Ariel's arborealization sways, as the lunar calendar sways, somewhere between 12 and 13. Prospero's threat of "twelve winters," on the other hand, attempts to be more precise with "twelve" instead of a "dozen," but his proverbial reference to seasonal time nevertheless insists on an incalculability and unpredictability, a "twelve" that is contingent on the vegetal's thoroughgoing orientation to the other. Thus, Ariel misses time in at least two specific ways: he misses (that is, *longs for*) the more regular, punctual time of anthropocentric time-keeping. He also misses time, understood as a more-than-human phenomenon, in the sense that, in his arborealization, he merges with overlapping and converging temporalities based on seasons and cycles that do not mesh neatly with human prediction, convention, or measuring ability. Therefore, he misses (comes close but does not attain) time, understood in relation to either human *or* vegetal temporality—he approaches both of these temporalities but does not come into contact with either directly. "Inter-missing" time, then, indicates a weak spot in the certainty of human measurement but also highlights a physical, natural reality that affects the human and nonhuman worlds alike: that of the moon's waxing and waning in the heavens and this cycle's relation with respect to the earth's annual orbit around the sun.

Even more precisely, Ariel's arborealization is contingent on arboreal *species*; his anticipated experience of wintering in an oak tree would vary, presumably as it had in the pine, depending on the severity of that year's winter. If Ariel were allowed to experience a very small measure of increased freedom with each passing year as the tree rings slowly expand outward, then a very harsh winter would preclude even that small measure of relief since trees do not grow in such conditions. Such is the stuff of lost or uncountable time in the world of dendrochronology, but Ariel's time is not really "lost" as a result of his being imprisoned. "Lost"

time is based on an anthropocentric view of time in which humans can take, keep, redeem, lose, or waste time. The inter-missing time Ariel experiences creates a perpetual *feeling* of loss, in the joining of his being to nonhuman otherness. Although he actually becomes something more in becoming other, he perceives loss and expresses vocal anguish for an eternity of time not expressed in 12 or 13 but in the infinite interval in between. This time is not actively "lost" by an agent who was once in control of that time; it is only relatively unapparent, not available to the senses of some. Ariel does his arboreal time in the in-between of paused time, the time of intermission and hibernation, missing from human accounting of time, but preserved somewhere in the material trace between Ariel's corporeal body and the wood, bark, and cambium of the *Tempest*'s cloven pines and oaken entrails. Shakespeare figures Ariel's experience of arborealization as a period of eternal time very different from the Christian view of blissful eternity in heaven, yet he also figures it as a time of birth. The rings of the tree, containing Ariel, but not his screams, grow through the seventeenth century on through today; like the infant's expression of the anguish-distress affect, Ariel's crying response feeds on itself, echoes across biological kingdoms, and offers a promise of disclosure and becoming.

CHAPTER THREE: THORN
PLANTAGENETS AND PLANT AGENCY IN *3 HENRY VI* AND *RICHARD III*

> And I, like one lost in a thorny wood,
> That rents the thorns and is rent with the thorns,
> …Torment myself to catch the English crown.
> – *3 Henry VI* (3.2.174-75, 179)

> Christ's crown was all thorns, no crown is without some thorns.
> – Thomas Adams, *Meditations upon the Creed* [1]

Introduction

When Shakespeare and his Elizabethan contemporaries were staging the first of Shakespeare's history tetralogies, English writers were using the word "thorn" both as a noun and a verb.[2] As Mary Sidney, Countess of Pembroke, writes in her 1592 translation of Robert Garnier's *Marc Antoine*: "This grief, nay rage, in me such sturre doth kepe, / And *thornes me still*, both when I wake and sleep."[3] In this instance, the action of thorn-ing, with its comparison to the pain of grief, describes a pain that is not only sharp but one that remains, sticks close to you, and just won't go away: the proverbial thorn in the flesh. Writers in the early modern period understood thorns as metaphorical and physical, associated in Protestant England as much with the unspecified weakness that Paul mentions in his second letter to the Corinthians as with the actual thorns that were believed to have encompassed the head of Christ when he suffered on the

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[1] Thomas Adams, *The Works of Thomas Adams: Being the Sum of His Sermons, Meditations, and Other Divine and Moral Discourses* (Edinburgh: James Nichol, 1859), 181.
Adams (1583-1652) was an influential Puritan preacher in the Church of England.

[2] "Thorn" as a noun appears after 700; "thorn" as verb appears much later, in 1483 (*OED*). The orthographical disappearance of "thorn" in the English language, in print, interestingly coincides with Richard's "thorniness," his association with the thorny wood, crown of thorns, etc., suggesting that neither thorn really disappears so much as becomes hidden or less visible.

[3] George Garnier, *The tragedie of Antonie. Doone into English by the Countesse of Pembroke* (London, 1595. Early English Books Online, Huntington Library), my emphasis.

cross.[4] Additionally, thorns—both plant and plant part—were virtually synonymous with weeds or tares (from the parable of), essentially worthless plants that offer no agricultural usefulness to humankind.[5] Even more troublesome, as a result of the Fall of Man, thorns and thistles attested to the presence of sin on the planet, actively resisting humans' efforts at husbandry and generally making life hard for them.[6] "Thorn," then, both as body and as action represents in Elizabethan literature a painful enmeshment of human and vegetal worlds, highlighting vegetal strength in the midst of human weakness.

Following from the rough barks of *The Tempest*, this chapter traces the agencies and fluidities of plant-kind in the material-semiotic becomings of "thorn" in two of Shakespeare's early history plays, *3 Henry VI* (1591) and *Richard III* (c.1593). The thorn appears in these plays both as bush-tree hybrid and as succinct, sharp vegetal exterior, extending from stems and branches into the arborealizing human bodies of the Plantagenets—the name of British royal family members before the Tudor dynasty.[7] I emphasize the trans-corporeal bodily nature of the thorn in these plays, tracing its route across vegetal and human bodies, via its tendency to stick in flesh (human or animal), transported and transporting itself into the world of human politics.[8] In this capacity, the thorn, like King Richard III, is a kind of "intelligencer" (4.4.71), a spy or secret agent, but from the plant world, piercing, entering into, and cutting through Shakespeare's

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[4] See 2 Corinthians 12:7-9 on Paul's thorn in the flesh (cf. Numbers 33:55). The crown of thorns appears in three of the four gospels: Matthew 27:28, Mark 15:17, and John 19:2. The King James Bible of 1611 popularized the "thorn" translation of Paul's infirmity, post-dating most of Shakespeare's writing career. Additionally, Ezekiel 28:24 sounds similar in rhetoric to Richard's "thorny wood" soliloquy: "And there shall be no more a pricking brier unto the house of Israel, nor any grieving thorn of all that are round about them, that despised them; and they shall know that I am the Lord GOD" (KJV).

[5] The "Parable of the Tares" is found in Matthew 12:24-13:30.

[6] Genesis 3:18: "Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field" (KJV).

[7] The House of Plantagenet originated from France, in Anjou. An "Angevin," Henry II (1154-1189) was the first of the Plantagenet kings. For an overview of the early Plantagenets, see Jeffrey Hamilton, *The Plantagenets: History of a Dynasty* (London: Bloomsbury, 2010).

[8] "Burs," seeds that have hooks or teeth, are similar to thorns in this way, but I do not treat them specifically in this chapter. See Chapter 4, however, for my reading of seeds and nuts in relation to the (more-than-human) characters of *As You Like It*.

representation of the fifteenth-century conflicts in England known as the Wars of the Roses. These plays, which dramatize warfare and revised the Elizabethans' understanding of their own national history, relate the agony of so-called civil war and the painful consequences of kin slaying kin over struggles for power. Acknowledging the role that vegetal beings play in the midst of this dense site of pain and suffering, I ecocritically read this pain across the thorny and floral agencies exigent in Shakespeare's Wars of the Roses, their secret agencies expressed in what I call "thornition." Taking a cue from biological theorists Humberto Maturana and Francisco Varela, who posit cognition as a bringing forth of a world, more of a doing than a knowing, "thornition" returns to the agentive nature of early modern "thorn" to assess this vegetal feature's ongoing affective and ontological potencies in the speculative space of vegetal cognition.[9]

In previous chapters, I focus on the trees of Shakespeare's drama; here, I consider "tree" more expansively, pushing at the term by observing how thorns spread across the vegetal kingdom in the form of trees, bushes, and brambles, as well as spreading back and forth across the human and the vegetal.[10] Today, botanists are careful to distinguish thorns from *spines* and *prickles*, all three of which differ anatomically from one another on the bodies of very different kinds of plants, but these various sorts of vegetal projections were largely undifferentiated in English from the early medieval period. In Old English, a thorn could be "a stiff, sharp-pointed, straight or curved woody process on the stem or other part of a plant," synonymous with "spine"

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[9] Humberto R. Maturana and Francisco J. Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding* (Boston and London: Shambhala, 1998), 30.

[10] While "brambles" sometimes refers specifically to blackberry bushes, the term also connotates short, prickly shrubs in general (*OED*, *n.*[1]). The term has been in use from around 1000 AD. Aelfric's translation of "thorns and thistles" in Genesis is "Ðornas and bremelas." The compound "bramble-brier" also dates from around this time. "Bramble-bush" appears in Spenser's *The shepheard's calender* (1579). "Brambles" appears twice in Shakespeare, in *As You Like It* and *Venus and Adonis*. Both instances reference the thorniness of brambles, the latter referring to "thorny brambles and embracing bushes."

and "prickle."[11] The premoderns included certain small trees and bushes under the moniker "thorn" as well. After 700, for example, a thorn could refer to plants bearing thorns or prickles, especially hawthorn and whitethorn trees.[12] Finally, "thorn," without an article before it, could even refer to "thorn bushes or branches collectively; also, the wood of a thorn-tree" (c.1330).[13] All of these meanings of "thorn" are in play in Shakespeare's first history tetralogy, especially in some of the scenes that feature Richard, Duke of Gloucester (later King Richard III), whose association with the thorn is far from accidental.[14] As Marjorie Garber and others have noticed, Richard III is an antichrist figure, his connection with thorns and crowns making him a shadowy, unholy perversion of the biblical savior-king.[15] I am interested in Richard's thorny interactions from an ecomaterialist perspective that treats these thorns, thorn-trees, thorn-bushes, and thorn-forests as living agencies intra-acting with the plays' characters, co-composing with humans the storied material of the drama.

I read the early modern "thorn," encompassing the aforementioned manifestations, to represent an arborealization that cuts across plant form and species. Most scientists believe that the vegetal adaptation of thorniness, or *spinescence* in botanical parlance, in shrubs and brambles is an evolutionary trade-off for their shortness of growth in comparison to that of larger arboreal bodies, a defense mechanism fostered because of their closer proximity and relationship to

[11] *OED*, "thorn" *n*. I.1.
[12] *OED*, "thorn" *n*. II.4.a.
[13] *OED*, "thorn" *n*. II.4.b.
[14] On the continuity of Shakespeare's early history plays operating as a four-part tetralogy, see Nicholas Grene, *Shakespeare's Serial History Play*s (Cambrige: Cambridge University Press, 2002).
[15] Marjorie B. Garber, *Shakespeare After All* (New York: Pantheon Books, 2004) See also Richard Marienstras, "Of a Monstrous Body," in *French Essays on Shakespeare and His Contemporaries*, eds. Jean Marie Manguin and Michele Willems (Newark: University of Delaware Press, 1995), 153-74; Joel E. Slotkin, "Honeyed Toads: Sinister Aesthetics in Shakespeare's *Richard III*," *Journal for Early Modern Cultural Studies* 7, no. 1 (2007): 5-32; and Michael Torrey, "'The Plain Devil and Dissembling Looks': Ambivalent Physiognomy and Shakespeare's *Richard III*," *English Literary Renaissance* 30, no. 2 (2000): 123-53.

herbivorous animals and insects.[16] These smaller, thornier varieties of arboreal being therefore complicate the simplistic, unrealistic notion of "tree" as a single trunk that grows high with graceful, arching branches near its peak—often embodied in early modern discourse, including in Shakespeare's work, in the form of the cedar tree.[17] But unlike the coniferous cedar, a cone-bearing gymnosperm, bushes and shrubs are usually angiosperms, meaning that they are flower-bearing plants—rose bushes being the prime example in Elizabethan England. And unlike bigger trees, most shrubs and bushes live for only a *relatively* long time, closer to the life-span of humans than to that of cedars and other long-lived trees, as well as being closer to humans physically, in terms of height.[18] These ambiguities and proximities point toward the benefit of reading older, more capacious meanings of "thorn" alongside the more specific classifications advanced by modern botany. While botanists understand a thorn precisely as a sharp modification of a plant's stem, a prickle as a sharp modification of a plant's epidermis or bark (meaning that roses actually have prickles rather than thorns), and a spine as a sharp modification of a leaf, the interchangeability of these terms in the early modern period to refer holistically to external vegetal sharpness emphasizes the essential form and function of this vegetal feature, regardless of name, where the precision of modern taxonomy looks for ways to discriminate.[19] While *Romeo and Juliet* is famous for its line "a rose by any other name would smell as sweet," Shakespeare's use of both "thorn" *and* "prickle" in reference to roses implies an eco-materialist notion of thorn-being *as sharp*, regardless of which exact signifier for "thorn" is in play.

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[16] In *The Tree*, Tudge notes how trees and bushes tend not to be as spiny higher up on their branches, reserving that energy and concentrating thorny growth only near the ground (354). Additionally, vulnerable young plants will lose their thorns after they mature. However, some recent studies have disputed the general assumption that thorns evolved as defensive mechanisms in response to mammalian munchers. See, for example, see Rupesh R. Kariyat et al., "Plane Spines Deter Herbivory by Restricting Caterpillar Movement," *Biology Letters* 13, no. 5 (2017): 1-5.
[17] The Biblical cedars of Lebanon appear, for example, in Psalm 29:5, as well as 92:12.
[18] Hawthorn trees are an exception to this rule, which can reach a mature height of thirty feet.
[19] For a brief discussion of classification and its development from Aristotle to neo-Linnaean models, see Tudge, *The Tree*, 36-42.

While early modern people generally considered thorns and brambles to be weeds, the flowers of some thorny plants were, of course, highly prized. Furthermore, roses in Elizabethan England represented the two noble houses that competed for the throne during the Wars of the Roses, at least as early as Shakespeare's first history tetralogy (which includes *Henry VI*, Parts 1-3, and *Richard III*).[20] The red "Tudor" rose symbolizes the house of Lancaster, while the white rose symbolizes the house of York. Technically, the houses of York and Lancaster were both composed of Plantagenets, the royal English family descended from Geoffrey II dating back to the eleventh century, but the name Plantagenet would become specifically associated with Richard, Duke of York (Richard III's father). The exact origin of the name Plantagenet is uncertain, but historians have speculated that the English king Geoffrey II, also known as Geoffrey Plant Genest, wore a sprig of broom plant in his hat since "broom" is the common name for *planta genista*.[21] Others suggest Geoffrey planted broom to improve his hunting covers. Regardless of its origin, as is evident among the many puns Shakespeare deploys, the family name Plantagenet was clearly associated early on with the vegetal kingdom as well as the human. I read the rose and thorn, both specific body parts of rose bushes, as "plant-agents" who exhibit ways of physical vegetal being in Shakespeare's dramatic histories, in addition to their symbolic/semiotic registers, accompanying the actors of the plays as secret agents, exerting and conveying other-than-human senses and sensations in the plays' performance and interpretative spaces. I follow Vinciane Despret's notion of "interagency" here, applying the idea that animal

[20] The name "Wars of the Roses" did not come into common usage until the nineteenth century, following Sir Walter Scott's *Anne of Geierstein* (1829), which takes the name from Shakespeare's Temple Garden scene in *1 Henry VI* (I analyze this scene at the end of this chapter), in which nobles take turns picking roses as a symbolic gesture of declaring their allegiance to either York or Lancaster.
[21] Henry Ellacombe writes, "The Broom was one of the most popular plants of the Middle Ages … As the favourite badge of the [Plantagenet] family, it appears on their monuments and portraits, and was embroidered on their clothes, and imitated in their jewels," in *The Plant-lore and Garden-craft of Shakespeare* (Exeter: William Pollard, 1878), 31.

subjects become visible through resistance to the similarly resisting agents of the botanical world. Despret theorizes:

> "Agenting" (as well as "acting") is a relational verb that connects and articulates narratives (and needs 'articulations'), beings of different species, things, and contexts.… We are all secret agents, depending on the circumstances, waiting for another being who will give us new agencies, new ways of becoming agents, actively acted upon, undoing and redoing precarious selves (through) one another.[22]

In calling forth the secret (plant)agents of Shakespeare's Richard of Gloucester plays, I seek to give voice to the arboreal material of the thorny wood that Richard evokes in *3 Henry VI* in soliloquy, which exerts agency through its connection to Richard and his precarious—and, in Richard's own representation, plant-like—body. The roses of thorn-bushes, unacknowledged actors on the stage, are secret agents in plain daylight, their materiality hidden by their glaring layers of dramatic-historical symbolism; the thorns themselves, on the other hand, while also potentially visible on stage, assuming they remain attached to the stems of the roses worn by actors, are not only secret but also *double* agents, seemingly in service to their respective white or red roses and corresponding noble houses (York or Lancaster), but ultimately, as I demonstrate, recruiting Richard and others in the service of their sharpened vegetality.

Agential status does not imply that the thorny wood is the same as a human character; however, its agency, acknowledged by Richard in *3 Henry VI*, persists in subtle ways throughout the play and, through the proximity of thorns to roses, throughout the entire first tetralogy.[23] Unlike the long-growing trees of *The Tempest* and the bark that sustains those bodies through decades and even centuries, the thorns of the small trees and shrubs of Shakespeare's histories exert a more focused, poignant agency, persisting with the human in the affective register of

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[22] Vinciane Despret, "From Secret Agents to Interagency," *History and Theory* 52, no. 4 (2013): 44.
[23] Richard appears briefly in *2 Henry VI*, but it is *3 Henry VI* where his Machiavellian character begins to emerge. In *Richard III*, the culmination of the first tetralogy and the play that bears his name, this aspect of his personality dominates throughout.

anger-rage. Brief contact between thorn and flesh causes intense pain in the initial brush of bodies against each other, but this interaction also has the potential to stick into and stay with the human, causing both grief and "nay, rage." The pain of these plays does not remain on the battlefield but has multiple vectors. The thorny wood of *3 Henry VI* seems to disappear in its sequel, *Richard III*, but the thorns remain, if somewhat hidden, clandestinely perched beneath the roses that accompany the characters on stage. This rage is a more-than-human affect that accompanies the piercings of colliding, warring bodies; this sharp, stinging pain incites fits of affective intensity rather than the prolonged suffering of Ariel's anguish in the pine.[24] Shakespeare's Wars of the Roses, then, allows modern audiences and readers to witness early modern politics and warfare from a posthumanist perspective that reads the ecological destruction of war-torn landscapes alongside trees and plants that, though often wounded themselves, are hardly passive in their stance toward the humans, animals, and insects in their midst.

Studying the vegetal in these plays is important not only ecocritically, but in other socially important areas as well. Building on criticism about Richard's body in the field of early modern disability studies, this chapter investigates the vegetal aspects of his body, in terms of his strange self-description of it, which blurs distinctions among arboreal entities. Additionally, it examines in his body the pointed figure of "thorn," understood and *felt* in multiple valences—not in a single point but in non-identical reiterations of vegetal, vascular self-expression. The body of the king and its relation to the land is more than metaphor in this sense; the sovereign's body is, in Shakespeare's terminology, "deformed" but it is also in-formed, punctured by the arboreal

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[24] The thorn in early modern literature and rhetoric is associated with pointed weapons like spears, pikes, and other piercers of flesh, just like the sharp projections of vegetal and arboreal bodies in the thorny wood. See Vin Nardizzi, "Environ," in *Veer Ecology: A Companion to Environmental Thinking*, eds. Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2017), 187-89.

agency of the thorn, physically proximal to Richard's throne, emphasizing and bringing together the orthographic similarity of "throne" and "thorn." The notion of vegetal externality also coincides with the superficiality of Richard's Machiavellian character; he is plant-like because he is all exterior, adaptable, grafted and graftable. Accordingly, after a brief aside on the differing textual bodies involved in my discussion, I begin with Richard's body, unto itself as well as in relation to the thorny wood, before moving to other arborealizing Plantagenets, reading their bodies as partaking in thornition: how the thorn *moves* in relation to the throne. I conclude by pushing toward a speculative feeling-with, lingering on the affective capacities of the dying, theatrical roses that participate in the play, particularly during battle scenes, to interpret their material agencies in relation to the actors' bodies, despite having been severed before the performance from their bushy, brambly bodies in rose gardens. The vegetal/arboreal bodies of these plays complicate the concept of "disability" by adding to the diversity of the early modern stage and confronting conceptions of "deformity" with their representations of so many disparate forms. Furthermore, these bodies demonstrate some of the difficulties and limitations of the project of species classification, calling the very notion of "tree" into question, opening up this monological category by exposing it to thorny multiplicities.

Te(X)ternalties (An Aside)

In addition to the secret agency of plants infiltrating the human world, my reading across human and plant bodies involves one additional crossing, a sort of "double crossing." Specifically, I read Shakespeare's plants and Plantagenets across variant *texts*, homing in on a specific alphabetic character, the letter "x" that is found in Act 3, Scene 3 of *3 Henry VI* in Shakespeare's First Folio but is usually removed by modern editors, who emend the phrase "external plant" to "eternal plant" (3.3.124). Like a number of other Shakespeare plays, *3 Henry*

VI is a play with multiple variant texts. The version printed in the First Folio of 1623 (hereafter, "F") is substantially longer than earlier printed versions of the play, the earliest of which is a 1595 octavo (hereafter "O"), titled *The true Tragedy of Richard Duke of York, and the death of good King Henry the Sixth*. This octavo version was followed by two quarto versions (in 1600 and 1619) with slight variations from the octavo. Theories about the connections among these texts are wide-ranging, but the two main schools of thought disagree over whether O represents a corrupted version of Shakespeare's play, memorially reconstructed by actors, or, alternatively, an early, "rough draft" that would later become Shakespeare's fuller, more mature play of F.[25] My interest in the textual variants is not to enter this debate; rather, I make use of the multiple textual nature of *3 Henry VI* as a vector into the vegetality of its characters. For the sake of vegetal plurality, I aim to take back the phrase "external plant" that modern editors routinely emend in F.

Using O as justification, editors change "external" to "eternal," going with the earlier printed source rather than F, taking the "x" to be a mistake, apparently added accidentally by the Folio printers.[26] However, I read this extra "x" as an additional crossing in the play between the world of plants and humans, a way to phytologically read *True Tragedy* and *3 Henry VI* as companionate texts that both comprise the body of the larger "text" of the first tetralogy, with *Richard III* functioning as the tail-end, or better, thorn-end of that body. The "x," under editorial erasure, is suggestive of this crossing of texts as well as biological kingdoms, in its double-ness and ambiguity, marking the spot at which plants in the Richard plays can be eternal or external or both simultaneously. Thus, recovery of the missing "x" allows readers to interpret the external bodies of the play, vegetal and human, and to witness their trans-corporeal becomings in *and*

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[25] John D. Cox and Eric Rasmussen provide an overview of the textual history of the play in the introduction to their Arden Shakespeare edition of *3 Henry VI*, 148-176.

[26] Neither "external plant" nor "eternal plant" appears in print before Shakespeare, though admittedly "eternal love" is a common phrase in early modern literature and makes an appearance in Shakespeare's Sonnet 108.

across the texts. Moreover, the "x" evokes the sharp material externality of the plant removed, the thorn cut away from the rose, yet never fully removed; the ~~external plant~~ thorn is still present in the contextual periphery of the more editorially and textually longstanding "eternal plant," sticking in costumes, hiding in the thorny wood, adventitiously sticking to the Folio text despite its removal in modern editions, and ultimately attesting to the potency of thornition amidst Shakespeare's involved representations of political power.

Furthermore, whether or not Shakespeare authored the *True Tragedy* octavo, his authoritative version in F emphatically vegetalizes the text, doubling the "thorny wood" reference, adding numerous plant descriptions and comparisons not found in O, and embellishing instances that are. Reading across these texts, I look specifically at scenes that involve tree-hewing, people becoming plants, and other instances of human-vegetal interaction, for productive thorny readings that situate the crown and throne in relation to both trees and brambles, investigating vegetal bodies that merge with and stick into those of humans to "double-cross" them in various ways. This reading is an ecological one, encompassing the stately cedar and the lowly bramble, the weed and the herb, the eternal and the external. Unlike the hell that Ariel experiences trapped inside the pine tree, this type of vegetal eternity is a more capacious one, one that allows for an externality to exist as well, a textual open-endedness that lets the plants represented in sixteenth-century texts provide today's audiences with alternative readings that make room for multiple views, bodies, texts, scenes, and natures. Throughout my reading of thornition in Shakespeare's Wars of the Roses, therefore, I will alternate between the textual variants of *True Tragedy* and *3 Henry VI*, juxtaposing the eternal plant of O and the external plant of F to read plants in and across both texts (and *Richard III*) as arborealizations

rather than static entities, plants and trees that cross into the human world in ways suggestive of vegetal exteriority *and* infinite growth.

The Thorny Wood

Despite Richard's body being the site of *multiple* vegetal bodies, most scholars do not seem to notice the vegetal aspects of Richard's body at all, overlooking them to focus on his allegedly animal, bestial, or demonic traits. Tom MacFaul, for example, observes, "In Richard's own play, he seems the only adequately living creature; everyone else seems strangely listless, easily swept along in his plans, and this is partly because he seems to summarize or epitomize all animals."[27] Yet MacFaul glances past numerous vegetal appearances when he laments the fact that *Richard III*'s animal imagery "thins out after its first act … In the middle of the play there is a good deal of talk of stoniness as opposed to natural kindness … but other modalities of natural imagery are absent."[28] The middle and end of the play actually include a number of references to plants and trees, which presumably most would include in the "natural" world. In a sense, this perceptual bias amongst critics against the vegetal mirrors that of the characters in the Richard plays, whose charges of demonic bestiality against Richard contrast with Richard's own self-image, which often tends more toward the vegetal. In fact, though many characters in both *Richard III* and *3 Henry VI* characterize Richard as a dog or otherwise associate him with animals, Richard at the end of *3 Henry VI* reveals he is only playing this "animal" part when he proclaims of his prodigious birth: "The midwife wondered and the women cried, / 'O, Jesus bless us, he is born with teeth!' / And so I was, which plainly signified / that I should snarl, and bite and play the dog" (5.6.74-77). Other recent ecocritical work has probed the Richard of

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[27] MacFaul, *Shakespeare and the Natural World*, 101. See also Greta Olson, "Richard III's Animalistic Criminal Body," *Philological Quarterly* 82, no. 3 (2003): 301-24.
[28] Ibid., 104.

Gloucester plays for insights into Richard's beastliness, monstrosity, and his role as nature's "black intelligencer," yet much of this work seems almost willfully to overlook the predominance of vegetal presences in favor of animal studies interests or other "natural" concerns related to the texts. In this section, I work against this trend to account for Richard's vegetalization in relation to both his own body and to what he refers to in an extended soliloquy in Act 3, Scene 2 of *3 Henry VI* as a "thorny wood." Additionally, I consider Shakespeare's added vegetalizations of the play in the extended Folio text, reading Richard's textual body as a plant-agent affected and informed by its proximity to thorny woods, real and imagined.

Elizabeth Gruber's reading of *Richard III* positions Richard's physical body, its skeletal remains recovered in 2012, as a material trace of historical reality that nonetheless must be mediated through layers of interpretation. Gruber asserts that "the bones alone will *not* do," using Richard's body as an entryway into a debate she sets up between new materialist positions that theorize concepts such as transcorporeality and her own more humanist position based on the critical views of Thomas Nagel and Giorgio Agamben.[29] Gruber suggests that Shakespeare's Richard, as "the prototype of the incipient individual, the anti-ecological self," represents the major crisis point that ecocriticism strives to redress: essentially, the (mis)perception, fostered since antiquity but especially deleterious today, that human culture exists apart from or in opposition to nature.[30] Though it is true that Richard is singularly imposing as villainous anti-hero—he declares, "I am myself alone" (5.6.83)—his Machiavellian character posits a self that is also not itself, an interiority that resides in the internal monologue of soliloquy but that enters into the action of the play only in schizophrenic surfaces of outward expression. Because of this

[29] Elizabeth Gruber, *Renaissance Ecopolitics from Shakespeare to Bacon: Rethinking Cosmopolis* (New York: Routledge, 2017), 57.
[30] Gruber, *Renaissance Ecopolitics*, 58.

inner/outer dynamic, the textual Richard that Shakespeare creates takes on specific bodily characteristics that correspond with the ontological capacities of plants generally, and, more specifically, with the thorn. Michael Marder asserts the following about the ability of the vegetal, via a certain kind of incapacity, to overcome distinctions of inwardness and outwardness that humans have difficulty surmounting:

> … it [the plant] is incapable of spontaneously choosing its place by exercising the freedom of self-movement (which justifies its sealed character). Indifferent to the distinction between the inner and the outer, it is literally locked in itself, but in such a way that it merges with the external environment, to which it is completely beholden. In other words, it is absolutely other to itself and, as such, transcends the relative and reciprocal distinction between sameness and otherness.[31]

Despite the supposedly individualistic self-ruminations that reveal Richard's interior to the audience, his interface with the world of the play exists on an external level; in effect, Richard merges like a plant "with the external environment." At the same time, the thorns he imagines as penetrating his body are externalized in his descriptions of his own body, his vegetal body parts signifying alongside thorny landscapes. This type of vegetal movement, embodied in transcorporeal thornition, goes beyond a vegetal merging into the other via nutritive growth and absorption into one's surroundings. Thornition is in fact an intentional extension into human and animal bodies, bodies that partly comprise the world of plants, specifically at the moment when those bodies accidentally cross into it. The thorn enters flesh and suddenly has the capacity of "self-movement," unsealing the vegetal character into that of Richard's "character," a character already vegetal in its Machiavellian externality but now en-thorned by a vegetal sharpness as well. When *3 Henry VI*'s setting physically moves at the end of the play to an exterior setting that includes a thorny wood, Richard has already been there in spirit, his body, as he conceives it, en-thorned and in-formed by vegetal agencies that run through the play. As it merges into

[31] Marder, *Plant-Thinking*, 32.

Richard, the thorny wood becomes more than landscape or place; indeed, it constitutes Richard's "place" amongst vegetal others and delimits specific versions of vegetal ontology in relation to vegetal and non-vegetal others.

Unlike Gruber, therefore, I do read Richard as ecological—via his own vegetally complex body and in relation to the thorny wood. By understanding Richard (and his body) as positionally related to the space of the thorny wood, we can conceive of a trans-corporeal, early modern self enmeshed within definitive ecosystems that cross through more-than-human bodies in the first history tetralogy. The presences of thorns in the plays belies a plurality of abilities and agencies that cross in and out of the human world. "Thornition," my term for the projected thought of the plant into physical space, thinks with—albeit painfully—precarious, vulnerable bodies like Richard's, like the soldiers on the battlefield, like all "human" bodies. The vegetal action of thornition traceable in and through Shakespeare's Richard speaks to a specific crossing of bodies, between the human and vegetal worlds, a directional specificity that might alleviate those who fear, like Gruber, "that proponents of trans-corporeality leave us, quite literally, no ground on which to stand—and no space from which to generate empathic alternatives to our current conditions."[32] She warns that thinking of the material world in terms of a monism that understands trees and humans alike to be composed of matter, what Renaissance writers sometimes referred to as "indistinction," can lead to a "sameness" of objects and beings that undoes human difference and as a result obscures or hinders the potential for human empathy at the expense of thinking across species. Much to the contrary, the sharply painful enmeshment of the Plantagenets with thorns in Shakespeare's histories highlights a potential more-than-human empathy that need not forsake the "human" nor that which exists outside of this category, animal

[32] Gruber, *Renaissance Ecopolitics*, 48.

or vegetal, if it exhibits a version of cognition in behavioral relationships toward sentient others. The "ground" or "space" from which this thornitive sentience emerges in Shakespearean drama is Richard's thorny wood, or brambly underbrush, a specific form of landscape native to England and elsewhere, at once material and semiotic, figurative in Richard's soliloquy in *3 Henry VI* that first references it, yet physically present near the play's denouement in 5.4, materializing on the battlefield.

In both of these instances, the thorny wood appears as impediment, difficult to traverse not only because of its overgrown density but also its potential for causing harm to human bodies, affirming an insolubility of the self. As alluded to in this chapter's epigraph, Richard views himself as having a particular orientation toward and relationship with the figurative "thorny wood" which entangles him and blocks his path to kingship, his soliloquy quoted below in more detail (none of this portion appears in O):

> I'll make my heaven to dream upon the crown
> And whiles I live t'account this world but hell,
> Until my misshaped trunk that bears this head
> Be round impaled with a glorious crown.
> And yet I know not how to get the crown,
> For many lives stand between me and home,
> And I, like one lost in a thorny wood,
> That rents the thorns and is rent with the thorns,
> Seeking a way and straying from the way,
> Not knowing how to find the open air,
> But toiling desperate to find it out,
> Torment myself to catch the English crown:
> And from that torment I will free myself,
> Or hew my way out with a bloody axe. (3.2.168-181)

I will return in the following section to the specifics of Richard's vegetalized body parts; I pause here to review this image of thorny forest scenery on its own as a kind of ecosystem, in opposition to traditionally metaphorical readings of Richard's rhetorical "wood." Elihu Pearlman describes the "thorny wood" of Richard's soliloquy as a "moderately allegorical psychological

expression," paired with the "farre-off shore," to which Richard refers earlier in the speech, as formidable problems for which Richard will propose solutions by soliloquy's end.[33] James R. Siemon understands the "thorny wood" as "a self-defeating struggle between desire and impossibility."[34] Yet neither of these commentators have in mind the actual ocean or the reality of woods that might inform Richard's words. Pearlman recognizes that the thorny wood, like the distant shore, functions in Richard's rhetoric as an extended simile, but Richard's figuration of himself as vegetal, as *part* of the thorny wood, complicates any sort of straightforward allegorical reading of the imagery that sees the human form of Richard lost in dense woods as a parallel to the intense struggle which he must undergo in order to take the throne. From an ecomaterialist point of view, the "many lives" that stand between Richard and his coveted object include the casualties he visualizes in the bloody brambles he will have to "hew" on his way out. The "heaven" or "open air" he cannot see is obscured by forest canopy, made up of arboreal English "crowns," the foliage of treetops that provide the physical shade and substance on which his extended simile is based.

Moreover, the thorny wood's visual replication in Richard's body as a kind of impairment of human bodies invokes a long history of disability studies discourse surrounding Richard's particular embodiment. David Houston Wood observes that Richard is "the representative example" of Shakespeare's portrayal of disability.[35] However, he also suggests that "the full range of Shakespeare's depictions of disability difference ought to spur us to expand our consideration of early modern nonnormative embodiment as a crucial means by

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[33] Elihu Pearlman, "The Invention of Richard of Gloucester," *Shakespeare Quarterly* 43, no. 4 (1992): 420.
[34] James R. Siemon, Introduction to *Richard III*, 41.
[35] David Houston Wood, "Shakespeare and Variant Embodiment," in *Shakespeare in Our Time: A Shakespeare Association of America Collection*, eds. Dympna Callaghan and Suzanne Gossett (London: Bloomsbury, 2016), 189.

which Shakespeare assays and delimits the human."[36] The quote by Marder above illustrates that posthumanists and critical animal/plant studies scholars tend to focus on certain abilities or capacities of nonhuman others as a means for deconstructing human exceptionalism or inciting greater awareness of and care toward nonhuman others, a focus that has the unfortunate side effect of over-valuing able-ness, whatever the species or kingdom. Such discourse would benefit from Wood's valuation of "nonnormative embodiment" or "varied embodiment," of which Richard's body in Shakespeare provides examples in both vegetal and human terms, bending the shape of his "disabilities" not only with his crafty rhetoric but also in his nonnormative arborealizations. Katherine Schapp Williams warns,

> If we read early modern drama to theorize disability in the period, then *Richard III* is one of the right plays to read but the wrong play to take as exemplary: Richard's "deformity" is not static, nor is it easily parsed. While the legacy of Richard's body is one that reduces his character to a particular bodily stereotype, Shakespeare's *Richard III* associates deformity with sexual and political power. In doing so, the play upends the critical and cultural impulses to codify Richard's form into a specific, legible, bodily formation.[37]

As this quote illustrates, Williams prefers the early modern term "deformity" to "disability," hoping to revive it as a critical term in disability studies discourse. "Deformed," nevertheless, still carries a rather pejorative meaning today, and other forms of "form" are worth considering. Richard's changing forms, especially in vegetal registers, lend themselves to an in-forming that per-forms variant versions of more-than-human, nonnormative embodiment. To perform is to alter one's form and become someone or something other. David T. Mitchell and Sharon L. Snyder hold up Richard in Shakespeare's plays as not only overcoming liability but also employing it for advantage. While Mitchell and Snyder acknowledge Stephen Greenblatt's idea that "self-fashioning" during the Renaissance opened up more fluid avenues of identity creation,

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[36] Ibid., 193.
[37] Katherine Schaap Williams, "Performing Disability and Theorizing Deformity," *English Studies* 94, no. 7 (2013): 770.

they assert that this "paradigm loses applicability when we seek to collect the multiconflictual ideologies of disability that inform the play."[38] It is in these sites of "multiconflictual ideologies of disability" that Richard's vegetal body performs. As a self in "performance" that is defined by others, Richard as plant-agent cannot be said to fashion himself; rather, his body performs a self-as-other-fashioning. En-thorned and in-formed, his body is trans-formed in its vegetal approximations.

Richard's Vegetal Body

Richard's body manifests itself vegetally in two primary ways, with one additional possibility, in relation to his supposed birth defects. Foremost, the characters of the plays, including Richard, draw attention to his back, torso, or body in general as being either "crooked," "crook-backed," "bunch-backed," or simply "mis-shaped," as a result of the one bodily ailment that the discovery of Richard's corpse has borne out as containing some truth. As Gruber mentions, "we now know that Shakespeare's depiction of Richard was partially accurate, in that the actual man had a curved spine, perhaps because of scoliosis, although this attribute likely would not have created the 'hunchback' effect familiar to us from the play."[39] It is Richard himself who adds to this description an arboreal signifier, calling his body a "mis-shaped trunk." Secondly, in Shakespeare as in his likely source of Thomas More, one of Richard's arms is diminutive in comparison to the other, such that Richard calls it a "withered shrub" in *3 Henry VI* and a "blasting sapling withered up" in *Richard III*, two slight variants that have different

[38] David T. Mitchell and Sharon L. Snyder. *Narrative Prosthesis: Disability and the Dependencies of Discourse* (Ann Arbor: The University of Michigan Press, 2000), 105.
[39] Gruber, *Renaissance Ecopolitics*, 39.

implications.[40] More's phrasing in his propagandistic "history" of Richard III's deformity is "a wearish withered arm and small," specifying with an air of historical nuance that it is the left arm in particular.[41] Shakespeare adds the vegetal embellishment of "shrub" not found in any of the chronicle sources. Furthermore, Shakespeare's vegetalization of Richard's arm occurs in *3 Henry VI* only in F, the earlier octavo emphasizing, like More's version, the diminutive nature of it, using "withered shrimp" rather than "withered shrub." Finally, while Shakespeare's Richard also claims his legs are of unequal size, it is the prodigiousness of his being born with a full set of teeth that offers, in line with Richard's affinity with the thorn, another sharp facet from the vegetal world of the thorny wood that coincides with his alleged deformity.

Connected already to the vegetal through his potentially plant-inspired surname and his visions of enthornment, Richard's envisioning of the main part of his body as trunk-like, related to the often twisted shapes of brambly forest terrain, fashions his identity in terms of a specific type of arboreal mobility. In this way, he channels the capacity of thorny bodies in the underbrush to grow into odd shapes and directions, as dictated by their relation to the sunlight and to neighboring plants. Gruber suggests, "From an ecocritical perspective, Richard's misshapen and much-reviled body is important because it impels scrutiny of the elusive meanings of nature."[42] She understands Richard as "a specific form of cathexis: onto him are cast dueling images of nature, and through him we glimpse the remediation of the human/nature relationship."[43] While I agree with the idea that "dueling images of nature" characterize Richard, I want to emphasize that the explicit vegetalization of his body, related to his relationship with

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[40] John Rous was Richard's first chronicler, whose *Historia Regum Angliae* (1486) appeared shortly after Richard's death and portrayed him as demonic and deformed. In addition to More, early chroniclers such as Polydore Vergil, Richard Grafton, and Edward Hall all followed suit in their derogatory descriptions of Richard.
[41] Thomas More, *The History of King Richard III* (London, 1557. Ex-classics online edition, 2013), 25.
[42] Gruber, *Renaissance Ecopolitics*, 40.
[43] Ibid.

the thorny wood, calls less for a "remediation" of our relationship with nature than for an opportunity to inhabit, speculatively, the point of fissure at which thorny bodies become entangled in Richard's suffering and "reviled" body, of which the thorny vegetation shapes, in part(s). In figuring his upper body as a trunk, misshapen or not, Richard's vegetality in this instance is emphatically arboreal, the word "trunk" referring from 1490 to "the main part of something as distinguished from its appendages […] The main stem of a tree, as distinct from the roots and branches; the bole or stock."[44] The *OED* records the first witness of "trunk" in Caxton's translation of the *Boke if Eneydos*: "How Eneas…hewe the troncke of a tree, oute of the whiche yssued bloode." From the fifteenth century, the verb "trunk" signified a cutting off of parts, a "truncating."[45] Richard's referring to his body as a trunk draws attention to its material vulnerabilities, sharing with trees the capacity to "bleed." Bodies bleed when pricked by thorns or hewn by axes. In Shakespeare's *Measure for Measure*, Isabella uses "trunk" figuratively to refer to Claudio's body, arborealizing it as Shakespeare does Richard's. She uses this image to extend her idea of "nature" to all feeling beings as well as to narrow it precisely to a material, embodied experience:

> Claudio. But in what nature?
>
> Isabella. In such a one as, you consenting to't,
> Would bark your honour from that trunk you bear,
> And leave you naked. (3.1.69-72)

When Claudio asks what Isabella's point is, her answer provides an image of pain and a fear of mortality that extends her arborealizing empathies to the "poor beetle, that we tread upon, / In corporal sufferance finds a pang as great / As when a giant dies" (3.1.78-80). Richard's "corporal sufferance" finds vegetal expression not in the "nakedness" of having been barked but in the

[44] *OED*, "trunk" *n.* I.1.a.
[45] *OED*, "trunk" *v.*[1].

exposure of his body to the sharpness of social norms.[46] His body hovers closer in early modern society's estimation to the thorn tree or the beetle than to the giant (human or tree), because of his "lowered" stature. He is a thorn among thorns, both arboreal body and body part, the logic of thornition spreading into sharp points at the body's extremities as it also twists into novel shapes that expand at its base.

The representation of human bodies as being like tree trunks, particularly when violently separated from other body parts and singled out as a torso, is common during the early modern period, before and after Shakespeare, a representation that recognizes how human and arboreal bodies are like one another. Sixteenth-century chronicler Robert Fabyan wrote of one historical battle: "There was Heddys Armys, Leggys, and Trunkys of Dede mennys Bodyes lyinge as thycke as Flowres growe in tyme of May in the florysshynge medowys."[47] It is Shakespeare, however, who merges this type of image with the nonnormative body of Richard in particular. Early modern gardening manuals refer to misshapen or crooked plants, but the leap from "crooked" to "crook-backed," conflating tree and human, is Shakespeare's intervention. "Crook-back" and "bunch-back" were roughly contemporaneous terms, while "hunchback" is of more modern provenance.[48] Additionally, from the thirteenth century, "crooked" was used simultaneously to signify the twisted growth of human and vegetal forms as well as the bent inclinations of moral depravity or perversity.[49] However, this twisting growth or direction often connotated the bending and bowing of age, the years piling on one another in a physical droop of bodily form. Hence, Richard as crookback was seen as supernaturally (or unnaturally) aged,

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[46] See Chapter 3 for my discussion on "barking."
[47] Robert Fabyan, *The New Chronicles of England and France, in Two Parts* (London, 1811 [1516]), 156.
[48] Other famous "crookbacks" in English history include Edmund Crouchback, Earl of Lancaster (1245-1296), another member of the house of Plantagenet, and Tudor statesman Robert Cecil (1563-1612), who served as Secretary of State for both Queen Elizabeth and King James.
[49] See Shannon Kelly, "Desire, a Crooked Yearning, and the Plants of *Endymion*," *Renaissance Drama* 44.1 (2016): 1-23.

advanced beyond the normative progression of human development. This perception of preternatural age corresponds with Richard's being called demonic, in addition to the incredible notion that he matured in the womb for an extra year before emerging with teeth and shoulder-length hair. In the latter instance, however, this image of proliferative growth resonates just as well with Richard's understanding of himself as arboreal, possessed not of demons but of infinite growth into new directions, even if that growth is not typical or vertical.

As nonnormative plant-human, Richard's thorniness is part and parcel with his "crookedness," both thorns and twisted shapes of vegetal bodies understood to be the result of the curse of sin, that which humans are ostensibly given the task of weeding out. Half a century after Shakespeare's Richard plays, Joseph Beaumont describes in the allegorical poem *Psyche* (1648) the supposed perfection of the Garden of Eden in terms of its lack of weeds, thorns, and "disgraceful" vegetal deformities:

> No Weed presum'd to show its roytish face
> In this Inclosure: Nettles, Thistles, Brakes,
> Thorns, Bryars, Cockle, Hemlock, rampant Grasse
> …
> The Yew, the Box, the Cypress, and the other
> Trees which to Funeralls consecrated be,
> Had there no bus'nesse; Nor Death nor her Mother
> Being as yet conceiv'd: No crook-back'd Tree
> Disgrac'd the place, no foolish scrambling Shrub,
> No wilde and careless Bush, no clownish Stub.[50]

According to Beaumont's poem, the existence of "crook-back'd" trees, undesirable specimens comparable to lowly shrubs, bushes, and "stubs," did not exist before the Fall of Man. This reference to a "crook-back'd" tree echoes Richard of Gloucester's figuring of his body as a deformed trunk. Though Shakespeare's Richard does not use the exact phrase "crook-backed

[50] Joseph Beaumont, *Psyche, or, Loves mysterie in XX canto's, displaying the intercourse betwixt Christ and the soule* (London, 1648. Early English Books Online, Huntington Library), 85.

tree," Beaumont's poem implicitly references the king's well-known wicked character, confirming the success of Shakespeare's influence and other anti-Ricardian propaganda, substituting "crook-back'd Tree" for Richard's "mis-shaped trunk." In banishing crooked trees like Richard from Eden's paradise, Beaumont reinforces the Elizabethan belief that immoral character corresponds with physical deformity. In the process, he manages to denounce anthropomorphically any vegetal life-form that does not measure up to a preconceived standard of arboreal beauty, order, and grace. Beaumont lauds the straightness of tall trees, imagined to look down on smaller and less orderly versions of vegetal being. Low to the ground, shrubs and weeds take on sinful attributes: foolish, wild, careless, and "clownish." Shrub-weeds are also associated with death because they are closer to the earth than the airy, heavenly cedars which Beaumont and other writers revered, also in evidence in *Psyche*:

> A royall Wood of everlasting Trees,
> Whose radiant Arms through all the World reach'd Gold,
> Whose Fruit were Gems, and Heaven-born Rarities,
> Whose Heads themselves high in the Sphears inroll'd;
> Yet all were Shrubs unto that *Cedar* who
> Had call'd them from their Graves with him to goe.[51]

Beaumont's "royall Wood" is composed of trees resurrected from the dead, yet even these radiant towering trees "were shrubs" compared to the Cedar-Christ who resurrects them.[52] The broadly vegetal and the specifically arboreal blend into one in this figuration which sees the cedar as simply a more perfect version of the silly shrubs below, yet the cedar itself is reduced to a shrub in the shadow of the almighty creator. In *A display of heraldry* (first published in 1610), John Guillim proclaims that plants possess "such Natures … as have in them express and

[51] Beaumont, *Psyche*, 89.
[52] On royal forests, particular domains set aside for the king's use as hunting grounds from the Anglo-Norman period, see James, *A History of English Forestry*, 1-42. See also Charles R. Young, *The Royal Forests of Medieval England* (Philadelphia: University of Pennsylvania Press, 1979).

manifest tokens of a living Soul," but he also views them as existing below animals and humans in the order of creation.[53] In Guillim's schema, types of plants are also ranked, as he cites of the wise King Solomon: "he was able to reason, discourse and dispute, not only of Beasts, Fowls, creeping things and Fishes, but of Trees also and Plants, from the Cedar in Lebanon to the Hyssop that springeth out of the wall, that is, from the highest and tallest Tree to the smallest Shrub and lowest Herb."[54] This exact formulation of "from cedar to shrub" became nearly cliché in early modern discourse, as a gesture of acknowledging a continuum from largest vegetal being to the very smallest, or least significant.[55] Along this continuum, some forms of life were believed to pass through in ranks or stages. As G. Havers' 1664 translation of a collection of French natural philosophy relates, "Nature observes such order as that she begins alwayes with the more simple, and never passes from one extremity to another without a medium. Thus the Plant springeth out of the ground like an herb, becomes a shrub, and then a tree. The Embryo lives onely a vegetable life at first, then arrives to motion, and lastly, is indu'd with reason."[56] The translation conflates human embryonic development with that of plants, not only in the sense that they both grow larger but also in that the human embryo is initially of a vegetable constitution, in terms of limited motion and lack of reason. In passing "from one extremity to

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[53] John Guillim, *A display of heraldrie: manifesting a more easie access to the knowledge thereof then hath hitherto been published by any, through the benefit of method* (London, 1660. 2nd ed. Early English Books Online, Harvard University Library and Birmingham Central Reference Library), 128.
[54] Guillim, *A display of heraldrie*, 130.
[55] John Evelyn, an early modern naturalist and advocate for planting trees, uses the expression in *A philosophical discourse of earth relating to the culture and improvement of it for vegetation, and the propagation of plants, &c. as it was presented to the Royal Society, April 29, 1675* (London, 1676. Early English Books Online, Yale University Library).
[56] Bureau d'adresse et de rencontre, *A general collection of discourses of the virtuosi of France, upon questions of all sorts of philosophy, and other natural knowledg made in the assembly of the Beaux Esprits at Paris, by the most ingenious persons of that nation / render'd into English by G. Havers, Gent.* (London, 1664. Early English Books Online, Bodleian Library), 286.

another," the thorn takes Richard's body as a medium, through which the vegetal crosses into the human.

The comparison of the cedar to the shrub relates to Richard's deformity in both his reduced stature as well as his "withered shrub" of an arm. Richard's reference to his arm in *3 Henry VI* as a "withered shrub" has connections to other references to shrubbery in Shakespeare's corpus, including the one spoken later in the play by Warwick. Several of these instances, Warwick's included, contrast the generic "shrub" to the more specific cedar tree, undisputed champion of conifers. In the narrative poem *The Rape of Lucrece* (1594), Shakespeare puts the cedar next to the shrub, only not "withered" as a past participle descriptor like Richard's arm but as an intransitive verb, "wither," an active withering in relationship to the towering cedar, when Lucrece tells Lucius Tarquinius:

> 'So shall these slaves be king, and thou their slave;
> Thou nobly base, they basely dignified;
> Thou their fair life, and they thy fouler grave:
> Thou loathed in their shame, they in thy pride:
> The lesser thing should not the greater hide;
> The cedar stoops not to the base shrub's foot,
> But low shrubs wither at the cedar's root. (659-665)

This withering of shrubs "at the cedar's root" corresponds to Richard's reckoning of his own arm as a withered shrub. Though Richard does not evoke the detrimental effect of a nearby cedar, rhetorically the thorn tree as shrub resides in the shadow of taller trees. Abraham Cowley compared "old patrician trees" to the "plebeian under-wood," a class distinction that Lucrece invokes, attempting to humble Tarquin.[57] Both scenarios envisage a basic sort of ecosystem that involves different orders or manifestations of vegetal being, proximate and interdependent, enmeshed into their environments, weathering the conditions that variously work toward the

[57] Thomas, *Man and the Natural World*, 219.

withering, or flourishing, of those beings. Both *3 Henry VI* and *The Rape of Lucrece* emphasize the lowliness of the shrubs, withering or withered in their respective circumstances. Expressing a different quality of pain than en-thornment, the withering of bodies is related more to the size and distribution of bodies than to morphological sharpness; the generic "shrub" loses its thorns as a result of its abstraction, becoming more akin to the human in a common withering-with.

The difference in the way that Richard describes his arm in the two history plays indicates a continuum of vulnerability that acknowledges the withering effects of age at the same time that it portrays how weather affects all bodies and how it can destroy even young lives. The progression of Richard's arm in *3 Henry VI* from a "withered shrub" to a "blasted sapling withered up" in *Richard III* may appear slight, but the difference carries significance in relation to humans' attempts to categorize what they see in the vegetal world. "Shrubs" as a categorical entity are more like most thorn trees in that they do not grow beyond a certain height, whereas the term "sapling" is used to refer to a young tree that may or may not grow tall as it develops, slight because of its early age, not because of its species. In a mirror image of Beaumont's poem, where imaginative Christ-cum-cedar makes shrubs of actual cedars, Richard's withered arm in *3 Henry VI* shrinks further into indistinction in *Richard III* as a young sapling which could take on any number of future identities. Thus, the human-vegetal vulnerabilities of youth cross with those of old age, both of them susceptible to withering, whether by the effect of windy "blasting" or some other cause. Jayne Archer, Richard Turley, and Howard Thomas point out: "Like 'choke,' 'blast,' which similarly implies death by tainted breath or breathlessness, is an infectious disease of cereal crops. But where 'choke' is used by Shakespeare to indicate rebellion from within, 'blast' points to the wide-reaching effects of such actions."[58] Clearly, "blasted" is

[58] Jayne Elisabeth Archer, Richard Marggraf Turley, and Howard Thomas, "The Autumn King: Remembering the Land in *King Lear*," *Shakespeare Quarterly* 63, no. 4 (2012): 534.

an appropriate adjective for Richard, in relation to his usurpation of the throne and its after-effects, but in the intertextual movement from "withered shrub" to "blasted sapling withered up," Richard also moves his vegetalized arm toward the physical space of the thorny wood, an exposure to the elements, not simply a rhetorical gesture but an ecological en-thorn-ment that contextualizes his vegetal body as existing amongst other vegetation. "Withered *up*" implies a greater, more intense action of withering, resulting in a vegetal body that has been used up completely, dried out, having taken in too much heat or cold. Richard's "blasted" body brings together its withered and weathered status, in a discontented "winter" from the very start of *Richard III*. Etymologically related to "wither," *weather* today implies a range of meteorological possibilities, but in Richard's early modern body the blasts and cold winds of winter weather have the same teleological end point in exposed human bodies as they do in those of plants: certain death. Like rendering like, a wind-blasted thorn withers and dies, supposedly short of breath, the wind paradoxically knocking the wind out of the vegetal body.

Similarly, with his extensive number of lines in *Richard III*, the actor who plays Richard may find himself breathless at the end of a performance, but in the play, it is Richard's metaphorically "infected" double royal body that spells death for not only him but for many of his subjects as well. While Richard as king already theoretically has two bodies, body natural and body politic, his association with the thorny wood and his vegetal self-figurations multiply his already doubled body into a human/plant hybridity. Richard's ambitious desire, temporarily contained in and by thorny woods, is for the raw power of kingship; he does not desire a vegetal immersion into "nature," and in fact curses "her." Richard en-thorned bears a certain vegetal wilderness, or wildness, already present within the power structures of hereditary royalty; thornition, however, cuts into this space via Richard's body, pushing kin and not-quite-kin to

fight each other over both horizontal and vertical political space in the Wars of Roses. Prudence Gibson suggests, “Humans are a part of nature but also have a conscious cognition of it. The disconnect and connection between these two perceptions of the environment, as being immersed in it and aware of it, are evident in the motif of the Green Man. Human identity exists *at the very point* between nature and a constructed concept of it.”[59] Rather than projecting a “human” identity, though, Richard’s vegetalized body, as trunk and shrub and teeth, exists *at* and *as* points, in the plural, that do not so much construct conceptual categories such as “nature” or “human” as they differentiate them through a thornitive logic of painful entanglement. Furthermore, Richard is not merely human-plant or plant-human; rather, he takes on a completely new vegetal identity that proliferates at the site of his figurative body, becoming and taking on new forms of vegetal hybrids.

In this prolific hybridity, Richard’s body “touches” plant-kind, such that he is a kind of plant, at the same time that his body becomes the many plants of thorny forest, sprouting from him even as they manifestly wither. In figuring parts of his body and not his *entire* body as vegetal, Richard suggests that *part* of human existentiality and/or physiology can be linked to that of plants. In other words, there is some of the plant in the human and some of the human in the plant, a sort of complementarity that nonetheless admits an alien otherness. As Michael Marder laments, “Curiously enough, the absolute familiarity of plants coincides with their sheer strangeness, the incapacity of humans to recognize elements of ourselves in the form of vegetal being.”[60] At the same time, however, this hybridity signals Richard as monstrous other, his self-description making a vegetal Frankenstein of his (dead or dying) vegetal parts grafted onto human surfaces. The image of Richard’s tree-body, based on his own description of it, is a

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[59] Ibid., my emphasis.
[60] Marder, *Plant-Thinking*, 4.

compilation of vegetal parts that all intersect with his desire for the throne, impelled *and* impeded by thorns:

> Until my mis-shaped trunk that bears this head
> Be round impaled with a glorious crown.

Richard's body retains its Machiavellian character in its vegetal register, twisting into multiple modes of (re)presentation, both shrub and tree trunk and crown. Scholars have debated whether these lines should be emended because the syntax indicates that a crown is to be impaled around the trunk, which in turn would bear Richard's head ("trunk that bears this head"). Logically, shouldn't the crown be on Richard's head, not on his body (the trunk)? Rather than attempt to reconcile this oddity with human logic, we might note another odd inconsistency in Richard's self-image, remembering that Richard's arm is rendered not as a branch or a bough of the bodily tree trunk but as *another* arboreal being altogether, a separate plant, attached to his misshapen trunk: the withered, blasted shrub/sapling, growing out of him in counter-temporal aging even as it grows old in its withering. Furthermore, yet another inconsistency confronts us in this image: given the common early modern portrayal of low shrubs next to a cedar's roots, we might want to locate the shrub-arm, in Richard's hybridic self-image, near the *base* of his trunk-body. Normative spatial mapping, on the other hand, would locate Richard's arm higher up on the trunk, the branch corresponding to human arm, but it makes little sense to imagine a withered shrub projecting itself from on high, unless Shakespeare was thinking of a moss, vine, or other parasitic plant. This incongruence of plant matter becomes less odd, however, if we accept the the location of the crown "impaled" around the tree's body rather than its "head." "Impalement" did not originally carry the connotation of a body or a head being pierced through with a stake, but "to impale" could suggest an encircling, hemming in, or surrounding, as in the wearing of a

crown or garland.[61] Richard's body exists in his own mind in plant *formations*, an "unnatural" corruption of natural forms: the crown of this *particular* tree does not sprout in its natural heavenward apex; it circles the trunk, under a bare, deadened canopy, like a barking ring (like Isabella's arborealizing of Claudio's "trunk"). His withered shrub, then, is overshadowed, like the shrub mentioned in *The Rape of Lucrece*, but by his *own* leafy crown that circles his body. Representing various plant kinds, Richard does not conform to the standard analogical divisions or separations of pre-Linnaean classificatory kinds that understood God's cosmological order in a descending chain of being. Wherever Richard's "crown" appears, before or after he actually wears it, he wears a crown of thorns, an antichrist whose suffering takes place not on a wooden cross but continually en-thorned by wood crossing into him.

Finally, the prenatal presence of Richard's "teeth" speaks to this (often unseen) presence of thorns in Richard's body, en-thorned there figuratively since the soliloquy in *3 Henry VI*, retro-actively accompanying the propaganda of Tudor myth that re-writes Richard's body into the tetralogical narrative. The teeth at the time of birth stand in for thorns, an alien vegetal presence marking Richard's body, other-ed into a human*istic* form by More *et al*. The child born with teeth is other-than-human monster, closer to the category of animal/plant in its foreign otherness. Furthermore, although Shakespeare's plays emphasize the deformity of Richard's body, the presence of teeth signals a movement away from normalized human (child) formations. The precocious or early development of teeth suggests the vegetal vitality that belongs to the particularly hardy varieties of fast-growing weeds that attempt to grow amidst the other trees and brambles, developing sharpness in an evolutionary strategy to fend off predators and exist in harsh sylvan environments. All of these vegetalities are bound up in Richard's thorny wood,

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[61] *OED*, "impale" *v*. 1-2. In this sense, "impale" was a near synonym for "environ."

caught in his body as his body is caught in theirs, sharing blood/sap in the puncture wounds that enact body-crossings, first trans-corporeal and then intra-corporeal, lingering in the sustained presence of "the thorn in the flesh" carried out of the forest into the political world of Shakespeare's history plays, to join the floral bodies (the roses themselves) and the arborealized human bodies parading, marching, signifying, and acting in the theatrical Wars of the Roses.

Plant-agents: Men, Women, and Children

The scholarly "plant-blindness" with respect to Richard's body extends generally to the vegetation of the entire tetralogy, observable in the figuring of other Plantagenet characters as trees or plants. Long ago, Caroline Spurgeon observed the "dominating imagery of garden and trees" in Shakespeare's first series of history plays, declaring that "the number of tree and garden images is unusual, even for Shakespeare. The royal house is definitely thought of as a tree, with the children and kinsfolk as branches, leaves, flowers or fruit, and the idea of this tree being planted, shaken by storms, grafted, rooted up and withered is constantly present."[62] Jean Feerick investigates the Renaissance commonplace that human flesh (particularly royal flesh) is comparable to the "mere" substance of the earth: that is, soil.[63] This analogy goes both ways in early modern formulations of the concept: human bodies are like fields, their skin the soil that sprouts vegetal "hair"; so too are fields likened to human bodies—especially the fertility of women's bodies, though male bodies are not exempt from the comparison, in evidence in Shakespeare's history plays. Similarly, Amy Tigner notes, "Shakespeare frames many of his

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[62] Spurgeon, Caroline F.E. Spurgeon, *Shakespeare's Imagery and What It Tells Us* (Cambridge: Cambridge University Press, 1935), 219; 401 (in chart). Alvin B. Kernan also observed some time ago that the sea imagery of *3 Henry VI* far exceeds that of *The True Tragedie*, in "A Comparison of the Imagery in *3 Henry VI* and *The True Tragedie of Richard Duke of York*," *Studies in Philology* (1954): 431-42.
[63] Jean Feerick, "Groveling with Earth in Kyd and Shakespeare's Historical Tragedies," in *The Indistinct Human in Renaissance Literature*, eds. Jean E. Feerick and Vin Nardizzi (New York: Palgrave Macmillan, 2012), 232-33.

plays by distinctively using botanical language to explicate ideas of government and rulership."[64] Aside from these latter two studies, however, remarkably little has been said recently about the overwhelming presence of vegetation in these plays and the relationship between the characters, trees, plants, and the many plant parts such as thorns and flowers. From an ecomaterialist angle, these are plant "parts," in both the sense that they are part of a larger being or organism and in that they play specific parts or roles in the performances. In this section, I look more closely at the characters who are caught up in Richard's "thorny woods," subjected to the painful logic of thornition that inheres their king and kingdom. As Richard "touches" plant-kind as a result of thornition, his vegetal(ized) body also touches the bodies of other Plantagenets to recruit them into plant-agency as well. I begin with the youngest relatives of Richard, his nephews the young Duke of York and his brother the prince Edward (never officially inaugurated as King Edward V), both in their early adolescence.[65] After explicating Richard's relationship to these younger royal Plantagenets, I situate the vegetal aspects of his relationship with Queen Anne, before moving onto the battlefield to account for the arborealizations of Plantagenets, namely, George, Duke of Clarence, the Earl of Rutland, and the Earl of Warwick.

With Richard's interactions with his nephews, *Richard III* focuses its vegetal expressions on growth, fruiting, and flowering. Richard's thorny influence on his nephews, represented consecutively in 2.4 and 3.1, appears in the form of highly vegetalized rhetorical conceits. At this point, reading the tetralogy chronologically, King Edward IV has already en-thorned his son Prince Edward by the end of *3 Henry VI* (in F, not O), though he does so to question his son's potency: "What? Can so young a thorn begin to prick?" (5.5.13). However, Richard's contact

[64] Tigner, *Literature and the Renaissance Garden*, 70.
[65] See Catherine Belsey, "Little Princes: Shakespeare's Royal Children." *Shakespeare and Childhood,* eds. Kate Chedgzoy, Susanne Greenhalgh, and Robert Shaughnessy (Cambridge: Cambridge University Press, 2007): 43.

with Edward and his younger brother takes on a much more extensive vegetal language, amplifying the thorn-pricking that King Edward dismisses. The most extended vegetal analogy of *Richard III* occurs in 2.4 in an interchange involving the young Duke of York, his mother Queen Elizabeth, and his grandmother the Duchess of York. Elizabeth compares her son to his brother Edward, proclaiming to have heard, “They say my son of York / Has almost overta’en him in his growth” (2.4.6-7). In his modesty, the young York protests to this statement, but the Duchess rejoins, “Why, my cousin, it is good to grow.” (2.4.9) In reply, York reports that Richard had once told him the following:

> ‘Small herbs have grace; great weeds do grow apace.’
> And since, methinks I would not grow so fast
> Because sweet flowers are slow and weeds make haste. (2.4.13-15)

“Great weeds” here does not imply the vertical greatness of the cedar but the ability of weeds and thorns to grow quickly and profusely, rapidly (“apace”) converting fields into thorny woods if not pared back. This botanical discussion continues for about thirty lines before being picked up again in the next scene in Act Three. The main thrust of the conceit is the categorical or characteristic distinctions between “flowers” or “herbs” versus “weeds,” desirable versus undesirable plants. While York figures his uncle Richard as a fast-growing weed, growing “so fast / That he could gnaw a crust at two hours old” (2.4.27-28), the Duchess, Richard’s mother, remembers his development differently: “He was the wretched’st thing when he was young, / so long a-growing, and so leisurely” (2.4.18-19). The slow growth of flowers is understood, like their smell, as “sweet,” akin to the slowness of arboreal and herbal growth, as opposed to fast-growing weeds. “Grace,” in this rendering of vegetal growth, is a type of affected, measured slowness, a reserved and refined movement of outward/upward spatial development into the future that scorns the element of “hasty” hardiness that common weeds retain. This graceful

growth and slow movement are not measurable in mere hours but require extensive time for refinement. In and from the weeds of the thorny wood, Richard's body signifies, even to the eyes of the inexperienced young duke, as incompatible with nobility, his dis-graceful, ig-noble "nature" signaling its place otherwise in its hardy thorniness. Richard's touching of plant-kinds in *3 Henry VI* figures in *Richard III* with the idea of touching plant growth itself. York comments, "I could have given my uncle's grace a flout / To touch his growth nearer than he touched mine" (2.4.24-25), suggesting that his quip about his uncle's rate of growth might be a sharper one, more thornitive, than his uncle's quip about York's fast growing. York's phrasing offers a haptic coupling of these two humans-become-plants and their intersecting yet diverging growth patterns. York's "touching" upon Richard's growth is a figure of speech that conveys the rhetorical notion of topos, figured as spatial and substantial, but this reciprocal "touching" also verges on an incestuous sexual activity or operation between the two relatives. York wants to "flout" Richard's grace by "touching his growth," that is, touching it "nearer" by disgracing him, calling attention to Richard's "unnatural" growth, either ultra-slow growth (two years) or ultra-fast (in the alternative story York hears). In this scene, Shakespeare stages two competing versions of Richard's bodily development, York's version vs. the Duchess's. Even within Richard's various vegetalizations, then, his nutritive growth has multiple identities of its own.[66] The idea that one growth can touch another's relates to the thorny wood: Richard's thorny entanglement comes to bear on the young "growings" in the kingdom, that of his nephews. In the thorny wood, brambles grow up against larger bodies as well as other vegetal bodies, vegetal growth always touching other "growths," those of more-than-human bodies endowed with the basic faculty of nutritive growth. "Touching nearer" suggests a closer, more intimate sort of

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[66] In *De Anima*, Aristotle associates nutrition and growth with the nutritive soul (413a28).

touching, possibly an en-thorning embrace, not only touching but becoming intra-corporeal, piercing flesh and remaining there.

Growth exerts its subtle action in a type of touch, a touch that is touched back, a nonintentional movement outward, comparable to the slow expansion of tree rings or plant growth in general.[67] Growth is also a movement that "touches" upon the air, the ground, and other material, medial surfaces, even if slightly or imperceptibly, as growth occurs just as slightly or imperceptibly, from a human perspective.[68] Earlier in the play, in mourning the death of her husband, King Edward IV, Queen Elizabeth turns to botanical metaphors as well, asking, "Why grow the branches, when the root is gone? / Why wither not the leaves that want their sap?" (2.2.41-42). In this moment, Prince Edward is not a thorn nor York a weed because Elizabeth conceives of them as branches in relation to their father's "root," and leaves, in relation to their father's "sap." They are, rhetorically—though also biologically—extensions of the same "growth" that once animated their father. This figuring, posed as a question, offers a salient picture of vegetal agency and resilience. Elizabeth expresses the common knowledge that the "life" in the roots of a tree is the most crucial to its overall well-being, while one can cut the branches without killing it. She understands the sap of the tree as its vital life-blood, recognizing that the water and nutrients transported in the interior of the tree reach up to enliven its leaves. Yet her observations of the political world show that it is out of sync with the natural world and its supposed affinities to it. They should be connected, in her thinking, yet she perceives an "unnatural" break, a fissure in the connectivity of worlds, human politics painfully unsettling

[67] Such a reversible touch recalls Merleau-Ponty's concept of the "tactility" of flesh, in *The Visible and the Invisible*, trans. Hazel E. Barnes (Evanston: Northwestern University Press, 1968), 142. Despret similarly suggests, "As there is no way to touch without being touched, there is no way to determine who touches whom. Touching enacts a desubjectification. One may now be an agent without being a subject; one is nevertheless not an object," in "From Secret Agents to Interagency," 39.
[68] Marder discusses the "barely perceptible motion" of vegetal growth in *Plant-Thinking*, 19-36.

expectations about a natural, orderly cosmos. Between the political and the natural Richard's vegetal body has been engrafted, touching this growth in unexpected ways.

To take another example, the arboreal growths of *Richard III* in its famous wooing scene tap into humoral watery elements crossing the human and the vegetal.[69] Greta Olson discusses the physicality of the interaction between Richard and Queen Anne in the first act of *Richard III*: "The wooing scene highlights the fascination as well as the instrumentalization of Richard's anomalous body … The scene exhibits how the simultaneously revolting and commanding qualities of Richard's body combine to make him a physically dynamic anti-hero, whose animal attractiveness and criminality are manifest in his visible difference."[70] While Olson labels Richard's body as both animal and criminal, she also posits it as "anomalous" in its "commanding" physical attractiveness, and the anomaly lurking in the materially viscous exchange between Richard and Anne is the arboreal, entering into the scene in the form of watering agents: tears and saliva. Early in the scene, Richard compares the tearful mourners of another dead king, Henry VI, to "trees bedashed with rain" (1.2.166). This arboreal comparison comes just after Lady Anne has angrily spit at Richard in defiance (1.2.148). If we retain the image of Richard's body from *3 Henry VI* as simultaneously tree and shrub, then we can presume Anne's spitting on him, especially immediately after he has arborealized others, evokes a metaphorical rain that "be-dashes" his arboreal body as well. Siemon glosses "bedashed" to mean "injured or spoiled as the wind dashes flowers (*OED* dash sb.1 1a)" [check source], recalling the "blasted" nature of Richard's arm. His vegetal body is now both blasted and bedashed. Richard elaborates on this image of trees being rained on—being "weathered"—in an

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[69] See Julian Yates, "Wet?" in *Elemental Ecocriticism: Thinking with Earth, Air, Water, and Fire*, eds. Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2015), 183-208.
[70] Olson, "Richard III's Animalistic Criminal Body," 308.

attempt to win Anne over, painting the scene of the grieving, post-battle tree-mourners before pronouncing: "And what these sorrows could not thence exhale, / Thy beauty hath, and made them blind with weeping" (1.2.168-69). He and Anne enact Richard's vegetality in this moment, with the action of crying tears, when Richard's face and body accept the spit/rain that she scornfully conveys on him, only to take the physical "watering" as a substantial rhetorical sustenance, a balm to his withered status. Olson notes, "Bodily fluids are exchanged when Anne spits at Richard; and depending on the individual interpretation, the actor playing Richard may wipe Anne's spit away, lick it from his fingers, and/or return it to Anne's body with his touch."[71] Richard claims that his own eyes have, until this moment, "never shed remorseful tear … My manly eyes did scorn an humble tear" (1.2.157, 167). However, Anne's eyes "from mine have drawn salt tears / Shamed their aspects with store of childish drops" (1.2.155-56). This mutual watering, effected by Anne's spitting on Richard, conjures a shared affective sensation, if not exactly a feeling, transmitted through the emission and reception of water. Regardless of Richard's assuredly Machiavellian histrionics, the watery substances of spit, tears, and rain commingle in this bedashing of cheek-trunk that cuts across human-vegetal affinities. Like the sharp pain of thorn piercing flesh, the affective intensity of grief-borne water charts across the human and the vegetal. Richard claims he is ashamed of his tears, considering them unmanly, the "store of childish drops" shaming him. The "storage" of water reserves, loosed by weeping bodies, arborealizes Richard alongside the rain-drenched trees he invokes to make his desperate plea. The water bedashes the exterior of tree-Richard, but only to slide down to his roots to renew his energy. This spitting/watering event occurs at a crucial vegetal juncture, in the instant at which Richard uses the vegetal family name he has in common with the deceased King Henry

[71] Olson, "Richard III's Animalistic Criminal Body," 307.

lying in view, calling himself "Plantagenet." Anne spits on Richard because of his claim that he is a "better" Plantagenet, with "The selfsame name, but one of better nature" (1.2.146) than her deceased husband, Edward.[72] The multiple Plantagenets, whose first names overlap almost as much as their common last name, take on plant agencies in their othering of themselves, lost and found in "selfsameness" that simultaneously allows for varied qualities and degrees of "nature," thornition representing one particular strain of vegetal being.

Moving now away from the growings of *Richard III*, I return to *3 Henry VI* to explicate its uprootings and hewings, which I read as related to Richard's vision of hewing his way out of the thorny wood, cutting down the "many lives" in his way. The figurations of human characters as trees, "cut down" in battle scenes, arborealize their bodies in relation to Richard's. To a certain extent, *3 Henry VI*'s instances of "rooting out" (1.3.32) and "rooting up" (1.1.48) gesture toward agricultural necessity, the uprooting of not only pernicious weeds but also root vegetables like potatoes and carrots. Such images quickly merge into that of death and warfare, however: "reaping" at a "too cruel hand" (1.4.166) as well as "weeping-ripe," which plays on *reaping* (what is) ripe (1.4.172). Rooting and reaping correspond in the text with hewing and felling, a version of vegetal death that Shakespeare associates mainly with arborealized Plantagenets who fall in battle, and exclusively the close relatives of Richard who are of the house of York. In Act Two, a messenger describes the death of Richard Plantagenet, Duke of York (Richard III's father), declaring, "And many strokes, though with a little axe, / Hews down and fells the hardest-timbered oak" (2.1.54-55). The Duke of York, of course, is this hard-timbered oak, brought down despite the "little" axes of the Lancastrian enemies. In the following scene, George, Duke of Clarence, one of Richard's brothers, expands on this image with a metaphor of

[72] This is a different (though also deceased) Edward than King Edward IV, who is the deceased husband of Queen Elizabeth, mentioned above.

their vengeful warring as a cutting away at the body of a tree, at its roots, acknowledging the difficulty and intense labor involved in this life-taking activity, when he challenges Edward (soon to be King Edward IV):

> But when we saw our sunshine made thy spring,
> And that thy summer bred us no increase,
> We set the axe to thy usurping root;
> And though the edge hath something hit ourselves,
> Yet know thou, since we have begun to strike,
> We'll never leave till we have hewn thee down
> Or bathed thy growing with our heated bloods. (2.2.163-169)

The sweat and blood resulting from this interaction are palpable. Anne F. Harris suggests that the word *hew* "carries an onomatopoeic trace of the effort of cutting down, the blunt force seized by the body to bring down the thing. Hewing is a gesture of intervention and survival."[73] Such "survival" in warfare is a desperate one, and it is important to note that the edge of the axe, as Clarence indicates, "hath something hit ourselves," depicting a distribution of pain and suffering across the axe that cleaves both arboreal and human body parts. Harris sees hewing as an attempted act of anti-ecological "mastery" of humans over the physical environment, a deforesting of thorny woods, yet she also sees this mastery as a fantasy, hewing ultimately unable to achieve its attempt at ontological separation: "The *act* of hewing tries to create boundaries between part and whole, living and dead…. But the hewn can yearn for the whole, can insistently tend towards it, and remembers it in parts."[74] Harris questionably anthropomorphizes the hewn wooden object as "yearning," but her emphasis on hewing as a type of worldly, embodied action, that is, the motion of cutting as a material interaction of not only bodies but body parts affirms in the action an affective insistence across more-than-human parts,

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[73] Anne F. Harris, "Hewn," in *Inhuman Nature*, ed. Jeffrey Jerome Cohen (Washington, D.C.: Oliphaunt Books, 2014), 17.
[74] Harris, "Hewn," 19.

each inflicted by pain from sharp edges. Furthermore, Clarence contrasts the "hewing down" of the tree against its continued growing, evidencing the common botanical knowledge of needing to cut a tree or plant at its base, roots and all, in order to kill it fully (even if such an action does not kill all trees). Clarence and the Yorkists will not stop cutting down this tree, even if they first "bathe" the tree's growing in their own "heated bloods." The warmth of spring and then of summer sunshine, in the first two lines of Clarence's dialogue, permeates the rest of his speech, ending with this bloody image of either fallen tree or blood-covered soldier. In the midst of the hacking, flying bark, wood splinters, and sap all intermingle with the blood and sweat of the human hewers, coming together painfully in an intimate human-arboreal encounter, merged into hewn arborealizations of shared pain, enlivened by sharp edges thrust into bodies of the other.

The images of hewn bodies, then, both human and arboreal, draw attention to the ontological cut separating these beings while focusing in on their mutual ability to experience or feel something like pain and suffering, evidenced in material signs such as bleeding. Early in *3 Henry VI*, Clifford, a Lancastrian lord, cries: "Plantagenet, I come, Plantagenet! / And this thy son's blood, cleaving to my blade, / Shall rust upon my weapon till thy blood, / Congealed with this do make me wipe off both" (1.3.50-51). Clifford does not evoke botanical imagery explicitly here, but the comingling and conflation of human blood and arboreal sap elsewhere warrant its reading here in relation to the repetition of "Plant…Plant" followed by "blood…blood." During the period, it was often noted that the sap of plants corresponds to the blood of humans. Feerick notes that the "popular genre of the husbandry manual records precise analogs between botanical parts and the human anatomy. In such tracts the correspondences between plant and human flesh, linked in sharing a common humoral physiology, are precisely delineated. The tree's sap translates as blood, its emerging cions as eyes, and the bark is perceived to be a kind of skin

threatened with wounding by the practice of grafting."[75] *3 Henry VI* and *Richard III* describe a number of instances of the hewing of plant parts and the cutting down of trees, which evoke this bloody/sappy complementarity but which also signal, as in the example of Clarence, a sort of resistance to this cut through an emphasis on the labor and pain of the process. Human and arboreal bodies share a companionate vulnerability in these moments, an un-becoming together, crossing species and kingdom lines to acknowledge our affinity in finitude, in the perishability of living bodies. Rutland, Richard's youngest brother, becomes a tree as a "tender spray" in the words of Richard, vulnerable both in his youth and in his kinship to the York family:

> Revoke that doom of mercy, for 'tis Clifford,
> Who not contented that he lopped the branch
> In hewing Rutland when his leaves put forth,
> But set his murd'ring knife unto the root
> From whence that tender spray did sweetly spring,
> I mean our princely father, Duke of York [Richard Plantagenet] (*3 Henry VI*; 2.6.46-51)

In evoking this metaphor, Richard mentions specific arboreal parts—branch, leaves, root—which are meant to correspond to the parts and functions of Rutland's body. Figured as a tree being pruned, Rutland's "branches" are only in need of lopping "when his leaves put forth," growing beyond their desired capacity. Clifford's pruning, or cutting back, is insufficient, however, according to Richard, because his hewing and lopping move from injury to murder, when he metaphorically takes the action of cutting Rutland's roots, meaning his father, out of which the "tender spray" emerges into and proliferates in the political atmosphere.[76] "Spray" indicates a slender twig or group of twigs from trees or shrubs, still growing or cut off. The tenderness of the young Rutland-plant relates both to the material composition of a tree's early years of arborealization, arboreal adolescence, its arboreal material green in terms of both inexperience or

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[75] Jean Feerick, "Botanical Shakespeares: The Racial Logic of Plant Life in *Titus Andronicus," South Central Review* 26, no. 1/2 (2009): 84-85.
[76] Cf Rackham on "lopping"

"sweet" innocence and in its living sapwood, not yet compressed into the service of arboreal structural support that woody interiors become over time as heartwood. As I discuss above, Richard revises his description of his arm from "withered shrub" to "blasted sapling"; his younger brother is a "spray" rather than a "sapling," rendered thin and young, "tender," but as connected vegetally to the body of his family, through his father's lineage, as branches putting forth leaves. As opposed to the separate conglomeration of vegetal entities composing Richard's body, Rutland's arborealization, like that of Richard's young nephews, is a composite figure fused into the body of his father. Both the trimming of young branches, signifying new life with their leaves, and the cutting of long-established roots point to egregious forms of harming different forms of life. This passage also clearly highlights Shakespeare's emphatic vegetalization of F, when compared alongside the shorter passage of O:

> Reuerse that doome of mercie, for tis *Clifford*,
> Who kild our tender brother Rutland,
> And stabd our princlie father Duke of *Yorke*.[77]

While Rutland is still "tender" in his young age, no trace of F's arboreal lopping and hewing of branches appears here.

Finally, Richard's relationship to his house affects the Earl of Warwick, known historically as the "kingmaker," who in the list of roles is named an "adherent of York, later of Lancaster." Like Rutland, he is also hewn, arborealized by Shakespeare apparently as a result of his relationship to the Yorkist Plantagenets. As noted above, Richard does not conceive of himself as a stately cedar, hewn or unhewn, enumerating his congenital deformities as vegetal parts. Warwick's entire body, on the other hand, is "mangled," becoming deformed as a result of

[77] *The true Tragedie of Richard Duke of Yorke, and the death of good King Henrie the Sixt*, 389-90. Quotations from *The True Tragedie* are from the facsimile of the unique manuscript of the 1595 Octavo, reproduced in Appendix 1 of Cox and Rasmussen's edition of 3 Henry VI. Page numbers cited are from that edition.

violent warfare. Also unlike Richard, who sees himself as a bent, thorny trunk with a composite vegetal body, Warwick does suppose himself a stately cedar who during its long life overshadowed and related to smaller forms of plant and animal life below/around him, claiming the protection of smaller "plants." Before perishing on the battlefield, he cries out:

> ...My mangled body shows
> That I must yield my body to the earth
> And, by my fall, the conquest to my foe.
> Thus yields the cedar to the axe's edge,
> Whose arms gave shelter to the princely eagle,
> Under whose shade the ramping lion slept,
> Whose top branch overpeered Jove's spreading tree
> And kept low shrubs from winter's pow'rful wind" (*3 Henry VI*; 5.2.15)

In this image, Warwick imagines himself as a cedar tree succumbing to the sharp edge of an axe, but not before remembering the power of the cedar's branches during its life, whose "arms" shaded the animals below and protected the smaller plants from the blasts of weather and the "winter's pow'rful wind," though it is the blasted "low shrub" of Richard and his army that ultimately cuts Warwick down. Warwick envisages an early modern ecosystem that includes multiple species of plants and animals. Despite an attempt to maintain in metaphor a bodily coherence or unitary self-composure while trying to overwrite his battlefield mangling, Warwick's arborealization of himself brings his body, like Richard's, into the midst of multiple vegetalities; indeed, he describes three varieties of plant-kind in his dying breath. The primary tree in the image, to which Warwick relates his own body, is the cedar, associated by Shakespeare's audience with the renowned Biblical cedars of Lebanon, conifers capable of growing over one hundred feet tall. In yielding his "body to the earth," Warwick falls like a mighty cedar hewn to the ground, devastating the ecosystem by destroying the fantastical habitat of eagles and lions. Additionally, having grown higher than the oak, "Jove's spreading tree" (recalling Richard Plantagenet's being figured as an oak earlier in the paly), Warwick-as-cedar

inhabited the earth in its/his own particular way; its/his/their death, however, implies a significant physical alteration in the landscape, an un-cedaring, giving preference now to the oak, which does not protect the "low shrubs" in the same way that the cedar had.

If we remember, however, that the oaken duke of York, Richard Plantagenet, has already been slain by this point as well, Warwick misspeaks; in fact, the casualties of warfare have left neither "tree" standing, and the "shrubs" and thorns will have to fend for themselves completely on their own. Richard, associated with these forms of plant life, will face just such a situation at the end of his eponymous tragedy. Curiously, Warwick's idea of what happens to shrubs in the shade of cedars is a dynamic opposed to that of *The Rape of Lucrece*, which, as noted above, describes the withering of shrubs below tall cedars. Warwick imagines his cedar-like body to have "kept low shrubs from winter's pow'rful wind" rather than causing them to wither as a result of blocking them from the sunlight. While both scenarios imagine types of mini-environments or ecosystems, they understand relationships between the two types of vegetal beings in a different way, withering or flourishing respectively. Rowland Watkyns, a Royalist poet, commented, "That Kingdom is an unhappy case / Where Cedars fall and shrubs possess their place."[78] Ultimately, the fate of "shrubs" in the Richard plays is connected to his vegetal, en-thorned body, the thorny wood transported through him into the bodies of taller, more upright "trees" that are felled at Bosworth Field and other battles. Regarding cedars vs. shrubs and the felling of trees associated with noble families, Keith Thomas observes a number of contemporary examples from the literature of the sixteenth and early seventeenth centuries: "The analogy between great families and great trees, giving shade and protection to lesser beings, was well established by the seventeenth century, when landowners might sometimes plant a tree to mark

[78] Cited in Thomas, *Man and the Natural World*, 220.

the birth of a child, and when many poets saw trees as symbols of ancestors."[79] Striking in Thomas's assessment of this common analogy is the concept that these "great" trees provide protection to "lesser beings," acknowledging implicitly the being of the trees themselves, not mere symbol but living "companion" species in the more-than-human world of early modern England. Thomas further notes, "When the fourth Earl of Warwick died in 1673 it seemed natural for the preacher of his funeral sermon to describe him as a 'princely cedar' or 'spreading oak' and lament him as a 'great tree cut down.'"[80] Almost a century after Shakespeare's histories of the Wars of the Roses, arborealizations were still being applied to an Earl of Warwick, alternately a cedar and an oak.

Like Birnam Wood in *Macbeth*, the thorny wood of Richard is carried elsewhere, through the text to arrive at another scene, carried forward, stuck in Richard's flesh, into *Richard III* and always accompanying the floral bodies signifying the red and white factions. The thorn, rent from the arboreal body, travels, via Richard's plant-agent body, through the body of the play-text, cutting across the hewings and hackings of both humans and trees. These actions intersect with thornition, the non-conscious but intentional agency of plant-kinds moving in and through the world, exposing the physical (and physically painful) dimensions of the plant that remain in the human, sometimes literally under the skin, the pointed skin of the plant planted in the receptive body of the king(dom), ultimately carried through, alongside the floral to contribute to the resolution of the conflict. The arboreal body of Richard, en-thorned by the thorny wood, operates in a sylvan mode, his own body a sort of forest in itself, not cultural but naturalcultural in his "unnatural," usurped enthronement, turning his kinship with plants into a kingship over all life/lives but failing to unite the Plantagenets. The unity of the kingdom does not take place

[79] Thomas, *Man and the Natural World*, 217-218.
[80] Ibid., 218.

through the plant-agents, the human characters/actors, even if they are significantly thorny and sylvan like Richard, open to thornition; this unification would have to come from the plants themselves, or at least the reproductive parts of the rose bush, in their white and red forms.

Rose-Actors: The Vegetal Materiality of Performance

Thus, I turn at last from thorns to roses, these two vegetal forms intimately tangled in the logic of thornition in Shakespeare's Wars of the Roses. The physical presence(s) of the roses on the stage help cement their role in the ostensibly human affairs, anachronistically revising history and bringing the vegetally obscure onto center stage, rendering them temporarily visible, thrust (like a thorn) into the apprehension and consciousness of theater-goers and of history. This special effect of the theatre begins early in Shakespeare's first tetralogy, with the Temple Garden scene of *1 Henry VI*. Shakespeare has Richard Plantagenet, the father of Richard III, initiate the Yorkist tradition of bearing white roses, when he requests, amid the growing silence of assembled lords and lawyers:

> Since you are tongue-tied and so loath to speak,
> In dumb significants proclaim your thoughts:
> Let him that is a true-born gentleman
> And stands upon the honour of his birth,
> If he suppose that I have pleaded truth,
> From off this brier pluck a white rose with me. (2.4.25-30)

The epideictic "this brier" to be plucked suggests the presence on stage of actual bush and roses (and thorns).[81] Nearby stands another shrub, as Somerset counters Richard Plantagenet's move in kind, requesting his retainers to "Pluck a red rose from off this thorn with me" (2.4.33). A few lines later, the Yorkist Vernon substitutes for both "brier" and "thorn" the more generic word "tree," before he plucks a white rose. The botanical details of these two plants are somewhat

[81] See Jean Jules Jusserand, *A Literary History of the English People (Vol. 3): From the Renaissance to the Civil War* (G.P. Putnam's Sons, 1909).

confused with such verbal substitution and equivocation, but the main difference of course is the coloration of the rose. Also pivotal in this scene is the presence of thorns. While both of these plants would have had thorns, the thorns on the white rose bush are apparently more prominent.[82] When Somerset asks Richard Plantagenet, "Hast not thy rose a thorn?" Richard responds, "Ay, sharp and piercing, to maintain his truth." (2.4.69;70) The red rose bush, on the other hand, is said to have a canker rather than a thorn, a worm or caterpillar that has infected the plant, but, like tree sap, its red hue is also associated with blood.[83] Somerset claims, "I'll find me friends to wear my bleeding roses." While they are not actually "bleeding" red blood, the roses that have been plucked, white and red, are severed in the moment of performance from their vegetal bodies, effecting a kind of bleeding from the points at which the stems are detached. The thorns of the white rose bush correspondingly threaten discoloration of the white roses with human blood. The emphasis on physical pain, potentially brought about in the process of plucking, extends to the vegetal bodies on the stage, dismembered of several flowers while the men posture and threaten one another through their orientation toward the bushes, the roses, and their opposing colors.[84] The arboreal verb "pluck" used here appears in F of *3 Henry VI* five times, whereas O substitutes the less specific "pull" for "pluck" (1.1.59; 3.2.195), the second instance of which Richard uses in his soliloquy in F to suggest he will "pluck" down a crown, arborealizing his antichrist crown of thorns to an even greater extent by taking away from heaven "fruit" that does not belong to him.

[82] See Mark Griffiths and Edward Wilson, "Sweet Musk Roses: Botany and Lexis in Shakespeare," *Notes and Queries* 65.1 (2018): 53-67.
[83] *OED*, "canker" *n*. I.3.
[84] On the opposition of the colors red and white in the Elizabethan period, influenced by the historiographical iconography of the Wars of the Roses, see E.L. Risden, "Red and White and the Wars of the Roses: Shakespeare's *Venus and Adonis* and the *Rape of Lucrece*," *Enarratio* 10 (2003): 143-153. See also Sabatier, *Shakespeare and Visual Culture*, 192-198; 247-255.

The dialectic of withering and flourishing, apparent throughout the tetralogy, appears toward the end of this scene, when Richard Plantagenet proclaims,

> And, by my soul, this pale and angry rose,
> As cognizance of my blood-drinking hate,
> Will I forever and my faction wear,
> Until it wither with me to my grave
> Or flourish to the height of my degree. (2.4.106-110)

The bold claim that he and his faction will wear the white rose "forever" implies that the red and white roses of this inaugural rose bush scene are meant to be worn by their respective houses throughout the four plays of the tetralogy, even though the mention of actors wearing roses, in their hats specifically, appears only in the stage directions of the quartos at the beginning of *3 Henry VI*. White roses are mentioned in the stage directions at the beginning of 1.1; red roses enter the stage after about 50 lines. Cox and Rasmussen explain that O's stage direction indicates the actors playing officers on the battlefield were in Elizabethan costumes, wearing hats rather than helmets, in which they would have pinned the roses. The paleness of the white rose takes on a red-hued anger only through its proximity to the flesh-threatening thorns which symbolize war and aggression outwardly but simultaneously point at and potentially prick their wearers in the theatre in an intimate, inward direction. Richard Plantagenet's declaration of "blood-drinking hate" coincides with the thornitive capacities of rose bushes, a sentiment that his son Richard echoes in his rhetoric in *3 Henry VI* (added in F):

> Why do we linger thus? I cannot rest
> Until the white rose that I wear be dyed
> Even in the lukewarm blood of Henry's heart. (1.2.31-32)

Richard's threat too recalls this important initial scene of rose-plucking, the corresponding thorn-pricking implied in the "dyeing" of the Yorkist white rose. Richard's deictic gesture of "that I wear" directs the audience toward his florally decorative headgear, prompting them to imagine

the white rose violently changing colors, the calling up of "lukewarm blood" prescient in the thorny threats of the Temple Garden scene. Further, Richard Plantagenet's floralizing of himself into the figure of his own withering white rose anticipates King Henry's speech in *3 Henry VI*, near the end of his reign, when he suggests that allowing the white rose to flourish at the expense of his own red one will effectively intervene to save "a thousand lives" from withering as well:

> The red rose and the white are on his face,
> The fatal colours of our striving houses:
> The one his purple blood right well resembles,
> The other his pale cheeks methinks presenteth.
> Wither one rose, and let the other flourish;
> If you contend, a thousand lives must wither. (2.5.97-102)

Richard's willingness to hew the bodies of "many lives" contrasts starkly with Henry's attempt at compromise, based on a pathos for "lives" that might wither, the intensity of the anger-rage affect wholly centered on the likened body parts and fluids, rose and face, rose and blood. Edward IV, a few scenes earlier, talks of a "thousand crowns" and "ten thousand lives" (2.2.144; 2.2.177), multiplying this repeated rhetorical gesture across the play in the pluralizing logic of thornition, the crown of thorns Richard wears in Richard III also glancing back at these vegetal multiplications, the "crowns" or hats of slain bodies across the battlefield bearing the withering bodies of roses and thorns. As usual, Shakespeare vegetalizes this speech more so in F than O, using "wither" instead of "perish."[85] However, curiously, he also adds the third and fourth lines, mixing in the color "purple" to describe the blood of fathers and sons who have unwittingly killed each other, a mixture of the red and white as a result of the "striving houses." The grief Henry describes is "more than common grief" (2.5.94), the stinging affect borne across the human and the vegetal, the roses and thorns withering in soldiers' hats and entangled with bleeding bodies kin to each other and kin to their vegetal allegiances, which dissolve in the face

[85] *The True Tragedie*, 388.

of withering death. The statement that "the red rose and the white are on his face" is also a deictic motion, the pallor of the son's face contrasted to his blood; in this gesture, Henry implicates the various white and red roses in the actors' hats in their showy distinctions as being partly responsible for the deaths, the reflection of their thorny enmeshment on the face of the deceased.

While granted, flowers ultimately "resolve the conflict," emblematized at the close of *Richard III* with Richmond's uniting of the two houses in the figure of the Tudor rose (5.5.15), I conclude this chapter with a final nod to the stage performance of a red Lancaster rose, worn temporarily by George, Duke of Clarence. In the last act of *3 Henry VI*, the actor playing Clarence is given stage directions involving direct contact with the rose in his hat. He takes his red rose out at 5.1.81, then throws it at Warwick at line 82, announcing, "Look here, I throw my infamy at thee!" In this symbolic gesture, Clarence formally returns his fidelity to his own father's house, taking it away from Warwick, his father-in-law. Like the dead young man lying on the battlefield, killed by his own father, Clarence also carries both red and white roses on, or at least near, his face. His father-in-law Warwick switches sides during the course of the play as well, a shift that is signaled to the audience by the changing colors of the roses in hats. Clarence and Warwick parallel the anonymous fathers and sons on the stage (as described by King Henry), having worn both shades of rose. The confusion of familial ties is an intentional theatrical effect, seeing a character switch from one side to the other, a double plant-agent ironically becoming Plantagenet regardless. The vegetal matter in the play performed and continues to perform to communicate alliances and hostilities that are fleeting but potentially deadly, in a world of shifting geopolitical pasts and futures. Of course, always under and alongside the colorful rosy bodies of political expediency are the thorny appendages of those rose bushes back in the

Temple Garden, a thorny wood grown in the heart of the capital city, the sharpest of thorns deep in the interior but coextensive with the vulnerable, fleshy bodies of jostling plant agents, in the midst of making history.

CHAPTER FOUR: ROOT
THE QUEER RHIZOSPHERE OF *AS YOU LIKE IT*

For seede that in the soile is sowne lies hidden long below,
And many monthes is vnder grounde, but yet at last doth grow:
And all the while in bellie of his mother Earth it lies,
The want of humour in the seede. the moistie soile supplies.
– Dominicus Mancinus, *A plaine path to perfect virtue*[1]

Spring crestless yeomen from so deep a root?
– *1 Henry VI* (2.4.85)

Introduction

When a root "peeps" out of the ground in the forest of Arden in Act Two of *As You Like It*, Shakespeare's most arboreal play, this earthy emergence offers a glimpse into the early modern rhizosphere, the soily space where tree roots grow beneath the forest floor (2.1.31).[2] The play's mention of this "antic root," a phrase unique to Shakespeare in early modern literature, occurs in reference to the melancholy character Jaques, who lies near a brawling brook under one of the forest's oak trees in deep and sorrowful contemplation. The peeping root in this scene gestures implicitly toward the many other roots in Arden, hinting at the arboreal possibilities and energies taking place not only at the ground level of the forest but also underground. This rhizospheric interface with Jaques near the brook holds out an invitation to dig deeper into the subterranean strata of the play. As a site of arboreal rooting as well as germination, the soil of the forest also points *above* the heads of the play's human characters toward the forest canopy, in the boughs of which the reproductive cycles of oaks and the other "greenwood" trees of Arden

[1] Dominicus Mancinus, *A plaine path to perfect vertue: deuised and found out by Mancinus a Latine poet, and translated into English by G. Turberuile gentleman* (London, 1568. Early English Books Online, British Library).
[2] See Hillary Eklund, ed., *Ground-Work: English Renaissance Literature and Soil Science* (Pittsburgh: Duquesne University Pres, 2017).

initiate the process of arboreal reproduction via the pollination of their flowers (the "male" flowers of oaks called catkins). Concerned, then, with the sexual natures of trees as they interact with the courting humans amidst them in the play, this chapter follows the peeping, antic root downward from the forest's ancient oaks, investigating the enrooted soil as a queer reproductive space, also inhabited by *As You Like It*'s seeds, primarily those enclosed in the acorns of oak trees. Alongside its roots, then, the acorns of Arden attest to the more-than-human desires and rhythms operating in the play, above and below the human drama.

Shakespeare anthropomorphizes the single root of *As You Like It*, attributing it with the sentient qualities of movement, agency, and even perception, with its "antic" peeping. But while the antic root is the play's solitary "root" reference, "root," as both noun and verb, appears frequently in many of Shakespeare's plays. Roots appear in physical form, consumed, for example by the exiled Timon in *Timon of Athens*, which calls for roots as stage props and directs the actor playing Timon to "dig" for roots on stage, commanding the earth to "yield me roots!" (4.3.23) The noun "root" is an Old English word, the *OED* citing its first print appearance in a recipe in *Leechdoms, Wortcunning, & Starcraft* that calls for arboreal ingredients: "horsellenes rota & eftgewæxen barc."[3] As a verb, "root" continued its association with its arboreal origin from the fourteenth century forward, often paired in early modern literature with "out," and sometimes with "up" or "away," the act of "rooting" an equivalent to what gardeners today call "weeding." In *Henry VIII*, for example, the Gardiner says of Cromwell, "He's a rank weed, Sir Thomas, and we must root him out" (5.1.52-53). By the early sixteenth century, "root" was associated with the digging of pigs or hogs into the ground with their snouts; of course, they

[3] *OED*, "root" *n.*[1] I.1.a. This recipe is for pain in the chest. "Horsellenes rota" translates to root of the horse-heal plant, more commonly known today as Elecampane (*Inula helenium*), an herb possessing both medicinal and gustatory properties. "Eftgewæxen barc" means, curiously, "bark that has grown again" (cf. *Bosworth-Toller Anglo-Saxon Dictionary*).

were often rooting for acorns, reinforcing even further the connection between the shared domain of "root" and "seed."[4] But most important for my argument, "root" carries a twin meaning in early modern texts, applicable in *As You Like It*, that messily combines old age and youth, antiquity and modernity, a deep, grounded rootedness that merges in the muck with the vulnerable, newborn vegetal life that emerges from seeds. This conflation of root and seed occurs in part because of common arboreal metaphors, popular in writing from ancient times, for familial genealogy figured in seeds, roots, branches, and offshoots, with both seeds *and* roots understood as points of origin.[5] Furthermore, this overlap probably occurs as a result of the nonsexual reproductive strategies of vegetal life that exist alongside its sexual ones, trees springing not only from seed but often, like the "stem" of Jesse in the book of Isaiah, from branches which "shall grow out of his roots," the seemingly spontaneous generation of life.[6]

This early modern blurring of "root" and "seed" complements and complicates my readings from the first chapter on the leaves of *Macbeth*. While still primarily interested in the deciduous oaks of Britain's early modern forests and woodlands, this chapter shifts focus to the vibrancy of vegetal life in the form of arboreal sexual reproduction and the emergence of that life from seeds into rooted plants. However, it also dovetails with the concepts of "deciduous-sense" and leaf senescence by reading the emergent vegetal life/lives of the forest alongside the persisting vestiges of both biological and cultural antiquity that come together in the ancient

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[4] The practice of forest husbandry called "pannage," the fattening of domestic pigs on acorns and beech mast had long been in decline by Shakespeare's day, land being converted to alternative uses such as for parks, coppices, or agricultural use. See Rackham, *Trees and Woodland*, 144.

[5] See Chapter 3 on the discussion of these botanical metaphors of genealogy, especially prevalent among descriptions of royal bodies.

[6] Many plants are notable for their totipotence, that is, their cells are able to differentiate into all cell types, including placental tissue. On seventeenth-century natural philosophy and its thinking related to spontaneous generation, see Marjorie Swann, "'Procreate Like Trees': Generation and Society in Thomas Browne's *Religio Medici*," in *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe*, eds. Barbara A. Hanawalt and Lisa J. Kiser (Notre Dame: University of Notre Dame Press, 2008), 137-54.

oaken bodies of *As You Like It*. Accordingly, the single instance of the noun “root” in *As You Like It* prompts an examination of its modifier “antic” along with its specific action of “peeping out” of the fertile earth. While Juliet Dusinberre notes the double meaning of “antic” as both comic or grotesque as well as ancient, this secondary meaning of “ancient” (*anticke* in the Folio) also doubles in signifying both the biological age of the long-lived oak tree as well as the oak tree’s long-standing cultural affinities with Zeus/Jupiter in classical antiquity, solitary oak trees often being the targets of lightning.[7] As a general shorthand symbol for *origin*, “root” in *As You Like It*’s brook scene connects a living organism to the earth even as it connects the early modern stage to a Renaissance claim of intellectual heritage of Greco-Roman culture, which functioned simultaneously as a seed and a root for Shakespeare and his contemporaries. In this vein, Shakespeare stylizes Arden as Golden World and Greenwood at once, a fusion of ancient pastoral past and English patriotic present, embodied in the enduring forest outlaw Robin Hood, whom Duke Senior emulates in the play with his homosocial cadre of merry men. In such a hybridic rhizosphere, Shakespeare’s antic/antique root does not anchor so much as dig—down, up, and out—a dynamic, active movement into the past/future, producing a reticulated rhythm seemingly anticipating recent discoveries of mycorrhizal networking, the fungal partners of trees that, like root and seed, connect Arden’s forest floor to its canopy through and across human bodies.

Botanically speaking, the root is related to the seed in that “root” is the first thing to appear and the first action to occur following germination: “the single root, which grows downward, soon gives rise to lateral branches, which grow and produce other branches, which in

[7] *As You Like It*, ed. Juliet Dusinberre, 192. She also points out that the oak is a symbol of constancy. On Zeus’s connection to the oak in the ancient world, see Carole M. Cusack, *The Sacred Tree: Ancient and Medieval Manifestations* (Newcastle upon Tyne: Cambridge Scholars, 2011).

turn branch out again."[8] Monocots and dicots, the two main distinctions in flowering plants, root differently from each other; in general, the roots of monocots are "adventitious," growing straight out from the trunk—potentially our "peeper" culprit in the brook scene.[9] Oak trees and other broad-leaved plants, however, are dicots whose root systems often employ a tap root for additional stability (as opposed to the fibrous root system of most conifers). While it is commonly believed that tree roots spread underground to mirror their crown above, they actually spread out about twice that length.[10] The rhizosphere is much more complicated than this initial picture indicates, however, for, as Peter Wohlleben points out, "most individual trees of the same species growing in the same stand are connected through their root systems … forests are superorganisms with interconnections much like ant colonies."[11] Moreover, fungal networks, composed of symbiotic mycorrhizae, intercede in the midst of the already diffuse root systems of these "superorganisms." The underground network becomes even more extensive with the presence of these collaborative fungi.[12] All of these interactions were taking in place in some fashion in the Arden of Shakespeare's day, visible only briefly in *As You Like It*, but the surfacing of the root in the brook scene indexes the teeming rhizospheric zone beneath the actual forest ground of Arden in Warwickshire (located to the northwest of London), as well as the rhizospheric activity taking place in the soil beneath the Globe itself.

Moreover, just above this complex rhizosphere, around the roots of beech and oak in English forests like Arden, beech nuts and acorns would pile up during "mast years," a small

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[8] Feininger, *Trees*, 123.
[9] See Tudge, *The Tree*, 135.
[10] Wohlleben, *The Hidden Life of Trees*, 10; Feininger, *Trees*, 124.
[11] Wohlleben, *The Hidden Life of Trees*, 3.
[12] Wohlleben mentions, for example, "a honey fungus in Switzerland that covers almost 120 acres and is about a thousand years old" (50). The web-like material of fungus is called the mycelium, of which different species of mycelia routinely correspond with specific species of trees, the oak milkcap belonging to the oak tree, which helps allow the tree's roots to spread out even more and take in more water and nutrients.

percentage of them escaping the foraging deer and boar to make it into the soil and set roots of their own, eventually reaching into the heavens, after about eighty years, to engage in the sexual activities of flowering, pollination, and fruiting, which frequently occur over a hundred feet above ground. This world above, like the one below, is also largely invisible to human eyes. Thus, continuous with my first chapter's investigation of the un-seeing aspects of "deciduous-sense" in *Macbeth*, I interrogate the visual spaces of Arden, with respect to plants that are not seen, overlooked in the oversight of "plant-blindness" or in the attention given instead to Orlando's tree poetry carved or hanged at (human) eye level. By far, human vision is not the only agency of perception in the forest, animal or vegetal; the "peeping" root decidedly draws attention to this fact. By exploring spaces in the forest that the human eye avoids/does not see, then, this chapter engages with the affective territory of shame-humiliation—that from which one looks away. Through this analysis, "plant-blindness" might be reconfigured, in a speculative fashion, as a type of shame affect, an aversion of the eye, a not-seeing.[13] In the radical networks of the rhizosphere, the unseen alliances of trees with fungi, bacteria, and insects insist on the outer-ness, or exteriority, of the tree and its orientation toward the other, as Michael Marder suggests.[14] Roots, though generally hidden to the eyes of humans, are always already exposed, in *their* becoming. In their terranean emergence from the subterranean, in erosion or other processes, they are further exposed to suffer along with the human in affective shades of shame, opened up to the world.

In theorizing a more-than-human shame, this chapter also seeks to complicate the heterosexual surfaces of the play's romantic encounters by investigating how queer sexual

[13] See Chapter 1 on not-seeing, or un-seeing, in *Macbeth*, in my reading an aspect of "deciduous-sense."
[14] "The life of the plant is limited to its outward extension, itself unlimited by anything but the environmental conditions: the amount of sunlight, the moisture of the soil, and so forth" (Marder, *Plant-Thinking*, 25).

exposures enabled by the forest bisect the proximal exposures of vegetal body parts and processes, the penetration of the root into open air something of a transgressive act in the life-world of arboreal being but also an adventitious stumbling into the primal scene of forbidden sexual awareness: that is, Shakespeare's reconfigured version of the Greek myth of Actaeon and Diana. In the original story, Actaeon accidentally comes upon the naked, bathing Diana while he is hunting. As punishment for seeing what he should not have, Actaeon's body transforms into that of a stag, to be consumed eventually by his own hunting dogs. In *As You Like It*, the antic root protrudes into a revised version of the Actaeon story in which two men encounter another man, Jaques, near a stream, crying over a dying deer that was shot for food by Jaques's companions. Unaware of the presence of two watching gentlemen, the vulnerable Jaques opens himself up, speaking to "the world" and adding his tears to the water, partaking in the aquatic primal scene in which "exposure" classically takes place. Shakespeare's peeping root, in its anthropomorphism, however, I argue, makes a bid to counter the dynamic of plant-blindness by performing its inverse: in voyeuristically looking at Jaques, seeing him for *all* that he is, exposed and vulnerable, the plant is the opposite of "human-blind," its gaze beholding Jaques in his weakened state while simultaneously *looking back* at the voyeurs spying on Jaques. In between this mirrored frame of the human and the vegetal, each exposed to each other in the crosshairs of their reciprocal gaze, the bodies of Jaques and the dying stag blur together in humanimality, crying together. Thus, Jaques is turned into a stag, like Actaeon when he is exposed to (and his eyes expose) the nudity of Diana bathing in the stream. This voyeuristic frame is doubled, though, as the Lords who report Jaques's shame to Duke Senior also spy on Jaques without his apparent knowledge. In their peeping of Jaques's body, they are simultaneously exposed as fellow voyeurs to the peeping root, an arboreal protuberance swelling out of the zone of vegetal

fertility to catch them in their homoerotic observation of Jaques's "spectacle" (2.1.44), looking upon something they should not.

Moreover, in the act of peeping, Arden's antic root exhibits an action connected with Greek tropes of primal shame, intersecting at the same time with the posthumanist "question of the animal," as posed by a different Jacques, that is, Derrida, who, like Diana, finds himself exposed (in his case, to his cat while taking a shower). The peeping root is emblematic of the entrance of critical plant studies into the territory of posthumanist animal studies, insisting that questions about the human and/or the animal cannot be answered without respect to other primary living beings engaged in sexual and other activities in and amongst our own. Ultimately, therefore, in digging into the play's representation of soil and the aerial dispersion of pollen, I theorize a more-than-human sense of shame that affects human eyes as well as "hidden" arboreal parts, tucked, for the most part, out of human sight below ground (with the notable exception of rivers, brooks, and other riparian locations of exposure) and above their heads in the canopy of Arden's greenwood trees. In thinking with the ancient alongside the emergent in *As You Like It*, this chapter also speaks to *our* age—the Anthropocene—because the age of the human has been exposed to us, via climate change and other large-scale markers of our devastation on the planet. Jaques's relationship to an unseeing but peeping "root" evinces this dynamic of devastation humankind causes to the earth. The peeping root is a starting point in that it is the speculative vantage point of that which does not see but senses as it moves underground and potentially above ground, reading its environment. The exposure of an arboreal body, through its peeping roots, poking out, is on a different order than that of human exposure, to themselves and to their environments. Like a tree denuded of bark (as from Orlando's carved poetry), however, the root

exposed enters into a more intimate relation with the world of humans, revealed to their sight, vulnerable to their touch.

After addressing previous queer and ecocritical approaches to *As You Like It*, I analyze the scene of Jaques at the brook in further depth, comparing it to a similar scene in *Hamlet* in which Ophelia drowns in a brook, drawing out the implications of this (sexuated) difference. From the peeping root, I move up the trunk past Orlando's love poetry to the forest canopy, examining the atmosphere of the play through its windy weather, which pollinates and propagates arboreal becomings in the midst of the characters. In these motions, characters are exposed in a different way, open to the potentially allergy-inducing sexual activities of plants. The chapter concludes at the terminus (or beginning) of this arboreal reproductive cycle with the play's figurative transformation of humans into nuts, an arborealization that infantilizes them even as it sexualizes them in the space of the soil. In addressing all of these arboreal spaces, I attempt to "open up" the positionality of the phrase "under the greenwood tree," the opening line to one of the play's songs, to include zones of more-than-human sensorial activity outside of and beyond the human gaze of scholarly intensity set on the semiotic markings Orlando makes in and on the forest's trees, a site of manifestly heterosexual courtship whose overflowing energies inflict pain on the vegetal world. Exploring the forest's rhizosphere as well as its atmosphere works toward a "queering" of the air, seeking other modes and moments of pain *and* pleasure "under the greenwood tree."

Ekphrastic Expositions

Scholarship in the mid to latter twentieth century on *As You Like It* established the play's intersection of the "green world" of pastoral romance with the topsy-turvy carnivalesque of

festival tradition.[15] By the early twenty-first century, however, Arden had become an obvious site for ecocritical work, opening avenues for incorporating early modern perspectives on environmental activism, animal rights, and environmental justice.[16] This research has begun to push into non-anthropocentric, if not posthumanist, directions, paving the way for critical plant studies perspectives on *As You Like It*'s portrayal of nonhuman desires and sexual energies. Anne Barton claims, for example, "At once imaginary, remembered, and a real, contemporary place, the forest of *As You Like It* presents many different faces, depending to some extent (as woodland always does) on the time of year, but also on the way different characters experience and come to know it."[17] In thinking with the seasons of Arden, the "different faces" of the forest become exposed, especially those of deciduous trees in the midst of winter, as discussed in chapter 1. Randall Martin takes the seasonality of the forest a bit further: "During Hymen's stage-epiphany, Arden's topographic mosaics serve not merely as pretty backdrops but also channel the reproductive desires and energies of forest ecosystems. Because these are active cyclical agencies, they shadow the human festivity with future intimations of metabiotic decay, decomposition, and regeneration."[18] Martin does not follow up on the implications of this claim, nor intimate the possibilities of queer sexualities manifesting in Arden, but he does open the way toward an ecomaterialist reading that attunes to the stories that nonhuman sexual beings might be telling.

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[15] See C.L. Barber, *Shakespeare's Festive Comedy: A Study of Dramatic Form and Its Relation to Social Custom* (Princeton: Princeton University Press, 1959); and David Young, *The Heart's Forest: A Study of Shakespeare's Pastoral Plays* (New Haven: Yale University Press, 1972).
[16] See Egan, *Green Shakespeare*, 92-107; Borlik, *Ecocriticism and Early Modern Literature*, 180-87; Theis, *Writing the Forest*, 35-89; Boehrer, *Environmental Degradation in Jacobean Drama*, 71-95; Martin, *Shakespeare and Ecology*, 56-77.
[17] Barton, *The Shakespearean Forest*, 9-10.
[18] Martin, *Shakespeare and Ecology*, 76.

Vin Nardizzi proposes a fruitful, reciprocal union of environmental and queer scholarship in this territory: "just as the analyses of the new wave of ecocritics could benefit from queer readings of pastoral in *As You Like It*, so too could queer studies of the play's erotic narratives be further enriched by an environmental aspect of the play that is now a staple point in ecocritical analyses."[19] Queer readings of the play tend to focus on the crossdressing of Rosalind/Ganymede and the homoerotic dissonances this dynamic produces in her/his relationships with other characters in the allegedly heterosexual trajectory of the play toward the culminating marriages of comedic generic convention.[20] Valerie Traub suggests that "at various moments in the play, these characters temporarily inhabit a homoerotic position of desire."[21] Building on Traub's argument, Hugh Grady extends Traub's argument to imagine that "desire has its own vectors … discourses of love and desire were of course central to court and related upper-class society. What gets explored in Arden, as in so much of the lyric poetry of Elizabethan culture, are love, sex, and desire, mainly as represented by any number of the literary encodings of these dangerous impulses."[22] Grady's anthropocentric reading of desire in the forest also clears a path for reading the forest's desires, nondiscursive but similarly "encoded" impulses intra-acting with the play's characters and potentially signaling danger or pleasure, depending on the frame of reference and on the bodies and body parts within the frame. Additionally, Grady's reading

[19] Vin Nardizzi, "Shakespeare's Queer Pastoral Ecology: Alienation Around Arden," *ISLE: Interdisciplinary Studies in Literature and Environment* 23, no. 3 (2016): 576.
[20] See, for example, Valerie Traub, "Desire and the Difference it Makes," in *The Matter of Difference: Materialist Feminist Criticism of Shakespeare*, ed. Valerie Wayne (Ithaca: Cornell University Press, 1991), 81-114. See also Valerie Rohy, "As You Like It: Fortune's Turn," in *Shakesqueer: A Queer Companion to the Complete Works of Shakespeare*, ed. Madhavi Menon (Durham: Duke University Press, 2011), 55-61. Nardizzi explores the lesbian overtones present in Rosalind's relationship with her cousin Celia.
[21] Traub, "Desire," 104.
[22] Hugh Grady, *Shakespeare's Universal Wolf: Studies in Early Modern Reification* (Oxford: Clarendon Press, 1996), 199.

clarifies that the tradition of pastoral romance privileges a myopic and exclusive upper class, at leisure to overwrite the reality of the peasantry with its fantasies of bucolic life.

However, as Bruce R. Smith and others have pointed out, the greenwood/arcadian space of Arden is primarily a homosocial one, guaranteeing "male bonding in its purest form, unadulterated by women, uncomplicated by social hierarchy."[23] At least insofar as human males are concerned, the arboreal sanctuary of Robin Hood's greenwood imagines a society that embraces the ideal of a more even playing field, which Shakespeare draws upon in his depiction of Arden's noble lords, who all become "foresters" in the obscure recesses of forest space. On this point, Jaques becomes an important centerpiece for analyzing the intersection of homoerotic human desire in the play and its implicit inclusion of nonhuman vegetal (a)sexualities.[24] As a melancholy "merry man," his contradictory presence in the play evokes the conflicting pains and pleasures of exposure, exposed to the "natural" elements of the forest as well as to the vagaries of sexual desire resulting from the artificial construction of a sequestered male society. In Cynthia Marshall's psychoanalytic reading of the play, she argues that Jaques, "even more than Ganymede's Rosalind, exemplifies the power of a symbol to hold at bay a repressed and troubling idea."[25] I accept Marshall's general premise, also incorporating Guy-Bray's observation about Jaques as "odd man out," to reinterpret "odd" as "queer," in a more-than-human sense, exposed to/by both the peeping root from the vegetal kingdom and to/by the eyes of the peeping lords-cum-foresters who have "traded their kingdom" for this view of a

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[23] Bruce R. Smith, *Homosexual Desire in Shakespeare's England* (Chicago: The University of Chicago Press, 1991), 82.
[24] This line of interpretation has been little explored, although Steve Sohmer briefly reads Jaques as a Marlowe-emulating homosexual, who takes "no interest in any of the female characters of the play," in *Reading Shakespeare's Mind* (Manchester: Manchester University Press, 2017), 195.
[25] Marshall, "The Doubled Jaques," 383.

man/deer/root.[26] From this perspective, one of the more "troubling" ideas of *As You Like It* is that human sexual desire is not exclusive in the de-hierarchized greenwood, as the play's primal bathing scene reconfigures the classical story to include plant *and* animal, as part of the human and his/her/their frustrated desire.

As Marjorie Swann humorously points out, "not until 1676," long after Shakespeare's death, "when Nehemiah Grew delivered a series of lectures on botanical reproduction to the Royal Society, did Englishmen begin to realize that flowers, previously viewed as exemplars of innocence, had sex lives."[27] However, Shakespeare's description of the emergent root as "peeping" out of the ground in the homoerotic tableau that the peeping Lords paint for Duke Senior has clear resonances even at this time with a voyeurism particularly aligned with the exposure of masculine genital parts, the earliest recorded use of "peeping" as a partial glance or appearance associated in a fifteenth-century ballad with an incident of torn breaches: "Owre syre breche, when hit is torn, Hys pentyll pepythe owte beforn, Lyke a warbrede [worm]."[28] The peeping "pentyll" in this scenario emerges in a heterosexual relationship (the wife complaining about her husband), but the root-as-pintle emerges in *As You Like It* in the absence of women.[29] This orchestrated arrangement of male/masculine bodies in the greenwood, however, does not necessarily preclude feminine natures and bodies, within and among the more-than-human bodies composing the triangulation of desires in the brook scene, oscillating across the vegetal,

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[26] Stephen Guy-Bray classifies Jaques among "the ranks of the odd men out" in early modern drama, "left behind by the relentless forward motion of the heteroerotic imperative," excluded from the "happy endings" of comedy, in *Homoerotic Space: The Poetics of Loss in Renaissance Literature* (Toronto: University of Toronto Press, 2002), 195.

[27] Swann, "Procreate Like Trees," 141.

[28] See *OED*, "peeping" *n*.[2]. See also the discussion of this ballad, titled "A Talk of Ten Wives on their Husbands' Wares," in Mark Morton, *The Lover's Tongue: A Merry Romp through the Language of Love and* Sex (Toronto: Insomniac Press, 2003), 96-98.

[29] On the possible audience familiarity with root vegetables being likened to penises (and substituting for them), see Rebecca Laroche, "'Cabbage and roots' and the Difference of *Merry Wives*," in The Merry Wives of Windsor: *New Critical Essays*, eds. Evelyn Gajowski and Phyllis Rackin (New York: Routledge, 2015), 184-93.

animal, and human. With respect to the psychology of the homosocial greenwood setting, Luce Irigaray might stress the presence of the other in what ostensibly appears as a prevailing sameness. Irigaray theorizes a type of embodied experience she calls "sensible transcendence" which

> can occur first on a horizontal level and between two differently sexuated bodies. It needs the presence of physical matter and the sexuate belonging that both animates the body and puts it in relation with another body, while entailing transcendence when the two are not of the same sex and are faithful to their natural belonging … Before any sexual practice, our identity is sexuate, unless it is a mere abstract construction that cannot be shared with the vegetal world.[30]

For Irigaray, "nature," inherently aligned with plants, is a sort of female other that "welcomes" and "mothers" the traveler of the "human journey."[31] Irigaray's collaborative philosophical project *Through Vegetal Being*, co-authored with Michael Marder, attempts to unite a plant studies perspective with a feminism centered on "sexuate" difference. Not to be confused with sexual difference (though the two can overlap), sexuate difference is proper to subjects whose thinking and being are partial and contingent. Although writers and even botanists of the early seventeenth century were in the habit of thinking of plants as sexless, the unexpected protrusion of enrooted life emerging from fertile soil in Shakespeare's queer, sexualized rewriting of the Actaeon/Diana myth represents "just the tip" of sexuated vegetality entering into the generalized perception of human observation, though its (over)active presence by and large still goes unnoticed even today.

To further examine this sexuated difference, I hold up the similar instance of Ophelia's drowning in a brook amidst her tears to the primal scene of *As You Like It* featuring Jaques. For the sake of a full comparison, I quote both reports (as reported incidents they are) below:

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[30] Irigaray and Marder, *Through Vegetal Being*, 54-55.
[31] Ibid., 55.

Gertrude. There is a willow grows aslant a brook,
That shows his hoar leaves in the glassy stream;
There with fantastic garlands did she come
Of crow-flowers, nettles, daisies, and long purples
That liberal shepherds give a grosser name,
But our cold maids do dead men's fingers call them:
There, on the pendent boughs her coronet weeds
Clambering to hang, an envious sliver broke;
When down her weedy trophies and herself
Fell in the weeping brook. Her clothes spread wide;
And, mermaid-like, awhile they bore her up:
Which time she chanted snatches of old tunes;
As one incapable of her own distress,
Or like a creature native and indued
Unto that element: but long it could not be
Till that her garments, heavy with their drink,
Pull'd the poor wretch from her melodious lay
To muddy death. (*Hamlet*, 4.7.166-183)

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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 banish'd you.
To-day 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 sequester'd 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. (*As You Like It*, 2.1.25-43)

First, I want to comment on the reported nature of these watery exposures. As a means of exposition for events taking place in the play's respective storylines that may have presented a challenge to early modern staging, these descriptions nonetheless go beyond mere plot device and enter into the rhetorical realm of ekphrasis, narrowly defined as the detailed description of works of visual art such as paintings or sculptures but which can also be applied to any sort of vivid event or experience utilizing such rhetorical description. By ekphrastically expositing the subjects, Ophelia and Jaques, within their surroundings, the voyeuristic reporters of both plays (Gertrude and the nameless First Lord) partake in various levels and layers of exposure, in both cases more-than-human bodies being sexualized and/or gendered in the elaboration of the verbal portrayal. They also both attempt to bring forth a visual image in the mind('s eye) of a third party (their interlocutor in the scene) and an invisible fourth party (the audience, behind its invisible "wall").

Both of these reports suggest queerly voyeuristic operations from the outset, the unacknowledged element of spying implicit in the reporters' viewing of the bathing/crying bodies. Yet in what appears to be something of a transferal of the passions of those observed, the narrations take on a heightened intensity as they gather and mount increasing foliage in their descriptions. The willow growing "aslant" corresponds to the root peeping at Jaques, Gertrude's notice of it producing a similar effect of bringing its implicated gaze into the picture, gazing at Ophelia as well but also gazing back at Gertrude herself. Notably, Shakespeare gives the willow a male gender, *his* "hoar" leaves signaling its antiquity like the protruding root of Arden's oak. Whereas all the players involved in *As You Like It* are male figures (the oaken root presumably associated with Zeus), the scene in *Hamlet* involves two female humans and the intrusive presence of the masculine willow. If we take both of these scenes to reconfigure the

Actaeon/Diana myth to some extent, then Gertrude becomes Actaeon to Ophelia's Diana, who, hanging her "coronet weeds" on a "pendant bough" of the willow, exposes her naked body to the open world, and, unwittingly, to Gertrude. Possibly projecting her own forbidden lesbian desires, Gertrude describes the willow boughs as "envious," like Actaeon taken by lust at the sight of Diana. Yet it is Ophelia, not the gazing Gertrude, who is transformed into "a creature native and indued / Unto that element," the "creature" in Gertrude's description recalling the vegetal matter of "crow-flowers, nettles, daisies, and long purples" that Ophelia brings with her to the brook as well as her rhetorical conversion into the hybridic human-animal form of the mermaid. In Gertrude's ekphrastic description of Ophelia's crying and then drowning body, she exposes her own desires as being rooted in and among the nonhuman living material that, like the "glassy stream," reflects those desires and pulls her in toward the primal scene of human exposure to the "elements."

If this brook scene in *Hamlet* represents the vegetal as the undesired advances of the masculine into a lesbian-feminine space, resulting in a transmitted melancholy laid bare, then the homoerotics of the brook scene in *As You Like It*, written around the same time as *Hamlet*, struggles even more intensely with a vegetal nature perceived as masculine in its peeping gaze in dense relation to still other masculine bodies. The misperception by Jaques that his moment "with" the dying deer (like Gertrude "with" Ophelia) is a private moment parallels a similar misperception by the Lords that their exposure of Jaques to Duke Senior (through their exposition/ekphrasis) is private, since they expose *themselves* in their telling. They are doubly, if not triply, exposed, not only in having been "witnessed" by an obtrusive oak member but also, in revealing their report of Jaques to Duke Senior and the world of the play at large, the report taken in by an equally "voyeuristic" theatre audience, they become exposed as fellow voyeurs.

Within the heterosexual structuring of the plot, the play embeds this moment of more-than-human shameful exposure, multiple shames piling on top of one another and relieved only after the "heaving" of "groans" that result from "discharged" arrows allows Jaques and deer to come together "on the extremest verge of the swift brook" to release their "almost to bursting" tears to "course" together, while the lords, root, and (through ekphrasis) audience take in the spectacle, all equally "silent." In this retelling of Actaeon and Diana, it is the Lords who become Actaeon, although, as in the inversion in *Hamlet*, it is also the exposed, Jaques, who becomes animalized, mirroring the agonized deer in his prostrate melancholic posture. The Lords unconsciously admit to a kind of vegetal desire, their homoerotic gazes toward Jaques reflected in their description of a growing, enrooted being which enters the spectacle only slightly but represents a potential universe of queer becomings moving just under the surface.

Pollen(eyes)

In this section, I leave the enrooted soil momentarily to analyze how the forest's material atmosphere of *As You Like It* complements and contrasts with its queer rhizosphere, the combined assessment of which contributes to a more capacious account of its sexual economies and ecologies. Botanists are well acquainted with the "promiscuity" of oak trees, much more likely than other varieties of arboreal being to combine their genetic material with that of trees outside of their ostensible species to produce new hybridic varieties of oak.[32] The pollination of oak trees takes place principally by way of wind, rather than by insects, their "masculine" sexual material circulating in the air over and around the heads of humans, like the characters in *As You Like It*, when they are amongst and "under the greenwood" trees. Although the play uses the

[32] In his discussion of tree speciation, Tudge explains the processes that lead to hybridity, in *The Tree*, 10-17. Oaks are prone to hybridization, leading some to think of them as "promiscuous" plants.

word “air” only once (“bleak air” at 2.6.15), it does refer to “wind” on at least five occasions (possibly six[33]; “sky” appears twice), gesturing implicitly toward the sexual activities taking place above that produce the acorns lying about the characters’ feet (and giving them rhetorical fodder at hand to arborealize one another; see discussion on acorns below). I suggest that these quick, glancing remarks about the wind also function as a kind of averting of the eyes, “seeing” the effects of the wind on human/animal bodies but overlooking, or perhaps “under-looking,” the significance of the airborne pollen traversing their senses—olfactorily as well as visually—an extra masculine (and extra-masculine) sexual substance that constantly adds itself to an already densely homoerotic environment. Biologically, as the pollen of arboreal catkins interacts with the forest’s biota, the female flowers transforms (provided it is a mast year) nascent arboreal material into the nuts that fall at the foot of trees.

The characters of *As You Like It* refer to the winds of Arden in dialogue, song, and verse, specifically naming the harsh “winter wind” (twice) as well as the “foggy south” wind, bringer of warm, wet weather. The extended timeline of the play suggests that if it begins in a wintry Arden, then the “seasons’ difference” Duke Senior mentions will be making itself apparent by the final act (2.1.6). Although he stoically puts on a smile in the face of the “churlish chiding” of cold winds, the duke admits that “it bites and blows upon my body / Even till I shrink with cold” (2.1.6, 8-9). Blowing is the primary action of cold wind in the play, as indicated too by the beginning of Amiens’s song: “Blow, blow, thou winter wind” (2.7.175). Though none of this winter wind carries the pollen of oak trees, other types of trees begin their pollination cycles as early as January. When Rosalind (as Ganymede) chastises Silvius for being foolish in pursuing Phoebe, s/he compares him to the “puffing” south wind and tells him, “You are a thousand times

[33] Touchstone’s “wind away” (3.3.95) potentially holds the meaning, though it is less obvious.

a properer man / Than she a woman. 'Tis such fools as you / That makes the world full of ill-favoured children" (3.51-54). This image of "ill-favoured" human propagation comes mingled with a sure vector of arboreal pollination, but Rosalind's insistence on the intensity of Silvius's allegedly "proper" qualities of manhood also reinforces an image of the "foggy" density of pollinating dust that permeates the air during the spring months and causes humans allergies, "puffing" in sneezy blasts themselves. Finally, in line with my argument about Jaques, his "wind" reference follows quickly on the heels of his statement to Duke Senior that he "weed [his] better judgements / Of all opinion that grows rank in them" (2.7.45-46). Jaques aligns these metaphorical vegetal maladies with their corresponding physical component (based on humoral theory): "I will through and through / Cleanse the foul body of th'infected world" (2.7.60-61). By his reckoning, the "world" via active winds "infects" the body, "fouling" it and making it "grow rank." But most crucially, Jaques indicates, "I must have liberty / Withal, as large a charter as the wind / To blow on whom I please" (2.7.47-48). Jaques may have once been a libertine, of which Duke Senior accuses him, but in the homosocial world of the greenwood, he understands himself, even more promiscuously, to intermingle with what amounts to the third-party agents of arboreal pollination, possessing this same sort of airborne sexual liberty.

In this free and open air of Arden with which Jaques identifies, the courting human characters are oblivious to the circulating sexual plant material, but the play allows for the identification of moments in which they gesture around it and avert their eyes from it. The obscurity of the sexual activity of plants and trees has made it all but invisible to human eyes, a fact that *As You Like It* amplifies in its heavy emphasis on the visual, using the word "eye" some thirty-four times, and "see" thirty-two times, but "invisible" only twice. Phoebe's speech at the beginning of 3.5 uses the word "eye" or "eyes" seven times:

> I would not be thy executioner;
> I fly thee, for I would not injure thee.
> Thou tell'st me there is murder in mine eye.
> 'Tis pretty, sure, and very probable,
> That eyes, that are the frail'st and softest things,
> Who shut their coward gates on atomies,
> Should be call'd tyrants, butchers, murderers!
> Now I do frown on thee with all my heart;
> And if mine eyes can wound, now let them kill thee.
> Now counterfeit to swoon; why, now fall down;
> Or, if thou canst not, O, for shame, for shame,
> Lie not, to say mine eyes are murderers.
> Now show the wound mine eye hath made in thee.
> Scratch thee but with a pin, and there remains
> Some scar of it; lean upon a rush,
> The cicatrice and capable impressure
> Thy palm some moment keeps; but now mine eyes,
> Which I have darted at thee, hurt thee not;
> Nor, I am sure, there is not force in eyes
> That can do hurt. (3.5.8-27)

Although Silvius claims that Phoebe causes him "wounds invisible," she insists that the effects of her dart-throwing eyes are immaterial by comparing Silvius's unseen wounds to the "cicatrice and capable impressure" that remains on the skin when one's hand brushes against a rush. The family of flowering plants commonly known as rushes are technically called *Juncaceae* (made up of eight genera and over four hundred species). Like oaks, rushes are perennials and have both male and female flowers, but unlike oaks their leaves are evergreen rather than deciduous. Resembling grasses, rushes are often found in wetland environments (near brooks, for example), and persons maneuvering near the water might easily be inclined to grip a handful of rushes to retain their balance, leaving the momentary "impressure" of the plant's image on their palm. By the nineteenth century, botanists would apply the term "cicatrice" to trees and plants, but during the seventeenth century it was exclusively thought of in terms of human scars. Phoebe's imaginary scenario thus recalls Jaques's brook scene, the sexuality of plants peeking into it. Her

focus, however, is the momentary wound that contact with the vegetal body causes, a contact she does not claim for her eyes touching Silvius. Her demand to Silvius to "show the wound mind eye hath made in thee" asks him to expose an invisible pain or "hurt" that if he cannot produce is "for shame." Silvius's shame, according to Phoebe, resides in an inability to be exposed, for his body to show signs of the wounding her eyes supposedly cause. Neither of the characters concern themselves with the physical marks that might be left on a rush as a result of bodily contact with human force, a non-erotic touching that nonetheless enters into a zone of pollination. For all of Phoebe's forceful, darting glances, she gazes past the rushes' flowers that even a brief shaking from the disturbance of humans or animals might, taking on the role of the wind, contribute to the plants' sexual activity, exposing in the process their own bodies to the pollen, inadvertently pollinizing themselves and inundating their sense, even if their eyes "shut their coward gates."

Sergei Lobanov-Rostovsky discusses a gendering of the eye in the context of sixteenth- and seventeenth-century poetry in relation to advances in ocular anatomical knowledge. He claims, "As metaphor, the eye reclaims the sovereignty lost to the anatomist's objectifying gaze. It *becomes* the gaze, affirming its power by effacing its own status as flesh … the eye retains its power to affirm the male subject, not so much by projecting its gaze upon the visual world as by imposing its form on the gaze it solicits. It is this gesture that Phoebe reveals in her critique of her lover's Petarchan tropes in *As You Like It*."[34] Lobanov-Rostovsky argues that the "analytical male gaze" in Renaissance poetry attempts to efface the materiality of the female gaze, but that "Phoebe insists on the eye's material reality, its frailty … she catches him in the act, imposes shame by making his deception visible to the eye. Silvius's crime is an accusation that objectifies

[34] Sergei Lobanov-Rostovsky, "Taming the Basilisk," in *The Body in Parts: Fantasies of Corporeality in Early Modern Europe*, eds. David Hillman and Carla Mazzio (New York: Routledge, 1997), 197, 209.

by empowering, attempts to impose his own eye's aggressive desire on her gaze. Significantly, she reinscribes the eye in terms that suggest frailty, even femininity, discarding the masculine forms ('tyrants, butchers, murtherers') of Silvius's accusation."[35] However, additionally, the wound (or potential wound) of the exposure in/to "eyes" in Phoebe's speech includes vegetal being. Though there is no "force in eyes," that crosses the air to "dart at" Silvius, this medial space (containing pollen in the forest, i.e. being near trees and rushes) conveys these intentional glances that *un*intentionally accompany the moving force of vegetal reproduction as the plant's desires cross amongst those of the humans involved, a more-than-human cross-pollination that, in their not seeing of it, brings them no shame, in contrast to Phoebe's insistence that lack of visible marks of the rejection of sexual desire is for Silvius's shame. The image of "cicatrice" that might be left by a wounding eye gestures toward the barely visible "rush" in Phoebe's picture and the invisible sexual substance of vegetal life permeating the air all around, issuing from the "leaned upon" body of the rush, literally touching the material but not really seeing it.

Eyes and exposure feature in the most obvious site of human-arboreal entanglement of the play as well, in Orlando's tree carving and hanging of verse on trees. Through his poetry, Orlando's courting of Rosalind affects arboreal bodies in Arden, exposing them to the air and other agentive forces, not excluding the material damage of its barky exterior caused by the passionate affect of human longing. Orlando speaks directly to his poetry, facing the trees, when he looks up and simultaneously addressing the moon, asking the "Queen of Night" to look down favorably upon his pinned poem:

> Hang there, my verse, in witness of my love;
> And thou, thrice-crowned Queen of Night, survey
> With thy chaste eye, from thy pale sphere above,
> Thy huntress' name that my full life doth sway.
> O Rosalind! These trees shall be my books,

[35] Ibid., 208-9.

> And in their barks my thoughts I'll character,
> That every eye which in this forest looks
> Shall see thy virtue witness'd every where.
> Run, run, Orlando, carve on every tree,
> The fair, the chaste, and unexpressive she. (3.2.1-10)

Orlando compares Rosalind to Diana by suggesting she is the moon's "huntress," and thus Shakespeare gestures toward the bathing brook scene once more in Orlando's preoccupation with visual exposure, highlighted by his repetition of both "eye" and "witness." However, because Orlando gazes past the boughs of the tree to the "pale sphere" in the night sky, he looks past the living presence of arboreal matter in front of him, ignoring the nonhuman sexual events taking place just above him to gaze on the unreachable firmament of the ancient cosmos. Orlando's poem-carving is not an intersection of himself and the tree in a sexual way, but it leaves the marks of one's (human) sexual urges or sexuality and does involve two sexual beings and their touching of bodies, in a penetrative way. Orlando's heterosexual desires push into or at the least scrape against the tree's, that is, against its body as well as against its sexual nature. Earlier in the play, Duke Senior figures brooks as books, whereas he thinks trees speak in "tongues"; Jaques, of course, actually encounters the brook, very physically. The peeping root in that scene thus centers vegetal sexual exposure as an extra-textual event, looking at the play from outside the frame, considering it as a scene framed by the Lords' retelling, that includes the peeping root that looks back, looks across the exposed, vulnerable body of Jaques. Here Orlando tries to make trees into written objects to express his love/desires, but he does not realize that desires are already written there. If we continue to re-read the play through a re-writing of the Diana/Actaeon mythical encounter of shame, via a speculative "viewing," that is, the human encounter with the sexualities of plant-kind, arboreal becomings intruding into the scene, then the rooted brook scene transfers its arborealizations into other scenes of arboreal exposure, such

as the de-barking wounds Orlando inflicts on multiple trees, likely of various species. When he invokes the moon to "survey" the names he has carved, he includes yet further nonhuman eyes into the mix. A moment of dissonance occurs, however, when he asks "every eye" to "see" Rosalind's virtue, since exposing her virtue, even if she is chaste, is akin to what occurs when Actaeon comes upon Diana. To see her nakedness is to open her up to the animal-like sexual energy of Actaeon, who must be destroyed in order for her to preserve her chastity. The nakedness of the tree underlying its bark, a "seeing" into the tree, does not penetrate into the "virtue" or any sexual terrain of arboreal being. The exposure in fact only exposes Orlando as "marked" by the pollinizing arboreal flowers. In standing under the tree to make his mark(s), Orlando is potentially in the path of both seed and pollen, and in fact, Rosalind figures him an acorn when he lies under an oak (an image I discuss in the following section). In this scenario, Orlando becomes arboreal "child," understood as dopey or immature in his infatuated courting, being taught by the "more experienced" (yet virgin) Rosalind-Ganymede.

Acorns and Antiquity

Amidst this windy arboreal pollination, I return in this section to tree trunks and roots that become characters' resting places, reading these spaces "under the greenwood tree" as sites of a queer reproductive zone into which acorns fall. Doris Leibetseder, noting the tendency of some queer theories to be avowedly "anti-breeder," pushes for a queer bioethics that engages with new forms of queer reproduction such as assisted reproductive technologies (ARTs). She argues, "Queer reproduction challenges norms, for example, those norms of who is allowed to reproduce and how, and which kinds of babies are allowed to be born."[36] I suggest that the sexually active

[36] Doris Leibetseder, "Queer Reproduction Revisited and Why Race, Class and Citizenship Still Matters: A Response to Cristina Richie," *Bioethics* 32, no. 2 (2018): 139.

parts of plants that produce the nascent arboreal material to which *As You Like It* refers, namely nuts and acorns queer the surface-level heterosexualities of the human characters, in addition to the queering effects already implicit on the Elizabethan stage in particular, with boy actors playing the parts of female characters (who sometimes, like Rosalind, pose as men, a doubled filter of gender identity in play). The human characters, *both* male and female (including a cross-dressing Rosalind) become acorns, transformed into nuts by Shakespeare's figurative wordplay. Furthermore, reclining humans likewise make their way into this space and enter into proximity with the arboreal reproductive zone that accommodates pollinating oak flowers, the female variant of which produce acorns. The possibilities of pollination open up in these arboreal spaces, where the queer agencies of recently "dropp'd" acorns lie in tangible nearness to sleeping human bodies and the slowly moving roots of ancient oaks, with their wind-pollinating mothers/fathers above.

Heterosexuality and normative modes of reproduction make little sense with regard to the sexuality of trees, which often embody what might be considered an "intersex" identity in human terms, possessing both male and female reproductive parts in a single body that interact sexually with the parts of other sexed bodies in the vicinity, via wind and/or insect pollination. However, some sort of sexual reproduction—merged and merging with continua of queer human sexualities, reciprocally influential—leads to the production of nuts, containing the seeds of arboreal life, intra-acting in the play with the rhetorical effects of characters figuring human bodies as being nut-like. The arborealizations of humans into nuts that take place in *As You Like It* are in tune with the vegetal fertility of the forest space embodied in the seeds of oak trees. In Touchstone's mockery of Orlando's bad poetry, he asserts:

> Sweetest nut hath sourest rind,
> Such a nut is Rosalind.

> He that sweetest rose will find
> Must find love's prick – and Rosalind. (3.2.106-109)

In comparing Rosalind to a nut, Touchstone touches upon the commonality between humans and vegetal bodies like acorns (which would have presumably been in plain sight in the forest setting), of materially having interior and exterior parts. He also figures Rosalind as a rose, with thorns. Both the rind of a nut and the thorn of a rose bush (as Chapter 3 shows) signal the tough exteriors of specific vegetal bodies that brush against humans and animals, the shapes and characteristics of those bodies helping to define those encounters. Roses are of course associated with human courtship rituals, but in being likened to a nut, Rosalind becomes an object of consumption, with the possibility of reproduction: "sweet" on the inside after someone has broached the shell. This metaphor renders her virginity as "sweet," but only once it is "found," and, in the process of exposure, negated. Touchstone's verses are bawdy throughout, "love's prick" indicating sexual intercourse, but his reference to the nut also evokes the physical acorns in the landscape that gesture toward the sexual activity taking place among the trees, engaged in their own forms of love, courtship, and desire that intermingle with that of the humans, which, as mentioned in the section above, finds *its* painful expression in some of the trees' barky exteriors where Orlando inscribes and nails his poetry. Irigaray sees in the fulfillment of sexual desire a kind of nonprivate but noncommercial exchange that takes place in and composes human society. She explains, "Obviously, our desires do not first aim to procreate but to create links between us. These links must not confine themselves to so-called private life, or to sexual relations, in the strict sense of the word. They must also serve to weave a social fabric, which corresponds to a cultivation of our relational potential, and does not amount to a construction that is unconcerned about it and based above all on money and goods."[37] Shakespeare's characters

[37] Irigaray and Marder, *Through Vegetal Being*, 66.

understand nuts in the context of economic exchange, the sweet nut being the commodity, or "good," circulated and consumed, but they also recognize that in the exchange of such goods there must be a surplus, the sour rind that gets tossed away after consumption, and thus Touchstone's figuring of Rosalind's chastity in this way is crude at best. On the other hand, to push Irigaray's ideas a bit, if the cracked nut signals an interiority and exteriority of self, *a posteriori*, and we keep in mind Rosalind's activity throughout the play as virgin as well as man on the outside and woman on the inside, then the image of the nut does more cultural work than Touchstone necessarily intends. The exposure of inner/outer self occurs only in or after the "cracking," a reflective gaze that self-identifies retroactively following the event of sexual contact. Before the moment of sexual intercourse with another being, one's sexual becoming appears as undivided, a blank surface for inscription that mirrors the fleshy surface of bark Orlando writes upon. This image implies a physical pain in the exposure of identity in its becoming, always a different shedding of the nut's "shell" in relation to gendered, sexual bodies in proximity, and an act that might be repeated indefinitely (and the pain thus multiplied) in something like the nut shell in which Hamlet reigns as "king of infinite space" (2.2.255-57).

Orlando arborealizes, in Celia's estimation, as a nut as well. Celia twice figures Orlando in this way, first saying she "found him under a tree, like a dropped acorn" (3.2.212). Later, Celia compares Orlando to a "worm-eaten nut" (3.4.23). This second arborealization is less specific than the acorn reference, but it is more specific in its visual description, having been eaten by a "worm," or caterpillar, suggestive of infertility, a seed that will not be planted because of the worm's interference. Whereas Rosalind-as-nut would be consumed by Orlando, Orlando-as-nut in Celia's schema is already spoiled, as a result of the insectile life of the forest, also involved with (and sometimes interfering with) the trees' reproductive cycles. Pigs, deer, and

other animals would have been engaged in acorn consumption as well, rooting about the tree trunks where humans are now reclining in their forest exile. When Rosalind notes, “it well becomes the ground” (3.2.235-236), she tries to redeem Orlando-as-nut by imagining his body as complementary to the greenwood environment, under “Jove’s tree” (3.2.238). From an ecomaterialist point of view, her statement takes on the additional meaning that Orando-as-nut, already arborealized to a certain extent when figured as oak seed, literally *becomes* the ground in the moment of germination and spreading out into full oaken form.

The image of Orlando lying under a tree, like a nut, also joins his arborealized (and infantilized) body to those of both his brother Oliver and Jaques, all three of them lying against or along arboreal bodies at some time during the play. Oliver’s report of Orlando’s adventure while finding him sleeping against a tree functions similarly to the lords’ report of Jaques, as ekphrasis, painting a vivid, complex picture of unstaged action that takes on homoerotic tones in Oliver’s masculine, animal, and yes, vegetal qualities. The scene he describes is almost mythical in nature and in tone, reminiscent of stories of the “wild man” of English forest lore:

> Chewing the food of sweet and bitter fancy,
> Lo, what befell. He threw his eyes aside,
> And mark what object did present itself.
> Under an oak, whose boughs were mossed with age
> And high top bald with dry antiquity,
> A wretched man, o’ergrown with hair,
> Lay sleeping on his back; about his neck
> A green and gilded snake had wreathed itself,
> Who with her head, nimble in threats, approached
> The opening of his mouth.   (4.3.100-109)

The snake, hearing Orlando’s approach, escapes into a bush, under which a noble lion awaits (noble because it did not want to attack Oliver if he were dead). In addition to the distinction between the tall, kingly oak, intruded upon by both Oliver and snake, juxtaposed (oddly/queerly) to the lioness, lying in wait under a bush, crucial in this passage is the description of the oak

tree's boughs, "mossed with age," not to mention its bald crown (tree-top), revealing its age in terms of *antique* quality. This antiquity of course resonates with the earlier passage about the antic root; here, we have the inverse: an antic crown or head. This baldness of the tree's head/hair, then, contrasts sharply to the wild, overgrown hair of Oliver, "wretched" and forced to sleep against a tree out in the "wild" of nature (like Jaques contrasted to the cultivated merriment of Duke Senior and company). The age of the tree is beyond memory, suggestive of the classical antiquity of the Greeks and Romans, revered by the Renaissance culture in which Shakespeare lived. Its age, or degree of antiquity, can be divined only through its "mossiness," that is, its external growth of "facial hair," possibly compensating for the baldness, the lichenous, fungal becoming of its exterior flesh, its barken, rilled surfaces, thriving in a moisture opposed to the dryness of the "high told bald" head of the old oak. In today's botanical terms, moss is an epiphyte, meaning that it is a plant that grows on the surface of another plant. Nonflowering plants, mosses reproduce both sexually (by means of spores) and asexually. In current taxonomies, mosses are included informally with two other "bryophytes," liverworts and hornworts, though they are actually distinct from this group, but "moss" during Shakespeare's time would have described many such differing life forms, a colloquial denomination that persists today with a range of epiphytic plants like the so-called "Spanish moss," a flowering bromeliad, neither a moss nor a lichen (nor even really Spanish). Suffice it to say that "moss" growing on this oak designates some type of epiphyte that propagates in a symbiotic fashion, entangled amongst the growth of other vegetal beings, emitting spores into the air for wind-pollination alongside the pollen of its queer parent/home.

The tree in this scene is an extraordinary site of biodiversity, encompassing tree, bush, lion, snake, men, moss, a nonrealistic, romance-style setting that presents an assemblage of

human and nonhuman actors in ekphrastic motion, all moving in relation to the centerpiece of Oliver's open mouth. Like the mossiness and "bald tops" of Arden's ancient oaks, exposed roots are a sign of age, evidence of a stretching out, a becoming that reaches into the world. The roots of the ancient oak are long-established, but its acorns seek the combination of soil and water to grow into existence and toward the level of maturity that the ancient oak embodies. The existence of a truly ancient oak in Arden *as* an oak dates back to the days of the Romans and possibly even Greeks, yet it still lives and partakes in the becoming of the forest. In the antic root's intra-action with the play's storied matter, the deer, women, men, other plants—all represent an ecosystem of bodies exposed to one another in various ways of sexuated arborealization that temporarily renders Orlando as acorn while Ganymede-Rosalind eventually exposes herself as female. What *an* oak, which bears male and female flowers, *is* greatly varies and changes over time, not only a single arboreal body of ancient provenance but also the species of oak-kind itself, its inclination toward hybridity and promiscuity promulgating over 600 different species of variant arboreal beings-in-becoming labeled under the single word "oak." This difference is intra-specific; much greater is the difference between Arden's antique oak and its antique osier. Yet the forest includes instances of identifiably "aged" members of both osier and oak along its central stream, in the world of the play as certainly as in Warwickshire at the time of the play.

Sleeping with Mother Earth

In Marshall's psychoanalytic reading of *As You Like It*, she observes the play's conspicuous absence of mothers, positing the idea that "disavowed mourning for the mothers whose acknowledgment is forcefully effaced from the play drives the need for a melancholic

safeguard who can hold at bay any recognition of emotional loss," that is, Jaques.[38] Similarly, Mario DiGangi muses, "Ganymede's initial admonishment of Phebe contains the only mention of a mother in a play that continually returns to fathers."[39] But this latter observation is not technically true, as the wrestler Charles brings up the figure of "mother earth" (1.2.192). The concept of mother earth, or mother nature, as a feminine embodiment of nature originates in Greco-Roman literature, with the figure of Persephone in Greek mythology and Lucretius's casting of Venus as mother of nature.[40] Persephone is especially pertinent to this discussion, considering that it is her consumption of pomegranate seeds that dooms her to a perpetual return to subterranean Hades, a representation of the arboreal life cycle that returns part of the tree, in seminal form, to the earth, or soil, from whence it sprang. I conclude this chapter by returning to the soil as well, in *As You Like It,* as in everywhere in the world, where the roots of trees mingle with the seeds of trees, a material entanglement of the old and the new that figures prominently in a play that "continually returns to fathers": not as a mother earth of fertility and nurturing growth but as a queerly sexualized space of incestuous decay. From a queer necropolitical point of view, we might assess the "missing" mothers of *As You Like It* as having been relegated to the soil, "buried" by the demands of the "plot" of heteronormative marriage. These queer mothers uncannily emerge, like the peeping root, as "symbiotic co-presence of life and death," simultaneously "queer subjects invited into life and queerly abjected populations marked for death."[41] Their sexual proclivities merge the hyper-young, infantilized Orlando-acorn with the

[38] Marshall, "The Doubled Jaques," 387.
[39] Mario DiGangi, "Queering the Shakespearean Family," *Shakespeare Quarterly* 47, no. 3 (1996): 284.
[40] On the application of James Lovelock's "Gaia Hypothesis" to Shakespeare, see Egan, *Green Politics*, 29 and passim.
[41] Jin Haritaworn, Adi Kuntsman, and Silvia Posocco, eds., *Queer Necropolitics* (New York: Routledge, 2014): 2.

anciently dead but renewed life of classical "culture," a hybrid undead body swaying into the frame with vegetal energies.

Charles taunts Orlando prior to their wrestling match: "Come, where is this young gallant that is so desirous to lie with his mother earth?" (1.2.191-92). This talk of mothers, even if a figurative one, contrasts to all of the discussion of fathers and sons in the play. Dusinberre notes the "lugubrious sexual metaphor for death" in copulating with the figure of mother earth, or the soil.[42] The sexual innuendo of lying in the ground (death) being a kind of sexual union with the earth-mother puts Orlando figuratively into the space in which acorns and roots mutually interact, or intra-act, if viewed as part of the same organism (the "eggs" or seeds of the tree being a kind of extra-bodily seed that happens intracorporeally for humans and most mammals, but outside of it for reptiles and other animals/insects), suggesting a nonhuman "desire" inherent in the soil itself, desirous of bodies like Orlando's to decompose and nourish the soil in order for other bodies, vegetal ones, to take root and begin a new life. Arboreal reproduction, in the midst of human desire, participates in a queer, more-than-human promiscuity that eschews the shame of exposure, an unearthing of desires taking place in Arden under the greenwood tree. While trees have multiple body parts, the soil is where the tree takes root, where the seed must ultimately be planted, and which the seed takes into itself, becoming other as it becomes itself. The ground on which we walk becomes part of arboreal embodiment in its enrootment. Differing of course from human birth, the seed is not incubated in the mother's womb; rather, a type of egg—in the case of the oak, the acorn—holds the seed, and it is not until the seed is in favorable conditions, in the soil with a certain temperature and moisture, that it will simultaneously take root and shoot up toward the sunlight. As mentioned, many trees have both male and female

[42] *As You Like It*, ed. Dusinberre, 172.

reproductive parts on the same body; they reproduce primarily, however, with other trees, in a sort of carefully *non*-incestuous orgy of floral display and pollination. In referring to soil, figuring it as female-mother, Charles highlights the fecundity of soil, yet also references the death of humans and their burial as participating in that fecundity, in fertilizing and providing nutrition to trees and other plants. It is the roots of trees that actually "lie" with mother earth, under the ground, yet we find Jaques, Orlando, and Oliver lying up against or along trees, the play's composite image of the three male tree "huggers" closely associated with the phallic trunk and roots that penetrate and/or emerge from the traditionally feminine soil, both virgin and ancient mother-goddess. Yet in this sustained image of males lying against trees, near the earth where roots are exposed, the play textually replicates for its audience the ekphrastic scene of Jaques's exposure to the homoerotic gaze of the two lords. The men lie near mother earth, then, but with one another, in proximity to and through the lens of vegetal exposure.

The potential shame associated with the homoerotic encounters in the play, therefore, are underwritten by a maternal sexuality that prefigures every "birth," in both human and vegetal worlds, not necessarily a heteronormative or even feminine sexuality, but that of the biological seed-producer. Long believed by medical practitioners to belong to the male, the "seed" of life in humans is, of course, to be found in the mother's body.[43] Though human and vegetal bodies are not always analogous, the same is basically true for plants, and, as Jonathan Silvertown explains, "The mother plant is able to exercise control over her offspring, even after they have flown the coop, because each seed is dispersed in swaddling clothes of maternal tissue … Mom can

[43] See Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA: Harvard University Press, 1992).

program the layers she has wrapped around each seed to be tough or tender, to germinate sooner or later."[44] Irigaray considers the "germinations" of humans and those of plants to be related:

> The secret germination of plants and even that of a human being are not assessed as it would be worthy of them. They bear witness to the fecundity of sap in the darkness of the soil, or of a womb, and to the fact that appearing amounts only to a part of the growth of life. Scorning this secret process of the living risks mistaking appearance(s) for the appearing of life, a risk that lies in our tradition from the very beginning and that has transformed the West into a culture of uprooting.[45]

The "peeping" of roots, sticking out of the ground to "view" humans in the midst of this "appearing," is related to the voyeurism of the audience, watching the characters court one another, evade, disguised as the opposite sex, marry under trees (and bushes), intimately involved with the parts of the forest's trees—perhaps except for the deep root, except under ground, but it is here where the acorn comes to mingle with the root, the child and the mother/father. As with Jaques and Oliver, shame is also involved here in the sense of the seed/Orlando now sleeping with mother earth; the earth is feminized, and Rosalind will eventually be feminized, when she exposes herself as "female," removing her Ganymede disguise; as hybrid/intersex figure, Ganymede approaches the vegetal within the field of its multigendered sexual and asexual activities that lead to the production of offspring. The play troubles the very categories of male and female, but it does so beyond just the human—if Ganymede seeds Orlando as "nut" then she/he is his mother/father/lover, like the tree that has multiple sexual "parts" and reproduces new trees at its base, in the same soil in which it grows and in which they will share nutrients and will probably exchange pollen in the future when the young tree reaches sexual maturity.

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[44] Jonathan Silvertown, *An Orchard Invisible: A Natural History of Seeds* (Chicago: The University of Chicago Press, 2009), 117.
[45] Irigaray and Marder, *Through Vegetal Being*, 39.

I conclude this chapter where the play does, at the site of heteronormative marriage, which for Touchstone and Audrey almost occurs "under this tree" rather than at a wedding chapel. The suggestion of vegetal presence at the wedding, in light of the play's queer exposures, bear witness to this nonhuman sexual energy operating above and below the "normal" currents running in the play. It reminds us of the brook scene and the alternative sources and springs of water, sustenance, and desire in the forest. In Touchstone's rush to marry Audrey, he asks the priest, Sir Oliver Mar-Text, "Will you dispatch us here under this tree or shall we go with you to your chapel?" (3.3.60-61) The deictic "this tree" implies the possible presence of a tree onstage, though later in the scene, Jaques generalizes from a specific "this tree" to a derogatory dismissal of it:

> And will you, being a man of your breeding, be married under a bush like a beggar? Get you to a church, and have a good priest that can tell you what marriage is. This fellow will but join you together as they join wainscot; then one of you will prove a shrunk panel and, like green timber, warp, warp. (3.3.76-81)

Although the melancholy Jaques elects to stay in the woods in monastic retreat, he blusters to Touchstone about having the official sanction of the church to "tell you what marriage is." Mar-Text, whose name recalls Orlando's marring of the forest's trees with his poetry, will not bestow an abiding "text" of marriage, according to Jaques; that which is written in/upon nature does not have the same classed cultural value as an ecclesiastical pronouncement. But once again, the arboreal metaphor hints at non-heteronormative cultural work at play "under' this tree-bush physically in view that holds the potential for "warping" and changing its shape, especially "under" a tenuous banner of holy matrimony that may not prove binding, when the young "green timber," unseasoned, like Jaques after his early days of libertine sexual indulgence, shrinks away.

CODA: VEGETAL DREAMSCAPES

Man is but an ass if he go about to expound this dream.
-*A Midsummer Night's Dream* (4.1.205-6).

Thinking myself remiss to have written a dissertation on Shakespearean trees and forests without mentioning the beloved comedy *A Midsummer Night's Dream* (c.1595), I hope to amend that omission in this brief final chapter, in which I apply the methodologies I have developed herein to perform a concise reading of the play, with an eye toward future directions this research might take me and perhaps others on a similar journey.[1] The theories of deciduous-sense, inter-missing time, thornition, and the queer rhizosphere, which I have drawn out in the foregoing chapters, resonate with *A Midsummer Night's Dream* in relation to its many trees and plants. Deciduous-sense occurs as early as the play's first act, with a meeting place in the woods specified as "the duke's oak" (1.2.103) and Titania's description of "the barky fingers of the elm" (4.1.43). Inter-missing time intersects the arboreal chronologies of deciduous woods in the second act, wherein seasons other than (mid)summer enter into the time of the play via the magical fairy world. The play is rife with momentary glimpses of thornition as well, filled as the Athenian landscape is with various forms of both rose and thorn. The queer rhizosphere embodied in Arden's peeping root appears in this forest with the play's multiple references to the dirty "ground," on which the converging bodies of the five lovers (I count Bottom the Weaver among the "lovers") comingle in slumber just before the play's final act. To end on something of

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[1] For ecocritical studies on the play, see, for example, Robert N. Watson, "The Ecology of Self in *Midsummer Night's Dream*," in *Ecocritical Shakespeare*, eds. Lynne Bruckner and Dan Brayton (New York: Routledge, 2011), 33-56; Lynne Bruckner, "Reprocentric Ecologies: Pedagogy, Husbandry and *A Midsummer Night's Dream*," in *Ecological Approaches to Early Modern English Texts: A Field Guide to Reading and Teaching*, eds. Jennifer Munroe, Lynne Bruckner, and Edward J. Geisweidt (New York: Routledge, 2016), 155-68. See also Theis, *Writing the Forest*, 91-120.

a happier note, I pursue in these more-than-human convergences an aspect of sentience that resonates more with a pleasure than with the pain that most of the dissertation theorizes. Surprise-startle, then, is the affect that I suggest figures most prominently in *A Midsummer Night's Dream*, a neutral affect that is as likely to lead to interest or excitement as it is to fear or distress. In identifying the potentially pleasurable surprises of plantkind's interactions with humans in *As You Like It*, I want to point toward the speculative future as I have been inhabiting speculative pasts and inter-missing times. The Anthropocene seems to promise only wide-scale devastation of the planet, but the recent startling discoveries intimating the workings of vegetal cognition might open avenues toward surprising new collaborations beyond the human and the animal in the pleasures of queer becoming, even in the shadow of the approaching apocalypse.

Oaks and elms are two of *A Midsummer Night's Dream*'s deciduous trees. The "duke's oak" implies an association with Duke Theseus of this play but also anticipates the oaks of Duke Senior's greenwood in *As You Like It*, and, as in *The Tempest*, stands as a "masculine" tree in opposition to an apparently more feminine one. (Prospero's oak is also a "duke's oak," in essence.) Unlike the pine of *The Tempest*, however, aligned with the feminine Sycorax, the elm in *A Midsummer Night's Dream* seems to stand in for the ambiguous character of Bottom, whose head is transformed by fairy magic into that of an ass. Bottom is not only dehumanized as a result of this animalization, but he is also emasculated in his proximity to Titania in her bower of fairies (closer to "nature"). Titania, the fairy queen, figures Bottom's becoming-animal body further into natural shapes by pairing him as the elm to her own vine-like forms: "So doth the woodbine the sweet honeysuckle / Gently entwist; the female ivy so / Enrings the barky fingers of the elm. O how I love thee! How I dote on thee!" (4.1.41-44). She entreats Bottom to sleep, "and I will wind thee in my arms" (4.1.39). Crucially, the stage directions as this point in the

scene direct these unlikely lovers to "sleep," lying down on the stage/ground in a mock image of the four mixed-up Athenian lovers who lie down to sleep later in the act, joining Bottom after Titania wakes up and abandons him. Upon awaking, the lovers decide their misadventures in the woods have been mere dreams, but Bottom is less convinced, evincing an element of deciduous-sense in his memory of the "dream" that is also an un-remembering. When he awakes, he begins, "When my cue comes, call me, and I will answer," as though still participating in his acting troupe's rehearsal before his transformation (4.1.199). Then he muses, haltingly: "I have had a most rare vision. I have had a dream, past the wit of man to say what dream it was … The eye of man hath not heard, the ear of man hath not seen, man's hand is not able to taste, his tongue to conceive, nor his heart to report what my dream was … It shall be called 'Bottom's Dream', because it hath no bottom" (4.1.203-5; 209-14). That Bottom answers a "cue" or "call" as an actor corresponds with the cues of nature to which the deciduous elm responds, and, encircled as he is with the "vines" of Titania, his vegetalized senses are perhaps even further muffled, faint as they may be, in the midst of his bliss and contentment in her dreamy bower. Bottom approaches in his "dream" a sense of bottomless feeling, a startling awake that un-remembers yet persists within his being. Bottom's synesthetic blurring of senses "past the wit of man" crosses into the intertwining becomings of Shakespeare's deciduous-sense.

The seasonality to which deciduous-sense responds also tracks in the inter-missing seasonal rhythms the play references that inform the world of a play that "exists" in the short passage of staged time, the plot itself lasting not much more than a day and a night in midsummer. Lamenting her conflict with Oberon, Titania intermingles the fancies and feuds of the fairy world with the changing seasons, Shakespeare nodding to English folk superstitions. Like Bottom's blurring of human senses, Titania blurs the seasons, as the "mid" of "midsummer"

already does: “since the middle summer’s spring” (2.1.82). She then moves through the seasons in a quick flurry, performing rhetorically the “distemperature” through which “the seasons alter” (2.1.106-7): “An odorous chaplet of sweet summer buds / Is, as in mockery, set. The spring, the summer, / The childing autumn, angry winter change / Their wonted liveries” (2.1.110-113). Dressing the seasons in “wonted liveries,” she proclaims that “the mazed world, / By their increase, now knows not which is which” (2.1.113-114), describing a world in an amazement at a colliding of seasons that bring unexpected floods, diseases, and disasters of all kinds in her description of fairy-feud. Although Shakespeare does not predict the increase of natural disasters and the unpredictable weather patterns of the Anthropocenic global climate, Titania’s relationship with Bottom—the man become animal become plant—represents a devolution in time preexisting the cohabitation of plants and animals on the earth and potentially peeks (peeps?) into the future at a dream of a similar time to come. As elm, “Bottom’s dream” records hundreds of years of climate change in prehistory, even as Titania’s whirlwind of weather and disease gestures toward the unexpected introduction of Dutch elm disease in the twentieth century, devastating to elm populations in Europe and North America. One should not take pleasure in scenes of devastation to humans or trees, but the unexpected shock that accompanies “natural” disaster can prompt a movement toward more ethical stances to others, the dizzying effects of “brute” nature in full force holding the potential for eye-opening change.

The thorns of the play are plentiful (“thorn” and its variants appearing sixteen times), so I will linger among its sharp vegetal agency only briefly, addressing Theseus’s comparison of Hermia to a rose: “But earthlier happy is the rose distilled / Than that which, withering on the virgin thorn, / Grows, lives and dies in single blessedness” (1.1.76-78). The image of distilling a rose (for perfume) plays into *A Midsummer Night’s Dream*’s heteronormative economies that

reckon the unplucked, “withering” rose as failing to live up to its instrumentalized value, just as Hermia’s virginity, according to Theseus, should be happily be used by a man. However, Hermia, bold in her defiance of Athenian custom, picks up on the duke’s obvious error in highlighting the “single blessedness” with which the rose remaining on the thorn bush “grows, lives and dies.” Hermia indicates, “So will I grow, so live, so die, my lord, / Ere I will yield my virgin patent up / Unto his lordship whose unwished yoke / My soul consents not to give sovereignty” (1.1.79-82). In aligning herself with the vegetal and its form of growth, Hermia manifests an aspect of the “vegetative soul,” which, in the words of Elaine Miller, refers to the idea of “genius as the plantlike relationship of the creative mind to nature as the place from which it springs forth without individual agency and indeed lacking full transparency to self as to its reason for being. The vegetative soul is radically opposed to the figure of organism as autonomous and oppositional; its stance toward the world is characterized by the promise of life and growth, not the avoidance of death and loss.”[2] On the other hand, Hermia’s earthly growth on the “virgin thorn” also configures an accompanying “stance toward the world” whose outgrowth is characterized by thornition, a vegetal agency which has a material intentionality pointing toward human/animal others in a defensive and/or offensive posture. Hermia’s non-consenting soul, vegetalized, exercises a nonhuman sovereignty in its persistence on/in the thorn, her material stance toward overarching, tree-like authority, rendered less powerful in the resisting agency of thornition.

Hermia’s “earthly” growth also resides nearer to the play’s queer rhizosphere, which, as in *As You Like It*, is buried clandestinely beneath its heterosexual overstory. In addition to the play’s acorns and its references to the harvest, *A Midsummer Night’s Dream* also resonates with

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[2] Miller, *The Vegetative Soul*, 5.

As You Like It in its inversion of Ovidian stories of metamorphosis. Rather than reimagining a queer Actaeon/Diana brook scene, the play re-envisions Apollo's chasing of Daphne, whose salvation from rape comes in her transformation into a laurel tree. Rebuffed by Demetrius, Helena cries, "The wildest hath not such a heart as you. / Run when you will, the story shall be changed: / Apollo flies, and Daphne holds the chase" (2.1.229-231). Helena's inversion of the classical image, if we pursue it momentarily, not only reverses the heteronormative trope of the aggressive male pursuer of passive female, who becomes a tree, but it also implies that the male might become tree, like Bottom, entangled by the passions of a female pursuer, embodied in Bottom's example by Titania's vine-like embrace of his arborealized body. In the traditional story of Apollo and Daphne, Apollo breaks off a sprig of the laurel tree to wear in memory of Daphne, her evasion of his sexual advances memorialized into reduced metonym. In the Shakespearean inversion, when Helena takes on the male role of Apollo, the implication that Demetrius-Daphne becomes tree further implies Helena takes a "part" of him in this reorientation. This exchange of roles and parts might reinforce the heteronormative trajectory of the comedy toward happy marriage in the final act, but the presence of Bottom as a fifth lover in the circle of sleepers before the final wedding adds a wrinkle of complexity to the plot that glances toward the peeping root of *As You Like It*, exposed as "part" of the scene of homoerotic gaze at the brook. Just after Oberon instructs Puck to remove Bottom's ass-head, he tells Titania with her music to "strike more dead / Than common sleep of all these five the sense" (4.1.80). Beyond "common sleep," the five lovers approach a state of deciduous-sense outside of the five human senses. When Puck reverses the charm on Bottom's head, he says to him, "Now, when thou wak'st, with thine own fool's eyes peep" (4.1.83). As in *As You Like It*, this single "peep" is the play's only usage of the word. Like the root that emerges from the surface of the ground, the

charmed lovers will awake in the morning to "peep" at the new day, but will wonder about/deny their wild evening in the woods, the desires of the unconscious peeping out into the daylight but repressed into the shady forest of sinful lust.

Such opportunities for the surprising and the shocking point us toward affective interrelations between humans and our nonhuman others in acknowledged co-becomings in sentient bodies that feel both pleasure and pain, both of which might intersect in material forests in the world composed of living bodies and their many body parts, in addition to the fantastical forests of fairy enchantment and unconscious repression. *A Midsummer Night's Dream*, with its manifold dreamscapes of Ovidian transformation, crosses the terrain covered in this dissertation in the way that those fantastic shapes correspond with and communicate vegetal desires and extensions into the human. From leaf to bark to thorn to root, Shakespeare's drama takes part in the world's arborealizations, the worlding of more-than-human bodies traversing disparate stages, exposed to one another in vulnerable becoming. Vegetality is no dream, but the dreams of vegetality reside in significant quantities in the material Shakespeare has left us, but they do not end there.

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