## CATHERINE BUSH

## ASPIRATION, OR, HOW TO WRITE A BIO-PHILIC NOVEL

STEPS OUTSIDE. A breeze moves out of the north, a strange direction given the furious heat. The flowering privet sizzles with bees. The red pine saplings form only wispy silhouettes on the property line because something's been eating the needles. Sawfly? Along with so much else that I've taken for granted, pine needles, too, have suddenly vanished from this lot in eastern Ontario, a loss that lurches through me. And it's a bigger loss for the pine trees, whom I love and who will survive if they are strong enough, if the weeks ahead don't bring drought. Elsewhere a virus binds to people's ACE2 receptor cells, carried on droplets and aerosols that pass between people, after originally crossing the porous species border between animals and humans. Human agency lies all over this landscape: glacial rocks piled by early settlers at roadside; the genetically altered corn greening a neighbour's small field; the wild parsnip stalks sprouting at the edge of another, invasives originally brought to this land by invading Europeans. Hollow, their stalks are filled with sap that, if it touches your skin while exposed to sunlight, can burn you, scar you, even blind you. Clad in long pants, knee-high boots, and gloves, I'll cut them down with care. This world is thick with interspecies experience and also thin, our presences excruciatingly intermingled. How might one tell these entangled stories? How might one make narrative out of them, which is a human way of making meaning of the world? How might one do so from the vantage of this moment?

In *The Thin Place*, a 2006 novel by American writer Kathryn Davis, everything speaks: humans, dogs, beaver, moose, pike. In ancient Irish pagan cultures a thin place was an energetic zone where the line between one world and another grew permeable: between the seen and unseen, the explicable and inexplicable, material and immaterial, human and other forms of life. Celts and later Celtic Christians co-opted the idea. In Davis' novel,

narrated with fluid, shifting omniscience, even lichen briefly annunciates: "fold, fold, fold, fold, starlight, starlight." Somehow this moment haunts me more than any other in the novel. It's one I've carried with me through the years. Something to aspire to, something like this. Why should speaking lichen feel any less realistic than a novel that has only people in it?

Biophilia. Dear reader, I googled it. A term popularized by American naturalist E. O. Wilson (1984), coined by German-American psychoanalyst Erich Fromm (1974) to describe the human desire for connection with the natural world and other forms of life. In Greek, the word *philia* describes a bond between friends—that is, love not for an object, or a being perceived as an object, but rather between beings, in which there is the possibility of reciprocity and mutual relationship.

The other day I looked at an online map, Native Land, which, when I keyed in my address, told me which treaty covers the land where I'm living (Treaty 57) and that this part of eastern Ontario is the territory of the Anishinaabe and the Huron-Wendat. The map that conferred this knowledge offered me a version of the landscape without any roads on it, only—only!—creeks, rivers, ponds, lakes, topographical lines, woodlots. The human markers were erased. At first, looking at it, I was lost. I didn't know how to locate the place where I'm writing this without following the roads that bring me here. Disoriented, I traced a passage north from the large blue expanse of Lake Ontario, along the curve of the river I know as the Trent. Picking up the squiggles of Rawdon Creek, I hopscotched to the ovoid pond on my neighbour's property, to the topographical lines of the drumlin beneath the small woodlot, letting the land lead me. I felt like I was rediscovering where I am.

The novel, whose very name celebrates newness, is a capacious genre, capable of shape-shifting and reinvention. Since the form stabilized in the West with the industrial revolution and the rise of the middle-class reader, it has focused, nearly exclusively, on human experience. The Anglo-European novel, exported colonially and imperially to North America and around the globe, is a humanist form, preoccupied with the problems of the self and its interpersonal relationships, individual psyche, agency, trauma. Novels I love adhere to this humanism: George Eliot's *Middlemarch* (1871), Virginia Woolf's *Mrs. Dalloway* (1925), Kazuo Ishiguro's *Never Let Me Go* (2005). With its focus on the striving, conflicted, desirous, thwarted lives of human individuals, the novel is marked by capitalism and the dualistic rationalism

of Western "Enlightenment." Under Westernized capitalism, we live in a material world: there's us and everything else. Culturally we recognize these elements as aspects of a novel's realism without acknowledging its self-confirmation biases. We see only what we expect to see. We normalize our expectations. Some human stories have occupied a lot more space than others. Historically marginalized by race, gender, or sexual orientation, many still struggle to find life and agency on the page. Yet here we are, in a moment when the word "normal" has a new, charged meaning, and our relationship to what we considered "normal" has been upended. A focus on the relentlessly human to the exclusion of all other networks of kinship and planetary entanglement, such as with animals, plants, trees, fungi, and bacteria, may be the most self-delusional fiction of all.

When I was young, it seemed self-evident to me that there was a world of living presences beyond the human. I was not brought up religiously but raised by amateur naturalists, who took me and my two sisters hiking in the Ontario woods. My parents taught us to name what we encountered: birch, beech, maple, oak, trillium, jack in the pulpit, cardinal, white-throated sparrow. All this was new to them, too, immigrants, both with their war-shaped childhoods, their naming a form of recognition and renewal. As a child I kept bird lists not as taxonomy but to bring the breathing world close, acutely aware of my family as recent arrivals whose personal and historical relationships led back across the Atlantic Ocean to England, where my grandparents lived and gardened. Nevertheless, I assumed everyone knew the names of trees. A surfeit of empathy, intense shyness, a dissociative relationship to my own body, and a longing for other creatures as companions, including imaginary Canada geese and a real gerbil so tame he spent long hours living in a tobacco tin on my school desk: these were some of the markers of my childhood. In my 20s, on the King Street car in Toronto, approaching Atlantic Avenue and a row of trees since cut down and replaced by condo towers, I admitted to my brilliant boyfriend, a composer, that I thought of trees as having a form of being. He told me he didn't. Not cruelly, but the gestalt shift of my own dismay left part of me stuck in that moment on the streetcar forever, staring out at those now-vanished trees. Ailanthus, probably, weed trees, otherwise known as trees of heaven.

Of course, land and sea and the world beyond the human have long been present in novels, including Anglo-European ones. Think of the moors and storms of Emily Brontë's *Wuthering Heights* (1847). Herman Melville's ocean and mammoth whale in *Moby Dick* (1851), in which, amid a fraught web of interracial relationships and interspecies' killing, obsessive human drive becomes mania. In *Tess of the d'Urbervilles* (1891), Thomas Hardy is keen to the ways that an intimate relationship with a living landscape is lost to the predations of industrialization. Yet while the more-than-human world presses on characters with extraordinary weight and metaphoric intensity, human dramas remain at the centre.

Across the world there are other kinds of stories, which are indigenous to specific cultures and landscapes. In such tales animals and birds speak, people shape-shift between the animal and the human, and plants grow to enormous heights or contain magic. Thin places can be stumbled upon. These stories didn't die but over time were infantilized and dis-placed, ripped away from the land that gave rise to them. The infantilizing became another way to rob such stories of the power that connected them to the earth and lives lived in embodied relationship to it.

In Ted Chiang's very short story "The Great Silence" (2016), the parrot narrator, its species and language on the brink of extinction, contemplates the Arecibo radio telescope, built by humans in Puerto Rico as a way to search for signs of intelligent life in the universe. "Why aren't they interested in listening to our voices? We're a non-human species capable of communicating with them. Aren't we exactly what humans are looking for?" The story's koan-like lucidity moves me to tears each time I read it. Despite the age of the cosmos and probability that intelligent life might have arisen elsewhere in its vastness, the silence of the universe—at least to human ears—is known as the Fermi paradox. The fact that humans seem incapable of recognizing the alien intelligences around us is its own self-destructive paradox, one that remains curiously nameless.

In English, one element of the silencing of other-than-human lives is their reduction to the personal pronoun it, which we use for the inanimate world. We might use a gendered pronoun for a pet, but how many of us would call a tree she? In Richard Powers' much-lauded novel The Over-story (2018), a man about to be stripped of his current life as a university professor and sent to prison for his youthful involvement in an eco-activist fire-bombing stares from the back seat of a squad car at a single tree in Lower Manhattan. The lives in Powers' novel are powerfully shaped by their relationships to trees, the novel full of astonishing tree lore. This tree, we're told, is a specimen of the oldest tree species on earth, a gingko. We are

offered much information about the genus. But I keep waiting, with urgent longing, for the tree itself to become more than object and for the man, in an act of radical yet painful empathy given his imminent imprisonment, to encounter the tree uniquely as a sensed, animate presence that might sense him in turn. This doesn't happen.

In English the plural and collective pronoun *they* refers to both the living and the non-living, but, as Robin Wall Kimmerer, botanist and member of the Potawatomi nation, argues in her article "Speaking of Nature" (2017), English remains stingy with the "grammar of personhood." She advocates for beginning to "mend that rift with pronouns" and offers up the pronoun *ki* for other living beings, along with the plural *kin*, a word that already voices our often unrecognized kinship. I discuss these pronoun possibilities with my graduate creative writing class at the University of Guelph. The conversation enfolds itself into one about human pronouns and the use of the singular, inclusive *they* with which some of my gender non-conforming students self-identify. What does it feel like in our mouths and hearts and minds to call a tree *she*, *ki*, or *they* and then to write this on the page? Could I address an entire novel to the alien intelligence of a tree or a parrot, as other people can be the silent listener/witness whose presence shapes a tale's telling?

In Barbara Gowdy's novel The White Bone (1998), narrated from the point of view of elephants and populated almost entirely by them, characters track each other's dung, vent emotion through scent, pick up its olfactory traces in others. "Every odour they have ever sucked into their trunks, every flicker of sunlight they have ever doused with their tremendous shadows is preserved inside them as a perfect and instantly retrievable moment," Gowdy writes. Deeply researched, Gowdy's achievement is nevertheless the novel's extraordinary, speculative act of embodiment. Her art enacts the necessity of imagining our way with the deepest attentiveness into not only other minds but also other bodies. It is these elephant bodies that remain with me, even now, as I walk with my dog up a hill, attempting to sense the olfactory world as she perceives it, trace of chipmunk, odour of coyote scat. Fiction is an act of embodiment: it recreates a living world as experienced by living, sensing beings. Without the body there is no art, just as there is no life in a biosphere that includes us. We forget our body and the life of others' bodies, human and more-than-human, at our peril.

Biophilia is not necessarily sentimental about the natural world. "Ten-

derness isn't easy," laments a character in Jean Giono's first novel Hill (1929), in which the novel's restless consciousness keeps shifting through a landscape in constant, metamorphosing motion, one in which everything alive-plant, animal, human, sky-is continually and almost overwhelmingly compared and connected to everything else. "All man's errors arise because he imagines that he walks upon an inert thing when really his footsteps press themselves upon a flesh full of life," Giono writes (as translated by Paul Eprile). Yet in Hill, the sentience of the natural world terrifies the French peasants who must contend with it. Projecting their fear outward, they make the land monstrous. Those most aware of its sentience become scapegoats. Death lurks everywhere. There may be a moral or prognostication here not just for French peasants but for the rest of us as well. As a work of biophilic fiction, however, the novel invites us to enter this living world as fully and radically as possible. Its metaphoric language of interpenetration—willow trees growl, a fire has muscles, a sick man is like a tree trunk—has a literal force and equivalency, further compelling us into connectedness. This is animism rather than anthropomorphism. We return to the world beyond the page, opened to a profound epistemological and ontological rearrangement.

Neurotypical people, given over to a focus on human relations, may have a harder time making the leap into empathetic interconnectedness with other forms of planetary life—at least the neurotypical of the industrialized, Westernized world. Those on the autism spectrum, long thought to suffer from a lack of empathy, may in fact be flooded with off-the-charts levels of sensitivity, particularly to the living world beyond the human. The difficulty comes when trying to process and communicate the overwhelm. This revelation, when I read of it, makes me both giddy and angry: here's something else unrecognized, a gift that, despite its difficulties, should be cast as neuroaspirational rather than neurodivergent.

I think of the orogenes in N. K. Jemisin's *Broken Earth* trilogy (2015-2017), the word taken from the geological term "orogeny," which refers to the structural shifts and deformations of the Earth's crust. With their uncanny ability to tune into and release the Earth's seismic forces, the orogenes are derided and feared; cast out of their communities; or corralled, mistreated, and killed within the caste-like structures in which they are compelled to live. Through their exquisitely heightened perceptions, we are asked to amplify our own awareness of the Earth's crust as fluid and roiling

on an immediate rather than geological scale. We live atop magma on shifting tectonic plates. In Jemisin's allegorical future world, the Earth's surface, long mistreated by humans, is active and heaving. Extreme sensitivity to the Earth is treated as pernicious, the line between rock and the living quiveringly thin.

Living with an acute, constant awareness of the rest of the living world makes intense and complex demands. Human scale shrinks even as our zones of attentiveness and responsibility expand to encompass the unseen and unknown. Narrative can be a way to scintillate ourselves into new neural pathways.

In my most recent novel, *Blaze Island* (2020), which takes place on a small island in the North Atlantic, I want to re-size the human story, temporally and ecologically, while gesturing to the unpredictable climate forces that humans have unleashed on the planet. The narrators are human, a young woman and a young man, one hyper-aware of air and water, wind and sea ice; the other empathetic to the sentience of animal, bird, and fish. On a geological scale, humans are a minute element. I want an awareness of deep, geological time to exist alongside the frightening pressure of present-time, ever-mounting biospheric damage: melting ice packs, air whose carbon dioxide uptake has doubled in the last 50 years, warming waters whipping up wilder winds. The characters dissolve ten-thousand-year-old glacial ice from melting icebergs on their tongues. I want weather to be not a menacing backdrop or metaphor but a story that interpenetrates the human story in a way that becomes a new and necessary realism, tumbling readers towards a renewed nature both inside and outside of themselves.

We tend to take the invisible air for granted, as naturalist and philosopher David Abram has pointed out. We do not ongoingly think of it as a substance in which we live—a substance that is in constant, complex movement. Air touches us at every second, flows inside and across the outside of our bodies, links us thrillingly to other forms of life. To *aspire*, literally, is to breathe. In recent months, it has become less easy to see air as inert. Digitized and ever-more screen-focused as our lives may now be, events return us again and again to the fundamental life of the body and our breath. Masked, we shun others, fearing possible contagion from the air they exhale. The terrible force of George Floyd's last words as a white police officer pressed his knee to Floyd's neck, *I can't breathe*, echoes around the world as an indictment of systemic anti-Black racism.

Even if I narrate a work of fiction from the perspective of a human, what it means to be human shifts if seen within a network of interrelationship with other forms of life. This becomes a new realism, which can in turn be the leaping-off point for new forms of narrative speculation that may simultaneously gesture back to older forms of storytelling while casting off human-centric literary realism like a shed skin.

Nothing is inert. We can look at a cell phone and feel its presence not as an object to be bought and manipulated but as a small vessel emitting electromagnetic waves, which links us to the child in the Democratic Republic of Congo who might have mined by hand the mineral cobalt that powers every lithium-ion battery on Earth. Even a material object pulses with a present and history of hidden actions. Everything has been created out of the elements of the planet. Humans share 61 percent of their DNA with a fruit fly. We are estranged hosts to other life forms, as bacteria make homes in our gut. The viruses we pass between us must infiltrate living cells in order to replicate. Trees release pheromones into the air as we do, which are sensed by other trees. Objects have futures, too—possible half-lives of decomposition in scales beyond human time even as we face swift, incomprehensible biospheric loss.

The surface of the Earth hides webs of interconnection, such as the pipelines and fibre-optic wires that humans make and bury or the fungi that spread for kilometres underground. (Sensing mycorrhizal networks link fungi to plants and join trees to each other.) Biophilic novels enter and heighten our experience of such interconnection. Instead of considering a novel's singularity, we need to conceive of our narratives as part of a sentient and continually replenishing web. More than ever stories must aspire to relationship with other new and necessary stories.