Trees communicate with one another. I'm trying to listen.

My favorite is a 100-year-old male cottonwood. I call him Grandfather.

by Belden C. Lane in the July 31, 2019 issue



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"Trees have long been trying to reach us," says Richard Powers in his stunning novel The Overstory, winner of this year's Pulitzer Prize for Fiction. The lives of his characters are intersected by trees, who come to them in dreams, accidents, neardeath experiences, and ordinary encounters.

A Vietnam veteran's life is saved as he parachutes into the limbs of a banyan tree in Cambodia, and he subsequently commits to a life of caring for trees. A college student has a mystical encounter that leads her to chain herself in front of a bulldozer that threatens old-growth Douglas firs. A brilliant forest biologist stirs controversy by insisting that trees are social creatures—sharing nutrients and information across vast underground fungal networks, signaling each other through airborne messages warning of insect attack or disease, showing "tree talk" to be a

foundational process in forest ecosystems.

Each of the novel's characters learns that "the most wondrous products of four billion years of life need help" right now. Not the trees, but *us*. We are the ones who have lost our sense of connection to everything else. "Trees used to talk to people all the time," Powers writes. "Sane people used to hear them."

History is rich in stories of people conversing with trees. The whispering oak of Zeus at the Dodona oracle in ancient Greece dispensed prophecy in its rustling leaves. The Prophet Muhammad regularly preached beside a date palm tree that wept for joy as he spoke. Hildegard of Bingen perceived an "unknown language" coming from trees and shrubs, composed a secret alphabet for this hidden language, and provided new names for more than 800 plants. The Baal Shem Tov, eighteenth-century founder of the modern Hasidic movement, is said to have spoken 26 languages: Hebrew, Yiddish, and Polish but also the tongues of birds, trees, animals, plants, and clouds. The Buddha went through 150 incarnations before being born as the historical figure we know; in 43 of those he was a tree. A universal "green language" (langue verte) has long been associated with the speech of trees and the birds who nest in them.

We don't take stories like these seriously. Since the rise of anthropology as a social science, we've learned to be suspicious of subjective human interactions with the natural world. We experience the world—notes ecotheologian Thomas Berry—as a collection of objects, no longer as a communion of subjects.

But science suggests that trees are intrinsically social beings. Accounts of the intelligence and communicative power of trees abound in scholarly journals and best-selling books like Peter Wohlleben's *The Hidden Life of Trees*. Forest biologist Suzanne Simard, head of the Mother Tree Project at the University of British Columbia, explores the vast information superhighway that constitutes the underground of a forest. Mycorrhizal fungi connect the roots of neighboring trees, operating like fiber-optic cables to transmit information, provide immune alerts, exchange nutrients, and enhance the trees' capacity to absorb water, nitrogen, and phosphorus. Through this "wood-wide web," mother "hub" trees send carbon and other resources to seedlings, even sharing them with other species.

Scientists are increasingly perceiving trees as sentient, purposeful beings living in dynamic relationship with each other. Their symbiotic networks resemble human

neural and social networks. A new field of plant neurobiology analyzes the cellular tissue at the tips of roots and shoots, observing how information is processed and conducted through electrical signals. Trees communicate by means of scent and taste, as well. When threatened by insects or animals, acacia trees emit an ethylene gas to warn neighboring trees of approaching danger. They pump toxic substances into their leaves to ward off attackers and use pheromones to draw beneficial predators. Japanese scientists analyzing the physiological effects of trees on human beings note how time spent in a forest reduces the stress hormone cortisol, heart rate, and blood pressure.

Trees reach out to us in multiple ways—inviting us as humans to tune in to their stillness, to listen more carefully. "Look at them trees," said Shug Avery in Alice Walker's *The Color Purple*. "Notice how the trees do everything people do to get attention . . . except walk?" "Everything want to be loved."

The tree that has touched me most deeply is a 100-year-old male eastern cottonwood that I call Grandfather. He's a member of the poplar family. His leaves flutter like aspen trees in the slightest breeze.

I spend more time with Grandfather than I do with most of my friends. He lives in the park across the street from my house. Every evening I go over to him, leaning into his hollow, entering into a practice of contemplative prayer. I let go of thoughts and words, releasing what's been rummaging around inside me through the day. At times something unexpected arises. Is it from inside me or from inside him? I never know for sure. It may be a feeling of being unaccountably loved in that moment, feeling utterly at home in the hollow of a tree.

I've learned from this tree that communication in its deepest form is rooted in a shared vulnerability. This is happening on a cosmic level today, inviting possibilities for our discovering a richer encounter with the rest of the natural world. The earth is threatened as never before by the forces of climate change, habitat destruction, and a loss of biodiversity leading to a massive extinction of species. Human beings, at the same time, are beginning to acknowledge the extent to which our throwaway culture, consumerist mentality, and rampant militarism are contributing to this threat—how it's destroying us as well.

Trees invite us to this awareness—the old and wounded ones especially. Think of the 90-year-old American elm that survived the Oklahoma City bombing in 1995. Or the

Callery pear tree that blooms each spring near Ground Zero, stripped to its roots by the 9/11 attacks. An old weeping willow stands as one of the *hibaku jumoku* (Abombed trees) in Hiroshima, close to the place where the bomb was dropped on August 6, 1945. These trees proclaim hope amid a history of despair.

For my part, "Cottonwood" is a language I'm still struggling to acquire. I'm a slow learner. There's more to it than figuring out a new grammar and syntax. It's learning how to lean into bark, how to listen to leaves. I notice the subtle play of moonlight on branches, releasing my need to rush into anything else. I discover what the communion of saints entails, what ethical demands are made on me because of our growing relationship.

The truth is that none of us will survive today without acknowledging the wider community of which we're a part. "We won't fight to save what we haven't learned to love," says Stephen Jay Gould. Loving a cottonwood tree impels me to speak for all things green.

A version of this article appears in the print edition under the title "A cottonwood's love."