

Armitage traces the legacy and stories of the Comanches and Hispano *pastores* who preceded Anglo occupation of the plains.

All of these issues are discussed as we explore the landscape against the background narrative of Armitage's childhood memories, her mother's failing health, and her own evolving relationship to her home place. Overall, *Walking the Llano* is an important contribution to the literary cartography of the oft-overlooked High Plains of Texas.

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ISLE: Interdisciplinary Studies in Literature and Environment 24.3 (Summer 2017), pp. 598–599

Advance Access published October 7, 2017 doi:10.1093/isle/isx053

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***The Language of Plants: Science, Philosophy, Literature.* Edited by Monica Gagliano, John C. Ryan, and Patricia Vieira. Minneapolis: U of Minnesota P, 2017. 352 pp. Cloth \$120.00. Paper \$30.00.**

The Language of Plants is an important entry in the emerging field of critical plant studies, joining Matthew Hall's *Plants as Persons* (SUNY P, 2011), Randy Laist's *Plants and Literature* (Rodopi, 2013), Michael Marder's *Plant-Thinking* (Columbia UP, 2013) and *The Philosopher's Plant* (Columbia UP, 2014), Jeffrey T. Nealon's *Plant Theory* (Stanford UP, 2015), Dawn Keetley and Angela Tenga's *Plant Horror* (Palgrave, 2016), and Luce Irigaray and Michael Marder's *Through Vegetal Being* (Columbia UP, 2016). Like its predecessors, *The Language of Plants* aims to rectify centuries of human blindness to what the editors eloquently call the "mysterious intricacies of vegetal lives," uncovering and challenging the ways of thinking that have obscured, distorted, and exploited plants as well as charting new ways to understand and represent plant life (x). The focus of the book is on plant language in particular, and the collection is divided by discipline, with essays from scientists, philosophers, and literary critics.

Contributors to *The Language of Plants* inevitably offer varied definitions of what it means to have a "language" in the first place. The four chapters by scientists that make up the first section focus on a "chemical" language, exploring the burgeoning research into volatile organic compounds (VOCs), which are emitted by plants and allow them to communicate with other plants and animals (primarily

insects). Plants' chemical language is very much a physiological kind of signaling, similar, perhaps, to the ways humans "communicate" through pheromones. Indeed, one of the principal functions of VOCs is reproduction/pollination (32–36), along with serving as a defense system—repelling predators and warning other plants of the presence of danger. While the scientists in this collection construe language the most narrowly, they may arguably come the closest to articulating how plants actually "speak," lying at one end of a spectrum that includes, on the other end, the efforts (explored in the literature section) of creative writers to narrate from a plant's perspective.

Chapters in the philosophy section take up a more theoretical level what a plant language might look like, how humans have used language to diminish vegetal life, and the ways humans and plants alike use language similarly to define their world and themselves. As Michael Marder eloquently puts it in his contribution, both plants *and* humans "form a world, by which they, themselves, are shaped," (italics in the original) and it is a matter of both ethics and justice that humans give the language of plants "their due" (122, 123). Karen Houle's excellent contribution is notable for taking up the very real implications of the language we use to describe trees—and how that language serves (and does not serve) justice.

If the emphasis in the science section is on plants' chemical signaling, and several philosophical chapters ask us explicitly or implicitly to contemplate the "silence" of plants, the five chapters in the literature section all explore how the "voice" of plants has been imagined in creative texts, including José Eustasio Rivera's *The Vortex* (Vieira), John Wyndham's *The Day of the Triffids* (Adamson and Sandilands), Stephen Wright's *Meditations in Green*, Ursula Le Guin's "Direction of the Road," Orhan Pamuk's *My Name Is Red*, and Aldo Leopold's *A Sand County Almanac* (James). John C. Ryan's chapter brilliantly concludes the collection, offering a reading of the "silent voices" of plants in the poetry of Louise Glück and Elisabeth Bletsoe, thus harking back to the focus of the philosophy section on the silence of the vegetal while developing the idea of a distinctly "ecological (i.e., relational and material) concept of plant voice" (275) that echoes the embodied/ecological approach to plant language articulated by both Gagliano (in the science section) and Marder (in the philosophy section).

The Language of Plants is an exceptional collection: every contribution offers provocative food for thought about plant language. While not all of the essays are themselves interdisciplinary (though some of the best contributions are—for example, those by Gagliano, Marder, and Adamson and Sandilands), the collection as a whole is multidisciplinary, launching what the editors rightly claim is a "transdisciplinary

exchange" that "will challenge the underlying assumptions, methodologies, and framework" of each of the three fields of study, "so as to contribute to a better appreciation of language and botanical life" (xxii). The differences among the disciplinary approaches are telling, with the scientists (except for Gagliano) making little effort to incorporate the humanities, while the latter engage much more with the emerging science of plant communication. Different ethical positions emerge too, with the humanists overwhelmingly striving to bring humans and plants closer together, as a matter of justice. Christian Nansen's contribution to the science section, on the other hand, seems to reproduce current dominant attitudes toward the vegetal, something resisted by all the humanistic contributors. He claims that research about the greenness of plants will "increase food production" (64), adding that interpretation of crop signals can be used to "optimize crop management practices" (79) and that such research will help in the "management of plant populations" (80)—a practice (thinking of plants only as food) and a language ("production," "management") that consigns plants to the status of reserve for human use. However, as Nansen's chapter suggests, it is difficult to step outside of language that treats plants as a human resource, not least because feeding the global *human* population is obviously a pressing ethical problem. How far can we go in dismantling the hierarchy of living beings (human and nonhuman) before we start to hurt human populations? In this way, Nansen's highly scientific contribution raises the crucial ethical question that lingers unanswered beneath other brilliant explorations of plant language and plant agency, explorations that explicitly take up the issue of justice to plants without addressing the implications for justice to humans.

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ISLE: Interdisciplinary Studies in Literature and Environment 24.3 (Summer 2017), pp. 599–601

Advance Access published October 12, 2017 doi:10.1093/isle/isx054

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***Edge of Morning: Native Voices Speak for the Bears Ears.* Edited by Jacqueline Keeler. Salt Lake City: Torrey House, 2017. 170 pp. Cloth \$19.95.**

This remarkable collection of interviews, personal essays, and poetry by Native American authors is a work of literary activism in the