SCHOLARLY ARTICLE

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Arborealities, or Making Trees Matter in Elif Shafak's *The Island of Missing Trees*

Trees are radiant forms of life that we humans encounter in our environment, language, and culture. Science offers deep insights into trees as intelligent life forms, with accessible studies such as Peter Wohlleben's Hidden Life of Trees (2017) helping us to understand how trees support each other through a network of roots and fungi below ground. This mycorrhizal network, the so-called "wood-wide web" of fungi and roots, brings us into the understory of arboreal matter, and to a more-than-human ontology that scholars in critical plant studies like Merlin Sheldrake have explored, decentering the human in the process. Indigenous cultures provide further knowledge about arboreal life in their regard for trees as subjects. Robin Wall Kimmerer combines her scientific knowledge as a botanist with indigenous knowledge as a member of the Citizen Potawatomi Nation to recount how her elders knew that the trees around them not only "talked to each other" (19) but acted collectively. "There is so much we cannot yet sense with our limited human capacity," writes Kimmerer, "Tree conversations are still far above our heads" (20). Elif Shafak's novel The Island of Missing Trees (2021) is an engaging example of how such arboreal conversations might be brought into our world. Like Richard Powers' The Overstory (2018) and Annie Proulx's Barkskins (2016) before her, Shafak makes the contemporary novel an arboreally engaged form, as she explores the affordances of narrative form for telling tree stories. Accompanying the human story of Defne, Kostas and their

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daughter Ada, who have moved from a divided Cyprus to London, is the more-than-human story and storytelling of a "*Ficus carica*" (Shafak 31), the novel's narrating fig tree. As Kostas, who within the story is a botanist, remarks, "In nature everything talks all the time" (341). The novel expands upon prior literary representations of trees but also draws from tree science and vegetal studies. These intertexts and contexts are, I argue here, the novel's tree-like companions, a mycorrhizal network of texts and trees, or what I term arborealities, in which the literary work does more than refer to trees but advances manifold ways of understanding and appreciating them as our kinfolk. *The Island of Missing Trees* thus suggests new directions in literature's arboreal turn (Nitzke and Braunbeck 341–55).

Influenced by the novel's own intra-diegetic illustrated guide, "How to Bury a Fig Tree" (Shafak 48), I examine the novel under three arboreally titled sections. First, Roots, or How to imagine a tree, considers the challenges of arboreal representation and draws on theories of storied matter to argue that the novel legitimates its primary conceit of the talking tree through narrative voice and intertexts, including Ovid's Metamorphoses, Shakespeare's Macbeth, which supplies an epigraph, and Margaret Cavendish's "Dialogue between and Oak and a Man Cutting him Down." These constitute the novel's generative root system. Second, Branches, or How to know a tree, brings the novel into productive conversation with critical plant studies, examining select scientific and indigenous knowledge of trees in the work of Kimmerer and Suzanne Simard, and vegetal ontologies in the work of Sheldrake and others, to argue that Shafak develops arboreal principles of collaboration and connection across time. These works give epistemological weight to Shafak's arboreal imaginary. Third, Rings, or How to be responsible to a tree, suggests that the novel's work of imagining and knowing tree life is deeply ethical, as the narrating tree articulates its rights. By interpreting the novel through arboreal being, knowing, and valuing, interconnecting circles if you will, I argue that Shafak's novel highlights the urgency of nonanthropocentric modes of storytelling in these times of Anthropogenic climate crisis.

I Roots, or How to imagine a tree

The novel opens in London, where Kostas, originally from Cyprus, and a botanist specializing in fungi, lives with his teenage daughter Ada and a fig tree, a cutting of which has been brought from Cyprus, planted, and buried in the back garden of their London home as a memorial to the late Defne. Grief thus marks the narrative present, as father and daughter process their loss separately. The novel transits between temporalities and locations, bringing the reader back to Nicosia in 1974 where the Greek-Cypriot Kostas and Turkish-Cypriot Defne fall in love in a country on the cusp of division.¹ Under the tree's canopy in The Happy Fig restaurant, their secret romance carries on, alongside that of restaurant owners Yusuf and Yiorgos. Together, these stories suggest the possibility that, Romeo and Juliet like, love can transcend the divisions that mark the island's history, while at the same time rooting the collective traumas of war in the personal. But the novel also complicates the idea of having firm roots in any one time or place. Even its fig tree is not sessile but carries "the shadow of another land" (Shafak 189) as it shares the human experience of migration. The novel suggests that the traumas of the past, embodied in the recovery of those disappeared in the conflict, resurface in second and third generations. The young Ada is characterized by this phenomenon of transgenerational epigenic trauma, experiencing the strange sensation that "far beyond her reach, someone's bones were breaking" (29), a continuation of stress and pain across time that she shares with the fig tree.

The tree is central to the novel's exploration of the past's uncanny incursion into the present in three interlinked ways. First, it is as an authorial medium, with Shafak herself commenting on how the idea of a narrating tree provided "a sense of freedom that I needed to dare tell the story" (qtd. in Nair) of a divided Cyprus.² The novel's arboreal narrator focalizes this history, bearing witness to the "division of the island into a Greek South and a Turkish North" and the displacement of thirty percent of the population (Dietzel 2; 146). As one historian of the conflict observes, "all Cypriots have been haunted and branded [...] by this protracted, never-ending confrontation," characterized as it is by ethnonationalism on both sides (Anastasiou 10). Second, the tree is a memorial medium through which the novel negotiates the island's history. The "missing" in the title connects deforestation and ecocide to the legacy of the disappeared on both sides of the island's divide. Third, the tree is a more-than-human medium, or an imaginative leap into arboreal life that enacts an intraspecies communion with nature, which is accorded a subject status at the level of narrative and story. The revelation that we have a narrating tree comes early in the novel, in its second chapter, so that readers experience her as a companion to the opening narrative voice. As such, Kostas' observation to his daughter-"We're only just beginning to discover the language of trees" (Shafak 41)—has metafictional significance.

Shafak herself has commented on the need for a deeper arboreal language, remarking in a Podcast devoted to literary trees that novelists must be more open to arboreal presence: "We need to stop seeing ourselves as the owners of the earth, as the centre of the universe, we

are not [...] one day we will all disappear but trees will still be alivethey live longer than us" (qtd. in Nichols). In the same Podcast, Richard Powers reflects on the narrative "challenge of putting [trees] on equal footing with human characters" (qtd. in Nichols). Both writers echo Amitav Ghosh's criticism of the novel form's unresponsiveness to the climate crisis, which he attributes to the form's historical emphasis on the protagonist's interior, moral journey set against a stable environment (Ghosh 26). However, Ghosh's own novel Gun Island, along with Powers' Overstory, suggest the form's continued relevance (Grener 45– 61). Both novels find agency, or the capacity for autonomous action and decision-making, in nature, telling its story alongside those of human affairs. The Overstory disrupts the human-oriented conventions of the novel form through an arboreal structure (Saint-Amour 149), with chapters titled Roots, Trunk, Crown, Seeds, and 5 tree species overlaying and connecting the stories of the novel's 9 characters, who each discover trees anew. Shafak's novel similarly decentres Anthropos at the level of its formal structure, narrative voice, and story, through a connecting arboreal thematic and temporality. Events unfold in a nonlinear fashion, with the narrative moving back and forth between characters' past and present in ways that are suggestive of a tree's rings. The novel is divided into 6 parts (How to Bury a Tree; Roots; Trunk; Branches; Ecosystem; How to Unbury a Tree), with section breaks delineated by tree icons that, along with the illustrated guide to tree burial, function as arboreal punctuation marks, inscribing tree life into the novel's materiality.

Where *The Overstory* gestures towards tree writing, with Berthold Schoene noting the novel's incorporation of arboreal voices in cursive at the head of each chapter, signalling a new mode he calls "arborealism" (15), *The Island of Missing Trees* goes further to unmute the tree within literary fiction. At a narratological level, Shafak gives equal standing to the novel's third person narrative voice and its arboreal one. The fig tree is a character too that comments on other characters and tells her own story:

This afternoon, as storm clouds descended over London and the world turned the colour of melancholy, Kostas Kazantzakis buried me in the garden. [...] Normally I liked it here, among the lush camelias, sweetly honeysuckles and witch hazels with their spidery flowers, but this was no normal day (20).

Here introducing its narrating tree, the novel uses the rhetorical figure of *prosopopoeia*, in which a dead or inanimate object is given a voice, to unmute the arboreal. Early accounts of literary devices understand prosopopoeia as "the counterfeit impersonation," as George Puttenham describes it in his Art of English Poesy, adding that "[I]f ye will feign any person with such features, qualities and conditions, or if ye will attribute any human quality, as reason or speech, to dumb creatures or other insensible things, and do such study [...] to give them a human person, it is [...] prosopopoeia" (183). The novel's vocal tree is not so much the fig of Genesis but rather those talkative ones in the Book of Judges: "Then the trees said to the fig tree, 'You come and be our king!' The fig tree replied, 'Must I forgo my sweetness, forgo my excellent fruit, to go and hold sway over the trees?" (Sutton 26). These biblical associations suggest there is a long history to imagining voice and agency for "insensible things." On the one hand, then, the novel's conceit of a talking tree is inherently anthropomorphic, a human ventriloquizing of nature that appropriates arboreal alterity in the interests of human characters' actions and feelings. On the other, however, Shafak's elevation of the tree to narrating character makes sense in a climate crisis context, a recognition of trees' pre-eminence that corresponds to their status as the planet's lungs, and thus of high priority in mitigating against Anthropogenic climate change. As Stuart Cooke argues, "[t]here has never been a more urgent need to better understand the lives of our arboreal companions" (215). Responsive to this need, Shafak activates Adrienne Rich's insistence that "in times like these |to have you listen at all, it's necessary to talk about trees" (Rich 1995). Her novel is a listening act. It brings the reader into arboreal life, drawing on what we already know about arboreal agency, that is how trees "act autonomously, outside the confines and expectations of human actions" by feeding, seeding themselves, and growing in unexpected places and forms (Jones and Cloke 57). This is particularly evident where the arboreal narrator describes her ecosystem:

My guess is humans deliberately avoid learning more about us, maybe because they sense, at some primordial level that what they find out might be unsettling [...]. Would they pleased to discover that by sending signals through a network of latticed fungi buried in the soil, trees can warn their neighbours about dangers ahead – an approaching predator or pathogenic bugs – and such stress signals have escalated lately, due to deforestation, forest degradation, and droughts, all of them caused directly by humans? (Shafak 44).

As the objectivity associated with narrative voice slips into the second person, indexical "us," the novel expands anthropocentric literary forms to remind its reader that the literary imagination is not bound to the laws of logic but instead "makes possible the imagining of possibilities" (Ghosh 128). This is because the novel is "a medicine bundle," in Ursula Le Guin's evocative description, "holding things in a particular, powerful relation to one another and to us" (169). Peter Boxall similarly emphasizes the form's "unique ability to put the relationship between art and matter, between words and the world, into a kind of motion" (*Value*, 13). The novel's "prosthetic imagination" provides for a move between mind and matter, and a productive tension "between being like something and being that something itself" (Boxall, *Prosthetic*, 16).

Shafak's own use of the novel form, in which we get the mimesis of a tree and the narrative prosthesis of a tree that produces a sense of treeness, suggests her novel is an Anthropocenic imagination, one attentive to nature's story and temporalities. As Bruno Latour argues, storytelling is vital to how writers, and scientists alike, describe a nature that is already animated in and of itself: "Storytelling is not just a property of human language, but one of the many consequences of being thrown into a world that is, by itself, fully articulated and active" (13). Ecocriticism adds further to our understanding of how the novel treats matter, with Serenella Iovino and Serpil Oppermann using the term "storied matter" (1) to capture how matter provides a ground for stories but, like Latour, they emphasize that it has its own story to tell: "the world's phenomena are segments of a conversation between human and manifold human beings" (4). The Island of Missing Trees acts as a container in Le Guin's sense, language in motion in Boxall's, and storied matter in Iovino's and Oppermann's, to catalyze a movement into arboreal narrative voice and tree-as-character to face another living thing. Shafak uses narrative's "uncanny capacity to animate voice" (Boxall, Value, 19), with the character of Ada increasingly sensing an arboreal presence despite her disbelief. As she feels empathy for the tree, "buried all alone in the garden, its remaining roots dangling by the side" (Shafak 95), a deeper, communicative connection strikes her: "she had the strangest feeling that the tree was awake too, tuned into her every movement" (95). The uncanniness of the moment, the interplay between absence and presence, is part of the novel's arboreal aesthetic in which it stories-and legitimates-arboreal matter. With the tree's own articulation of an arboreal world that humans imperil, we slip out of metaphor or, rather, that figure "overflows," to borrow Stephanie Frampton's term, into metamorphosis as "an actual metaphor, a metaphor that is no longer figurative, but descriptive" (184). Shafak comingles the figures of metaphor and metamorphosis as a "rhetorics of becoming" (Frampton 195), with the narrating tree referring to a literal fig tree-it stories that green matter and provides a

resemblance to one—and *becoming* one through the narrative's actualising of arboreal sentience. This is the novel's contribution to what Latour calls our "geostory" (3), in which nature and human are no longer set apart as object and subject but instead operate on shared ground (16). Shafak's approach provides "a less anthropocentric kind of listening" (Fargione 254) to trees that appreciates their energy.

Equally important to Shafak's arboreal aesthetic, or what I propose are the novel's arborealities, a set of representations that story arboreal agency and sentience, is an intertextual root system. Kostas' replanting of the fig tree resonates with the Palestinian poet Naomi Shihab Nye's "My Father and the Fig Tree," a poem about the planting of a fig-tree fragment, originally from Palestine, in the family's new home in Texas. As Carol Bardenstein argues, the poem reveals how trees are so often "highly loaded and hypersaturated cultural symbols" (148) in literature and history. For Nye, the tree fragment stands in "metonymic relationship to the entirety of Palestine as homeland" (Bardenstein 152) that finds a new incarnation. Kostas' tree is a similar site of memory, reconstructing Cyprus as homeland in London, and remembering Defne too. Her name suggests another arboreal intertext, and how the roots for the figuring of the tree run deep, with Shafak finding a generous support system for her arboreal aesthetic in prior literary representations of trees and human-to-arboreal transformation. The root system runs from the paratextual, with the epigraph from Macbeth, "Stones have been known to move and trees to speak" (Shakespeare, 3.4.120–21), to the diegetic, with Defne's name and story connected to that of Daphne and Apollo in Ovid's Metamorphoses, as the narrator explains:

Women, at least where I come from, and for personal reasons of their own, have, time and again, turned themselves into native flora. Defne, Dafne, Daphne ... Daring to reject Apollo, Daphne became a laurel. Her skin hardened into a protective bark, her arms stretched into slender branches and her hair unfurled into silky foliage [...]. Whereas Daphne was transformed into a tree in order to avoid love, I transmuted into a tree in order to hold on to love (Shafak 342).

The aftermath of Defne's death, the circumstances of which are relayed in fragments as Ada grieves, becomes apparent through the space of the fig tree, as the reader experiences the affecting narrative revelation that the tree's voice is also Defne's spirit. She has been associated with stories throughout the novel, with Ada recalling her mother's propensity to conjure them, including that of migrating butterflies (154), a recurring motif, with Defne herself saying, "Imagine Cyprus as a huge butterfly" (221). Here too, she spins her own story, conjoining the tree's without appropriating it. Unlike Ovid's Daphne, Defne is not fleeing a male aggressor but a past trauma, and her absorption into the tree is self-willed rather than through the soliciting of external intervention as in The Metamorphoses, where Daphne's prayers to her father to save her are answered (Ovid 21). She adapts Daphne's story and the subsequent designation of the laurel as a sacred tree, using the Ovidian intertext to licence her alteration but also departing from it, with the emphasis on her agential transmutation into a sacralized fig tree, and a new, human-arboreal becoming. This language of arboreal metamorphosis suggests that in writing a tree, a literary text does not enact a singular ecological realism but rather arborealities, whereby the variety of arboreal lives, that is as literary representations and as real, green matter, are storied and accorded agency and sentience. The ontology of trees, along with the story of them, is something Defne desires, not in an appropriative manner, but more in terms of what Hannah Copper-Smithson describes as arboromorphism: "To become arboreal is to grow not just upward but outward, to connect, to betroth, to trust, to endure" (234). In the transformative possibilities of arboreal life is an anthropocentrism, implicit challenge to а move towards "arboromorphic qualities of connection and community" (Cooper-Smithson 235) that might be found in earlier texts representing trees, thus prompting a re-evaluation of what we notice-and value-in the literary past.

Trees and their literary representations can, therefore, generate new epistemologies and ontologies for the human, something Shafak's novel appreciates through another Ovidian arboreality, where in Book 8 of The Metamorphoses, Erysichthon fells an ancient oak in defiance of the Goddess Ceres (Ovid 229). Unlike the "arborified women" (Kelley 39) elsewhere in Ovid, who are associated with enforced silence and veneration, in this story the sacred tree herself speaks out, addressing her aggressor—"I am a Nymph most dear to Ceres, alive | In this timber, and I foretell as I die | Punishment for your crime, solace for my death" (Ovid 230) - who then suffers eternal hunger for his destructive impiety. Shafak's Defne is, then, a composite of Ovidian arboreal texts that challenges the woman as "mute-tree tradition" through a continuation of "a legacy of sisterhood trees" (Kelley 49). Changing from one form to another, and from one story into another, Defne is both Daphne and not Daphne, fig tree and not fig tree, suggesting an interspecies communion rather than an Ovidian punishment. After her funeral, she explains, "I wanted to continue to be anchored in love, the only thing humans have yet to destroy" (Shafak 343), indwelling the

fig tree as a type of a spiritual inhabiting: "I drifted above and danced circles around our *Ficus carica*. I seeped into her vascular tissues, absorbed water from her leaves and breathed again through her pores" (343). Trees, the novel suggests, can teach humans about new forms of connection.

As with the Ovidian intertext, the novel's Shakespearean epigraph introduces an ecological history that is suggestive of stages in the human-nature relationship, where that relationship is not hierarchical, as in Genesis, and Judeo-Christian creation stories more generally, but instead recognizes the animacy of all living organisms. Todd Borlik notes that in contrast to biblical tradition, "Ovid's universe is far more dynamic and fluid, in which every creature can mutate into something else" (30). If not mutation, movement is suggested through Macbeth and the witches' prophecy of a marching forest. To Macbeth himself, it is not only conceivable but verifiable, and supported by the messenger's conditional, ocular proof, "As I did stand my watch upon the hill, | I looked toward Birnam, and anon methought | The Wood began to move" (5.5.31-33). The play's lively forest is, significantly, the consequence of felling, with Malcolm's instruction, "Let every soldier hew him down a bough | And bear 't before him" (5.4.4–5), announcing both a martial strategy, as the branches provide camouflage, and a deeper, extractive proto-capitalist logic: Malcolm and his men assume the right to take nature for their needs. An animist world is set in opposition to an Anthropocentric one.

Shakespeare's own arborealities, in which the play registers humanity's entanglements with the natural world, allow us to connect Shafak's concerns with ecocide in Cyprus to what eco-critics have noted is the coincidence of environmental destruction and nature writing, which acts as a vital record of human interventions and a belated consciousness of lost worlds (Hiltner 126). Literary trees whisper lost arboreal worlds back into life, performing "cultural reafforestation" (Schama 95) amidst rampant deforestation. This tension between presence and erasure runs through Margaret Cavendish's poem, "A Dialogue between an Oak and a Man Cutting him Down" (1653), as the speaking tree attempts to delay the blade of its human interlocutor-another version of Erysichthon-at the same time as the poet herself urged her husband to fell large woodlands at their Welbeck and Sherwood estates to pay off debts (Borlik 436). Associated with writing all forms of matter, and anthropomorphism, Cavendish's use of prosopopoeia links her stylistically and intertextually to Shafak and, like the later work, her poem's staging of an encounter between human and arboreal forms is an encounter of animism and anthropocentrism. In a poem that sees Man entice the Oak with afterlives as a ship or stately

home, and that gives the last word to Man, it is unclear whether the Oak's "aged life" (line 103) is being spared, or memorialized. A precursor to Shafak's arboreal thinking and dendrography, however, Cavendish's *prosopopoeia* unmutes nature and introduces "an alternative hierarchy of values" to human ones (Rosenfeld 81). The tradition of the tree's complaint stories arboreal life, with the Oak referring to its boughs (lines 1, 16) and bark (lines 5, 22), describing how "my leaves a gentle noise did make, | And blew cool winds that you fresh air might take?" (lines 7–8), and how it shelters both birds and man alike. Along with Ovid's felled oak and Shakespeare's moving forest, therefore, Cavendish's oak is among the supporting roots of Shafak's sentient fig tree.

II Branches, or How to Know a Tree

Thus far, I have been suggesting that The Island of Missing Trees examines the challenges and possibilities within literature for imagining arboreal life and agency. The novel's roots, or its intertexts, reveal literature's role as a powerful expression of more-than-human agency and signal the formation of a new literary history, one alert to a multispecies world. But Shafak's literary arborealities also branch out to connect with tree science and the novel continually plays with the limits-and possibilities-of human perceptions of and knowledge about trees. The fig tree herself criticizes humanity, "they really don't want to know more about plants" (Shafak 44), noting how "they even compose romantic poems about us, calling us the link between earth and sky, and yet they still do not see us" (46). In this metafictional reflection on the state of knowledge, the novel itself integrates arboreal and plant epistemologies. "Trees might not have eyes but we have vision" (46), the tree explains, echoing biologist David Chamovitz assertion that "Plants don't have eyes, just as we don't have leaves" (19) to convey vegetal ontology. Chamovitz's What A Plant Knows is listed among Shafak's research for her novel, which also includes studies on the fig tree and Merlin Sheldrake's Entangled Life (2020), cited as the inspiration for one of Kostas's books, The Mysterious Kingdom: How Fungi Shaped Our Past, Changes our Future (347). Writing tree science into the diegesis, Shafak offers a distillation of vegetal epistemologies despite the simplicity of the novel's prose. The arboreal knowing the novel performs can be better understood when put into conversation with Robin Wall Kimmerer's Braiding Sweet Grass, Susanne Simard's Finding the Mother Tree, Sheldrake's Entangled Life, and Luce Irigaray and Michael Marder's Through Vegetal Being. These are the novel's branches that reveal the deep epistemologies of its arboreal aesthetics.

Where Shafak begins with a fig tree, the pecan tree is Kimmerer's starting point for reconnecting with nature. Combining her knowledge as a botanist with indigenous knowledge as a member of the Citizen Potawatomi Nation, she tells a story of gathering pecans, the gift from the trees, that proves what her elders knew-the "trees are talking to one another" (20). Her pecan trees communicate "via pheromones, hormonelike compounds that are wafted on the breeze, laden with meaning" (20), and fungi that connect each tree below ground, redistributing carbohydrates from tree to tree to "weave a web of reciprocity" (20). To enhance our knowledge about trees, however, we need what Kimmerer calls "the grammar of animacy" (55) that can get us closer to feeling nature than a scientific "language of objects" (49). She notes how in contrast to the English language, in which "you are either a human or a thing" (Kimmerer 56), indigenous people's language expresses the animacy of the natural world in ways that enrich Ada's personification of the fig tree as "her." Sifting through an Ojibwe dictionary, Kimmerer is reminded of the subject status the language grants to nonhuman life forms:

Our toddlers speak of plants and animals as if they were people, extending to them self intention and compassion – until we learn them not to. [...] When we tell them that the tree is not a who, but an it, we make that maple an object; we put a barrier between us, absolving ourselves of moral responsibility and opening the door to exploitation. [...] If maple is an it, we can take up the chain saw. If a maple is a her, we think twice (57).

Perceiving trees as subjects might stop their felling, removing the barrier between us and them, and make us appreciate as gifts. The "Thanksgiving Address" of Kimmerer's indigenous neighbors the Haudenosaunee, which she shares with their permission as "a gift of the Haudenosaunee to the world" (116), honors the many subjects in nature for their being and their giving: "Standing around us we see all the trees. The Earth has many families of trees who each have their own instructions and uses. Some provide shelter and shade, others fruit and beauty and many useful gifts. [...] With one mind we greet and thank tree life. Now our minds are one" (Kimmerer 110). Humans must practice this spirit of gratitude for nature, rather than extract more from it, because "the generosity of the earth is not an invitation to take all" (Kimmerer 382), a salutary note that resonates with the fig tree's claim that "Most arboreal suffering is caused by humankind" (Shafak 45). 12

Shafak's fig tree deploys this language of animacy and, like Kimmerer, encourages us to think beyond human needs and eyes, a provocation that manifests itself in Kostas' life-long inquisitiveness about nature, as when he hears the buzzing of cicadas: "there were some cicada species that could sing at extremely high frequencies, and they were doing so right now. Nature was always talking, telling things, though the human ear was too limited to hear them" (Shafak 207). Kostas' sensory alertness gestures to what Shannon Lambert, writing on The Overstory, calls "intraspecies communication and connection" (2) that "challenge and deterritorialize ideas about human individualism and exclusivity" (15). In contrast to Kostas' plant knowledge, Ada registers her discomfort with the trees's uncanny liveliness: "your fig gives me the creeps," she remarks to her father, "Sometimes I feel like it-she-is listening to us" (Shafak 42). But, as her selfcorrection conveys, she acknowledges the tree as a being and enacts the kind of transformation in human perceptions of tree sentience that Kimmerer proposes.

Another branch of Shafak's novel is the work of forest ecologist Suzanne Simard, a name synonymous with the discovery of new insights into tree agency. Simard's research details the so-called "wood wide web" through which the forest regenerates itself, the older Mother trees sustaining saplings through a network of roots and fungi, a mycorrhizal system stretching beneath the forest floor. Her work on the Mother tree informs Avatar and she herself is the probable source for The Overstory's Patricia Westerford, who has authored a book called The Secret Forest and discovers how trees are social beings (Powers 132; 141). Simard's memoir Finding the Mother Tree, published in the same year as The Island of Missing Trees, connects her own personal story to the arboreal matter she has spent a lifetime studying. She recalls growing up in British Columbia, her research discoveries as a young forester (and the scientific community's often gendered resistance to them), and her own role as a mother. She finds solace in the forest's underlying support system, where Mother Trees nurture younger ones by transmitting carbon to them, and different tree species such as Douglas-Fir and Birch mutually help each other, when dealing with her breast cancer diagnosis. Walking on her favorite trail, she passes some pines: "I thanked the trees along the boundary for helping the saplings along. 'I need your help. I need to be healed,' I said at the top of the trail-where they stood solid, still. I glided along, their branches over me, some touching my arm" (Simard 264). It is an affecting moment of interspecies co-existence. Expressing gratitude, Simard echoes Kimmerer's emphasis on earth's generosity, noting how she is increasingly drawn to indigenous knowledges, including the story told by Subijay about

"The Tree People" (293). Simard acknowledges that while she does not "presume to grasp" indigenous knowledges "fully" (294) since they come "from a different way of knowing the earth" (294), a sense of respect for cultural specificity I share, she appreciates how indigenous beliefs make the case for knowing nature much more responsibly. In turn, her work stresses the agency of vegetal organisms:

They perceive, relate, and communicate; they exercise various behaviours. They cooperate, make decisions, learn, and remember – qualities we normally ascribe to sentience, wisdom, intelligence. By knowing how trees, animals, and even fungi [...] have this agency, we can acknowledge that they deserve as much regard as we accord ourselves (Simard 294).

Simard's attribution of agency to trees informs Shafak's arborealities, as the fig tree's explanation of the reciprocity inherent to arboreal ecosystems demonstrates:

A tree always knows that it is linked to endless life forms – from honey fungus, the largest living thing, down to the smallest bacteria and archaea – and that its existence is not an isolated happenstance but intrinsic to a wider community. Even trees of different species show solidarity with one another regardless of their difference, which is more than you can say for so many humans (Shafak 100).

Knowledgeable, sociable, and connected to lively organisms, the fig tree draws the reader into a subterranean world of dirt and roots, resisting the green pastoral of literary tradition. Kimmerer and Simard's work thus gives epistemological weight to Shafak's arboreal imaginary. But we can also see how the novel's branches of arboreal knowledge overlap, as the intra-diegetic account of tree existence converges with the extra-diegetic understanding of mycorrhizal networks. The novel absorbs and compresses tree discourse in the interests of nonanthropocentric ways of valuing nature.

In advancing this knowledge about trees, the novel's narrative world draws from Merlin Sheldrake's *Entangled Life*, a book influenced by Simard. His explanation of how fungi form "networks of many cells known as hyphae [...], fine tubular structures that branch, fuse, and tangle into the anarchic filigree of mycelium" (Sheldrake 12) reveals the understory of Shafak's fig tree, and the brown matter that the text gestures towards. That subterranean system is "better thought of not as a thing but as a process" (56), a sprawling, agential energy. In ascribing agency to these nonhuman organisms, Sheldrake considers the risk

of anthropomorphizing, but then wonders if something more provocative is occurring, a slippage into more-than-human epistemologies and ontologies: "If you say that a plant 'learns,' 'decides,' 'communicates,' or 'remembers,' are you humanizing the plant or vegetalizing a set of human concepts?" (217). Similarly, is the novelist humanizing the tree or arborealizing storytelling to expand human ways of knowing and perceiving the natural world? Sheldrake's contention that "It is hard to make sense of something without a little part of that something rubbing off on you" (217) expresses the sense of ontological flexibility that, I think, emerges through Shafak's narrating tree. As the tree explains the magic of photosynthesis, its growth always towards the light (Shafak 46), and details how soil teems with life (80), it becomes evident that "Fungi make worlds" (Sheldrake 228) and that matter bleeds into the narrative voice—and even authorial voice too.

More-than-human stories are, then, all around us, if only we take care to know more about them, and to tell them too. The literary tree raises epistemological and ontological questions that suggest Shafak's novel should itself be understood as a branch of critical plant studies because, to borrow from Luce Irigaray and Michael Marder, it thinks with and "through vegetal being" to challenge traditional ways of being human as handed down by Western epistemologies. As Irigaray argues, challenging human exceptionalism involves rethinking "our language in order that it expresses life, ours and that of other living beings" (90). Marder addresses language too, reorienting the Aristotelian definition of the human as an "animal that possesses speech" (204) towards a process of becoming a human: speech or logos does not set the limits of a human being but is always working in relation to the life, or zoe, in us (204–05). This dynamic, Marder suggests, is one we can apprehend through an appreciation of the "silent logos of plants" (206), "resisting the urge to judge plants and animals by human standards and respecting [their] silent flourishing" and striving "to relate to the world nonpossessively" (206). The Island of Missing Trees disrupts the silent logos of plant life to express a rich arboreal knowledgebase that extends to the fig tree a quality associated with the human, disrupting traditional hierarchies of human/vegetal being in favor of a relationality. Shafak's novel branches outward to ask that we not only know trees better but learn from them.

III Rings, or How to be Responsible to a Tree

Proposing arboreal collaboration and reciprocity as exemplum for humanity, *The Island of Missing Trees* proposes an ethical value-system in which humans are urged to recognize the rights of nature. The tree

records the threats to its own life, explaining that "a tree's rings do not only reveal its age, but also the traumas it has endured, including wildfires, and thus, carved deep in each circle, is a near-death experience, an unhealed scar" (45). In this moment, the novel implies a broad ethical question: "Do trees have intrinsic rights?" (Jones and Cloke 220) and, if so, who grants them, and how do we defend them? The fig tree is shown to have self-knowledge, and makes meaning out of green, scarred matter; this, in turn, makes matter meaningful, both in and of itself as well as for humans. Emphasizing the intra-actions of matter and meaning, Karen Barad reminds us that "knowing is a matter of part of the world making itself intelligible to another part" (185). For her, the rings of a tree reveal how matter has agency, engraining a tree's history "within and as part of the world" (Barad 180). Shafak's novel similarly shows the tree within and part of the world, creating those arborealities that I have been tracing that bring us from representing to knowing to valuing arboreal life, or an "ethico-onto-epistemology" (185) that recognizes the "differential intelligibility" (335) of morethan-human life. This is most evident where the tree outlines arboreal time through its rings:

Arboreal-time is cyclical, recurrent, perennial; the past and the future breathe within this moment, and the present does not necessarily flow in one direction; instead it draws circles within circles, like the rings you find when you cut us down.

Arboreal-time is equivalent to story-time – and, like a story, a tree does not grow in perfectly straight lines, flawless curves or exact right angles, but bends and twists and bifurcates into fantastical shapes [...].

They are incompatible, human-time and tree-time (Shafak 47).

The tree's experience of time is non-linear. Telling its story, the tree tells arboreal time, opening up a more-than-human time space. An arboreal alterity is conveyed through the rings, which will only be accessible to human eyes when the tree is felled or dies. The tree also has deep time: at 96 years old in The Happy Fig restaurant, and 16 years in its new life from a cutting brought to London, it spans generations. Moreover, considering a fig tree's typical life span, the novel's tree exceeds the lives of the human characters. Growing in the center of the restaurant, the fig tree constitutes even deeper time again, linked to extra-textual, sacred trees in Cyprus older than itself, and understood as "places of encounter [between] the metaphysical and worldly realms" (Dietzel 126) where people hanged clothes on the branches in the hope of saintly or

even divine intercession (Kyriacou 2021). The novel's tree is, then, not only an extended metaphor for modern Cypriot history but it also commands respect and rights based on its "situations, the actants involved and the places that arise out of them" (Jones and Cloke 219). But the novel goes further, insisting that through the "incompatibility" of human and arboreal temporalities that the fig tree is important—and has rights – not because of its relevance to humans, but because it itself is vibrantly animate, a living organism that operates beyond human comprehension. The novel's imaginative and epistemological work regarding arboreal life is, therefore, also ethical in the way it prompts the reader to appreciate how things other than humans might have rights. It dovetails with the posthumanism of Donna Haraway in her critique of human exceptionalism. In Staying with the Trouble, Haraway advocates for nature in all its infinite complexity and messiness, and invokes Le Guin's speculative fiction and theories as "capacious bags" for collecting, carrying and telling the stuff of the living" (39). The living here is human and the more-than-human, from intelligent pigeons and coral self-worlding to acacia seeds: "They-we-are here to live and die with, not just think and write with" (Haraway 125). The prepositional with, connecting human and plant species, must become "the main story" (Haraway 55), one told through the "Chthulucene," which Haraway uses in preference to Anthropocene. From the Greek, khthon ("roots," or "earth") and kainos ('time'), Chthulucene decentres Man, and counters human oriented history with natural histories of "ongoingness" (Haraway 89), conveyed in Haraway's slogan, "Make Kin Not Babies" (102), an ethic that builds on Le Guin's own imagining of a humanity not defined by accumulation and need:

One way to stop seeing trees, or rivers, or hills, only as 'natural resources' is to class them as fellow beings—kinfolk. I guess I'm trying to subjectify the universe, because look where objectifying it has gotten us. To subjectify is not necessarily to co-opt, colonize, exploit. Rather, it may involve a great reach outward of the mind and imagination (16).

Shafak's novel performs this "reach outward," designating the fig "her" and naming her too, "subjectifying" through a language of animacy that values animist ontology without collapsing its alterity. The tree describes herself as subject—"What I tell you [...] I tell through the prism of my own understanding" (Shafak 189)—and as witness to human suffering and nature's too. The novel nonetheless recognizes the challenge of valuing trees as fellow beings, with Defne's work for the commission on the disappeared leading her to prioritize human suffering and justice, whereas for Kostas, "human existence, though no doubt precious beyond words, had no special priority in the ecological chain" (325). These competing ethical positions are incorporated as the arboreal narrator claims that "Tangled beneath our roots, hidden inside our trunks, are the sinews of history, the ruins of wars nobody came to win, the bones of the missing" (211). Whereas earlier in the narrative, tree history and human history had distinctive temporalities, ultimately, they are shown to be intertwined. Shafak extends the literary tradition of the tree's complaint, her fig tree not only "bearing witness to the ways of the humans and their endless wars" (32), but also articulating its own uprooting and replanting. The tree is a site of memory for Kostas that allows him to memorialize Defne and reassemble the fragments of his old life in Cyprus. Humans are shown to suffer but do so surrounded by more-than-human matter that has vital lessons to impart. The novel closes with an emphasis on arboromorphic qualities of connection and collaboration, with Kostas regarding plants as nurturing the missing persons of a divided Cyprus:

even those who would never be found were not exactly forsaken. Nature tended to them. Wild thyme and sweet marjoram grew from the soil, the ground splitting open like a crack in a window to make way for possibilities. Myriad birds, bats, and ants carried those seeds far away, where they could grow into fresh vegetation. In the most surprising ways, the victims continued to live, because that is what nature did to death, it transformed abrupt endings into a thousand new beginnings (325).

This reparative natural history, in which humans, plants, and soil are interconnected matter, highlights the novel's significant contribution to the imaginative work needed in the Anthropocene to find new ways of being responsible for nature. In the context of climate crisis, we need a narrative focalized through a tree not out of some escapist retreat but precisely because we need an approach to nature grounded in an "ethico-onto-epistemology" (Barad 185) that values its lively matter and learns from it too. The novel closes with a photograph of a "prickly pear growing through wire fence on the border line in Nicosia, Cyprus," on the UN Green line that marks the division of the island. It is a powerful visual coda to the narrative emphasis on a relational ontology between human and vegetal beings. The two objects symbolize the novel's status as a work about the interrelation of natural and human histories, with the fence suggesting the latter's brute force, and the light-seeking fruit tree that makes its way through the wire lattice suggesting how matter always has a story to tell. Defne's closing

sensation, as she embraces her arboreal refuge, of "a pale ray of sunshine combing the earth, excruciatingly slowly" (Shafak 343) captures the tree's natural reach upward to the light, and an optimism about history—and human and more-than-human interrelations.

Conclusion

The Island of Missing Trees does the imaginative work of representing nature, using personification as a creative entry point into animist ontology. It does the epistemological work of understanding nature through its incorporation of plant science and knowledge. And it does the ethical work of valuing nature throughout, reorienting human story towards the stuff of other life forms. By insisting that these forms matter, the novel shares eco-criticism's broad aim of moving "to a better ontological humility [...] that has potential for more humane kinds of (non)human relations" (Duckert 116). In Shafak's carrier bag of fiction, are the seeds of animacy from which we can ask, "Wouldn't things be different if nothing was an 'it'?" (qtd. in Kimmerer 57). The literary tree generates a capacity to imagine, feel, and know trees as our kinfolk, and reveals the vital work the novel form does in re-enchanting humanity with a nature from which it has been falsely separated. Making a contribution to critical plant studies, Shafak's Island of Missing Trees should be understood as expanding upon traditional literary-arboreal representation to provide a set of arborealities that are imaginative, intertextual, and ethical, and that offer new directions for other writers interested in the aesthetic and ontological possibilities of trees.

NOTES

1. I use the EU's terms for Cyprus and the historical events referenced in the novel. See https://european-union.europa.eu/principles-countries-history/country-profiles/cyprus_en#:~:text=Despite%20joining%20the%20EU%20as, does%20not%20exercise%20effective%20control

2. This move affords arguably affords Shafak license in negotiating identities on the divided island and is continuous with her earlier works that explore these. However, that aspect of Shafak's reception is beyond the focus of this article.

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