

PLANT WORLDS
Assembling the Ethnobotanical

Lewis Daly¹ and Kay E. Lewis-Jones²



Without plants, life on earth as we know it simply could not exist. In terms of sheer mass, plants dominate terrestrial ecosystems, with one thousand times more plant than animal biomass on land (see Bar-on et al. 2018). Within this vital mass is incredibly diversity: according to recent estimates, there are just shy of four hundred thousand species of plants in the world (see Willis 2017). The significance of this is as much cultural as it is ecological. All human societies rely on plants in myriad ways – as resources, as symbols, as ideas, as cohabitants. And like an optical illusion, while often going completely unnoticed, the centrality of plants to social life, once seen, cannot be unseen. Just as they do in ecosystems, plants underpin and thread their way through human social worlds with grace and tenacity.

¹ Dr Lewis Daly, UCL Anthropology, 14 Taviton Street, London. Email: l.daly@ucl.ac.uk

² Dr Kay E. Lewis-Jones, Centre for Biocultural Diversity (CBCD), Kent. Email: kayevelina@outlook.com

Yet, a rapidly growing – and increasingly urban – human population risks losing touch with the knowledge, the wellbeing, and the perspective that comes from living in close proximity to our leafy companions, unless we, collectively, develop innovative ways of sharing our spaces (see Meyer and MacCormick, this issue). On a planet increasingly dominated by human pressures, however, a general failure to share place with plants pervades, leading to up to a third of all plant species potentially facing the threat of extinction (Pimm et al. 2014). It is in recognition of this complex context of threats and possibilities that *The Ethnobotanical Assembly* (henceforth TEA) is founded: as a virtual space where ideas and practices emerging at the interface of people and plants are brought together, to stimulate the creative and collaborative thinking needed to nurture culturally and biologically diverse futures. A space to assemble – and better learn how to share.

To secure the flourishing of plant-life in the human-dominated context of the Anthropocene, we need now, more than ever, to promote an improved and nuanced understanding of the vital and diverse relationships that occur between human beings and plants. Fortunately, there is a great wealth of work emerging at the intersection of people and plants, across many spheres – from the Brazilian Amazon (see Miller, this issue; Daly 2015) to Los Angeles (Meyer, this issue). Clearly, human beings live in constant and meaningful interaction with an array of animal, plant, fungal, and bacterial beings. The study of the different forms these take and the significance of this is longstanding, and the discipline of ethnobotany – broadly, the study of human-plant relationships – has a long and distinguished intellectual history (see Ellen and Puri, this issue). Ethnobotany as an established academic discipline is at least as old as anthropology, having its roots in Victorian intellectualism – however, humans have been practising ethnobotany across different cultural traditions for millennia (Schultes and von Reis 1995).

In recent years, interest in plant agency has begun to spill over into more mainstream discussions of socio-cultural life: with innovative research, work groups, symposiums, and influential books springing up across disciplines, capturing public imagination (e.g. Chamovitz 2012; Marder 2013; Wohlleben 2015) and fomenting the sense of a vibrant community of thought, and of care (on the latter, see Hartigan 2017 and Puig de la Bellacasa 2010). As awareness of anthropogenic

environmental change and degradation increases, there is a growing curiosity about vegetal life and its elusive agency – as well as its symbiotic relationship to human, animal, and microbial life (see, for instance, Tsing 2015; Charlton, this issue).

Plants do not have brains, nor do they have central nervous systems. Anatomically speaking, of course, they are completely different from animals. However, as we are increasingly coming to understand, plants do exhibit complex modes of sensation, perception, and communication that may, under certain definitions at least, be considered sentience (Mendum 2009; Myers 2015), intelligence (Pollan 2013), thinking (Kohn 2013), and learning (Gagliano 2018; Gagliano et al. 2018). It is well-established that plants are sophisticated communicators (Sebeok 1994: 19–20); they transmit information using visual signals, airborne hormones, biochemical impulses, and via dispersed subterranean fungal networks (Tsing 2012, 2015). The more we learn about plant behaviour, the more what we understand challenges and helps us reimagine our theories of sociality, sentience, identity, and intelligence.

This realisation, in turn, forces us to experiment with new methods of engaging with people and plants. Established ethnobotanical methodologies are still of vital importance in making sense of human-plant life-worlds (Ellen and Puri, this issue; Martin 1995). However, the recent emergence of Multispecies Ethnography (MSE) as a methodology for the posthumanities is reflective of a growing desire to break with social and natural scientific conventions in the pursuit of new and creative forms of knowledge production and sharing that transcend species boundaries (Swanson 2017; Lewis-Jones 2018; Smaby, this issue).

TEA seeks to bring together the blossoming yet often-fragmented community of people thinking and working at the human-plant interface. We have launched this initiative because we hope that through providing a space to share and explore diverse approaches and developments, TEA can help stimulate and support the creative, constructive and collaborative thinking that we believe is key to nurturing inspiring, resilient ethnobotanical futures.

REFERENCES

- Bar-on, Yinon M., Rob Phillips, and Ron Milo. 2018. [The Biomass Distribution on Earth](#). *PNAS* June 19, 2018 115(25):6506–6511.
- Chamovitz, Daniel. 2012. [What a Plant Knows: A field guide to the senses](#). New York: Farrar, Straus and Giroux.
- Daly, Lewis. 2015. [What Kind of People are Plants? The challenges of researching human-plant relations in Amazonia](#). *Engagement*, a blog of the Anthropology and Environment Society of the American Anthropology Association (AAA). 8th of December, 2015.
- Daly, Lewis, Luiseach Nic Eoin, Katherine French, and Theresa Miller. 2016. [Integrating Ontology into Ethnobotanical Research](#). *Journal of Ethnobiology* 36(1):1–9.
- Gagliano, Monica. 2018. [Inside the Vegetal Mind: On the cognitive abilities of plants](#). In F. Baluska et al. (eds.), *Memory and Learning in Plants*. Pp. 215–220. New York: Springer International Publishing.
- Gagliano, Monica, Charles I. Abramson, and Martial Depczynski. 2018. [Plants Learn and Remember: Let's get used to it](#). *Oecologia* 106(1):29–31.
- Haraway, Donna. 2008. [When Species Meet](#). London: University of Minnesota Press.
- Hartigan Jr., John. 2017. [Care of the Species: Races of corn and the science of plant biodiversity](#). Minneapolis, MN: University of Minnesota Press.
- Kohn, Eduardo. 2013. [How Forests Think: Toward an anthropology beyond the human](#). Berkeley, CA: University of California Press.
- Lewis-Jones, Kay E. 2018. *Saving Wild Seeds in the Anthropocene: Pursuing more-than-human futures at the Millennium Seed Bank Partnership*. PhD Thesis. Canterbury: University of Kent.
- Marder, Michael. 2013. [Plant-thinking: A philosophy of vegetal life](#). New York: Columbia University Press.
- Martin, Gary. 1995. [Ethnobotany: A methods manual](#). New York: Springer.
- Mendum, Ruth M. 2009. [Subjectivity and Plant Domestication: Decoding the agency of vegetable food crops](#). *Subjectivity* 28(1):316–333.

Myers, Natasha. 2015. [Conversations on Plant Sensing: Notes from the field](#). *NatureCulture* 3:35–66.

Pimm, S. L., Jenkins, C. N., Abell, R., Brooks, T. M., Gittleman, J. L., Joppa, L. N., Raven, P.H., Roberts, C.M. and Sexton, J. O. 2014. [The Biodiversity of Species and their Rates of Extinction, Distribution, and Protection](#). *Science* 344(6187):1246752.

Pollan, Michael. 2013. [The Intelligent Plant](#). *The New Yorker* 89:92–105.

Puig de la Bellacasa, Maria. (2010). [Ethical Doings in Naturecultures](#). *Ethics, Place and Environment: A Journal of Philosophy and Geography* 13(2):151–169.

Schultes, Richard Evans and Siri von Reis. 1995. [Ethnobotany: Evolution of a discipline](#). Portland, OR: Timber Press.

Sebeok, Thomas A. 2001. [Signs: An introduction to semiotics](#). Second edition; originally published in 1994. Toronto: University of Toronto Press.

Swanson, Heather Anne. 2017. [Methods for Multispecies Anthropology: Thinking with salmon otoliths and scales](#). *Social Analysis* 62(2):81–89.

Tsing, Anna L. 2012. [Unruly Edges: Mushrooms as companion species](#). *Environmental Humanities* 1:141–154.

———. 2015. [The Mushroom at the End of the World: On the possibility of life in capitalist ruins](#). Princeton, NJ: Princeton University Press.

Willis, Kathy J. (ed.) 2017. [State of the World's Plants 2017](#). Report. Royal Botanic Gardens, Kew.

Wohllenben, Peter. 2015. [The Hidden Life of Trees: What they feel, how they communicate – discoveries from a secret world](#). Vancouver: Greystone Books.