



LIVING LEXICON
FOR THE ENVIRONMENTAL HUMANITIES

Roots

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“Zipping up my boots, going back to my roots

To the place of my birth, back down to earth”

Lamont Dozier’s song¹ celebrating being “homeward bound” toward Yoruba ancestry, was released the same year Alex Haley’s *Roots* aired on TV, another story tracing African American heritage. Metaphors of human rootedness reach way beyond and before 1977 USA, often being used to visualize diaspora.² *Roots* are perhaps the most familiar way to convey belonging—human connections to place.³ bell hooks describes regaining connection to Black history and community by returning to her Kentucky roots because for her, just as roots feed plants, place nourishes people.⁴ Histories and survival of peoples and plants are so closely intertwined,⁵ it is perhaps not surprising that people often understand themselves through botanic metaphors.⁶

Geographers, anthropologists, and others have spent many words interrogating place-people connections, but metaphors of roots and territory are perhaps so commonsense they pass under-interrogated.⁷ I turn attention to the plant side of these metaphors because considering their roots invites reimaginings of human rootedness.

1. Although credited to Dozier, Nigerian musician Orlando Julius claims authorship of elements including the Yoruba words. See www.ft.com/content/11ff54ae-6e96-11e5-aca9-d87542bf8673.

2. Long, “Rooting Diaspora, Reviving Nation.”

3. Malkki, “National Geographic.”

4. hooks, *Belonging*.

5. Head, Atchison, Phillips, and Buckingham. “Vegetal Politics.”

6. Malkki, “National Geographic.”

7. Malkki, “National Geographic.”

Dismissing roots as inappropriate metaphor for human relationships to place is founded in misunderstandings of plants; attending to the nature of plant roots shows they can symbolize multiple complex modes of human-place relationships.

Rootedness was typically interpreted as an exclusive fixed connection to a single location,⁸ associated with phenomenological understandings of place as source of human security.⁹ For geographer Dooreen Massey, being rooted is “too little open to the externally relational,” implying places and belonging barely change.¹⁰ Contrasting relational versions of place like Massey’s render it fluid and open, not associated with one neatly bound authentic community. Such places are seemingly not easily attached to through root-like connections. Malkki argued that botanical language falsely naturalizes links between people and place, celebrating a territorial rootedness that is neither inevitable nor desirable in a world of displacement and mobility.¹¹ Refugees she researched had more fluid understandings of spatial identity than typically conveyed by rootedness or authentic cultural roots.

Even in a highly mobile world places matter; people can belong to somewhere dynamic.¹² Alternative metaphors have therefore been sought, suiting mobile, partial, overlapping place attachments.¹³ With serendipitous homophony routes convey belonging complementary to and contrasting that of roots: bonds lived in motion or across distance, befitting cosmopolitan lives and complex identities.¹⁴ Refugee and migrant populations demonstrate belonging as a process shaped through practice rather than inevitably inherited.¹⁵ This more dynamic place relation has been described as rhizomatic, conveying home-making as a process of territorialization open to change and transplantation.¹⁶ But celebration of rhizomes over roots neglects parallels between them, perhaps demonstrating lack of curiosity about plants.¹⁷ In the plant world they share many qualities: both can travel laterally, groping beneath the surface toward nutrients. Rhizomes can generate roots, both can be the source of new plants, either can anchor plants in place.

Newer metaphors for human-place relationships have been sought to convey characteristics of motion, dynamism, and multiplicity in the assumption that rooted plants cannot represent these. This misconstrues plant rootedness in two ways: how plants relate to place and how roots live. Rootedness is typically taken to convey fixity,

8. Gustafson, “Roots and Routes.”

9. Anderson and Erskine, “Trophilia”; Gibas, “Between Roots and Rhizomes.”

10. Massey, *For Space*.

11. Malkki, “National Geographic.”

12. Country et al, “Co-becoming.”

13. Tomaney, “Region and Place II.”

14. Gustafson, “Roots and Routes.”

15. Raffaetà, and Duff, “Putting Belonging into Place.”

16. Gibas, “Between Roots and Rhizomes.”

17. Gibson and Gagliano, “The Feminist Plant.”

hence enduring connections to one place lending stability to human life.¹⁸ But “even as they are rooted, plants move.”¹⁹ Pea-plant tendrils search support then twirl around it; seedlings rotate through the daily cycle; seeds are flung or carried far from plant-parent; Egyptian walking onions perambulate. Roots themselves move, growing toward water and nutrients.²⁰ For plants rootedness does not equal immobility—they have diverse ways to move and thrive, which human chauvinism is blind to.²¹ By knowing plants on their terms²² they become more like humans.²³ If plants are sessile yet mobile then rooted humans also move, change, and connect to many places simultaneously.

The second reimagining of rootedness comes through examining plant roots’ characteristics and functions. Roots are plants’ lower parts, usually underground,²⁴ serving functions of anchoring, absorbing nutrients and producing hormones.²⁵ Beyond this comes huge diversity, with roots specializing in different functions including carbohydrate storage and reproduction.²⁶ Some roots are temporary, others permanent; a single plant can have millions of root tips.²⁷ Anyone who has weeded a garden will know root systems vary hugely between surface threads and deep masses.²⁸ If plants are rooted in multiple ways, rootedness encapsulates diversity of depth, extent, function, and form befitting complex human belonging.

Students instructed by Kimmerer to gather spruce roots for basket making will tell you—contra Gibas—rootedness does not mean being bounded or self-contained. They follow spruce roots across the forest floor, uncovering maplike systems of different roots crisscrossing and connecting, spreading considerable distances.²⁹ This sharing of space involves complex relationships between organisms, including the well-known symbiosis with microbes enabling plants to fix nitrogen.³⁰ By forging through the ground roots make space for air circulation, creating conditions for other organisms to thrive.³¹ This is also the zone of communication between plants and to other organisms: roots exude hormones that signal presence of threat or nutrient.³² These induce responses to defend against attack or grow away from competitors. The root system is the center

18. Tomaney, “Region and Place.”

19. Head, Atchison, and Phillips, “The Distinctive Capacities of Plants,” 403.

20. Fogg, *The Growth of Plants*.

21. Hall, *Plants as Persons*; Gibson and Gagliano, “Feminist Plant.”

22. Myers, “Photosynthesis.”

23. Head et al., “Vegetal Politics.”

24. Allaby, *A Dictionary of Plant Sciences*.

25. Mauseth, *Botany*.

26. Mauseth, *Botany*.

27. Mancuso and Viola, *Brilliant Green*.

28. Masueth, *Botany*.

29. Kimmerer, *Braiding Sweetgrass*, 235.

30. Hall, *Plants as Persons*.

31. Kimmerer, *Braiding Sweetgrass*, 268–77.

32. Hall, *Plants as Persons*.

of the plant nervous system.³³ Each root tip must act in light of numerous others, and of the plant's overall needs—a form of distributed intelligence.³⁴ Rootedness enables communication and cooperation, allowing plants to thrive among their neighbors while shaping the environment.

To understand roots, let us follow Natasha Myers' suggestion to feel like a plant:

"Now drop down into your roots. Extend yourself into the cool, moist earth. . . .

Feel the energetic thrill of connection. How far can you extend your awareness? Run with it, in every direction.³⁵

Roots are active and vital, neither simple, not natural opposites to routes nor rhizomes. Rooty metaphors informed by knowledge of plant worlds suit spatial relationships of diaspora, multiple homelands, or none. Drawing on roots' being for metaphors of human-place relationships offers many threads to follow: nourishment, symbiosis, communication, coemergence. Roots need not be what we go "back to," or convey reactionary belonging favoring past times and places with one authentic identity. Plant roots suggest potential to move forward and become. Roots are in motion and move others so being rooted does not mean binding to the spot, more a dynamic relationship to place, reaching toward others and moving together in continual exchanges. Beyond suggesting more diverse and accurate metaphors for human belonging, learning from plants shows how rootedness can nourish care for the world.³⁶ A more vegetal perspective shows plant roots enable coemergence within multispecies communities where each depends on, so must care for others.³⁷ So in pursuit of care, I'm going *forwards* to my roots.

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33. Hall, *Plants as Persons*; Mancuso and Viola, *Brilliant Green*.

34. Mancuso and Viola, *Brilliant Green*.

35. Myers, "A Kriya for Cultivating Your Inner Plant."

36. hooks, *Belonging*.

37. Gibson and Gagliano, "Feminist Plant."

References

- Allaby, Michael. *A Dictionary of Plant Sciences*. 4th ed. Oxford: Oxford University Press, 2019.
- Anderson, Jon, and Kathryn Erskine. "Trophophilia: A Study of People, Place, and Lifestyle Travel." *Mobilities* 9, no. 1 (2014): 130–45.
- Bawaka Country, Sarah Wright, Sandie Suchet-Pearson, Kate Lloyd, Laklak Burarrwanga, Ritjilili Ganambarr, Merrkiyawuy Ganambarr-Stubbs, et al. "Co-Becoming Bawaka: Towards a Relational Understanding of Place/Space." *Progress in Human Geography* 40, no. 4 (2016): 455–75.
- Fogg, Gordon Elliott. *The Growth of Plants*. London: Penguin Books, 1970.
- Gibas, Petr. "Between Roots and Rhizomes: Towards a Post-Phenomenology of Home." *Transactions of the Institute of British Geographers* 44, no. 3 (2019): 602–15.
- Gibson, Prudence, and Monica Gagliano. "The Feminist Plant: Changing Relations with the Water Lily." *Ethics and the Environment* 22, no. 2 (2017): 125–46.
- Gustafson, Per. "Roots and Routes: Exploring the Relationship between Place Attachment and Mobility." *Environment and Behavior* 33, no. 5 (2001): 667–86.
- Hall, Matthew. *Plants as Persons: A Philosophical Botany*. Albany: SUNY Press, 2011.
- Head, Lesley, Jennifer Atchison, and Catherine Phillips. "The Distinctive Capacities of Plants: Rethinking Difference via Invasive Species." *Transactions of the Institute of British Geographers* 40, no. 3 (2015): 399–413.
- Head, Lesley, Jennifer Atchison, Catherine Phillips, and Kathleen Buckingham. "Vegetal Politics: Belonging, Practices, and Places." *Social and Cultural Geography* 15, no. 8 (2014): 861–70.
- hooks, bell. *Belonging: A Culture of Place*. Abingdon, UK: Routledge, 2009.
- Kimmerer, Robin Wall. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*. London: Penguin Books, 2020.
- Long, Joanna C. "Rooting Diaspora, Reviving Nation: Zionist Landscapes of Palestine-Israel." *Transactions of the Institute of British Geographers* 34, no. 1 (2009): 61–77.
- Malkki, Liisa. "National Geographic: The Rooting of Peoples and the Territorialization of National Identity among Scholars and Refugees." *Cultural Anthropology* 7, no. 1 (1992): 24–44.
- Mancuso, Stefano, and Alessandra Viola. *Brilliant Green: The Surprising History and Science of Plant Intelligence*. Washington, DC: Island Press, 2015.
- Massey, Doreen. *For Space*. Thousand Oaks, CA: Sage, 2005.
- Mauseth, James D. *Botany: An Introduction to Plant Biology*. Burlington, MA: Jones and Bartlett Publishers, 2019.
- Myers, Natasha. "Sensing Botanical Sensoria: A Kriya for Cultivating Your Inner Plant." Centre for Imaginative Ethnography, 2014. imaginativeethnography.org/imaginings/affect/sensing-botanical-sensoria/.
- Myers, Natasha. "Photosynthesis." Society for Cultural Anthropology, January 21, 2016. culanth.org/fieldsights/photosynthesis.
- Raffaetà, Roberta, and Cameron Duff. "Putting Belonging into Place: Place Experience and Sense of Belonging among Ecuadorian Migrants in an Italian Alpine Region." *City and Society* 25, no. 3 (2013): 328–47.
- Tomaney, John. "Region and Place II: Belonging." *Progress in Human Geography* 39, no. 4 (2015): 507–16.