

NATURE-BASED RELIGIONS, PLANT KINSHIP, AND SUSTAINABILITY

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Abstract: The United Nations' Sustainable Development Goals targets protecting the planet's natural resources and re-establishing a sustainable planet for the next generations. The role that religion plays in the attainment of the SDGs lies in how it influences certain environmental actions and ethical choices. Modern nature-based religions, in particular, espouse the interconnectedness of humanity and nature, and reverence for Mother Earth. These revived nature belief systems are translated into practices and rituals where a type of familial or kin relationship between human beings and all its inhabitants is fostered. Human relationships with plants, for example, are venues where individuals may meld nature-based solutions and conservation practices. Plant kinship beliefs and plant caring are individual actions that may subsidise the agenda for peace and prosperity for people and the planet. In this paper, we uncover and revisit traditions that may address the sustainability agenda by critically engaging nature spirituality beliefs and plant kinship concepts.

Keywords: Animism, Canela, Indigenous Peoples, Plant Kinship, Plant-based Ethics, Sustainable Development

1. Introduction

Religion plays a role in global development processes through its influence on cultural, social, political, ecological, and economic factors (Tomalin et al. 102). In terms of sustainable development, religion is vital through its capacities for value formation,

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influences people's duties and ethical choices and their purposes in life (Narayanan 136). This is why various religious community leaders have made calls for individual and global action amid environmental destruction.

Despite the religious and spiritual basis of the calls for environmental action, however, planetary sustainability remains to be a huge challenge (Biana and Rivas 113). Studies show that links between religion and environmental attitudes vary from negative or positive impacts to no relationship at all (Sommerlad-Rogers 227). A particular kind of spiritual or religious belief only becomes good for the planet if it is translated into global policies and individual actions. How religion shapes understanding and conduct toward nature and how spiritual teachings consecrate and affirm such relationships remain vital questions for sustainability goals (Gottlieb 8–9).

Promoting sustainable development through religion lies in the production of values and practices based on transforming beliefs and attitudes (Zagonari 21). Examples of such values can be seen in most practices and rituals of neo-nature or modern nature-based religions wherein human "bonding" with nature is emphasised (Taylor 226). On this account, affinities are forged between human beings and the planet.

Aside from mere environmental stewardship, neo-pagan movements promote love, reverence, and kinship with nature. This constitutes a familial or kin relationship between human beings and the earth's seen and unseen beings from the past and the present (Rountree 305). This type of kinship is evident in the currently renewing interest in human relationships with plants. These relationships are venues where individuals may meld nature-based solutions and conservation practices. Such nurturing and cultivating multi-species relationships bring about ecologies that lead to the eventual resurgence of nature (Searle and Turnbull 291).

In this paper, we examine human-plant relationships. We look at certain actions that affirm the earth's sacredness by cultivating plants through gardening, tree-planting, or even herbology. How do plant kinship beliefs and caring for plants influence individual actions that subsidise the agenda for the planet's biodiversity aims?

Reviewing nature religion beliefs and plant kinship concepts, we critically engage the intricate process of recreating reverent traditions that may address contemporary sustainability concerns. The paper is developed by looking at the ethics and beliefs of modern nature-based religions and how these religions approach plant kinship. It illustrates how the erosion of a plant-based ethics has led to sustainability issues. Finally, by using the Canela peoples' example of a plant-based ethical paradigm, we argue that a plant-based ecological-religious framework is necessary for planetary sustainability.

2. Modern Nature-Based Religions: Ethics and Beliefs

Pope Francis came up with his second encyclical entitled *Laudato 'si*, which talks about caring for *our common home*, and how the planet's destruction can be traced back to human beings' consumerist and irresponsible choices. Some Muslim leaders also affirm that climate shifts are harming people and that humans are responsible for these changes (Koehrsen 3). Similarly, other religious leaders have also expressed alarm and concern over the planet's situation. The Tibetan Buddhist leader, 17th Karmapa Ogyen Trinley Dorje, stressed religion's roles in shaping morality in relation to the environmental emergency (Cohn). Both the Pope and the Karmapa highlight the interrelatedness of humanity and all creation and the need for environmental stewardship.

The idea of the interconnectedness of humanity and nature, however, is nothing new. As early as the 1930s, when ancient nature-based religions were revived by the contemporary Neo-Paganism, Neo-Animism and Wicca, practitioners espoused the reverence for Mother Earth and all its inhabitants. At the same time, modern nature-based religions stress the importance of human connections with the earth. While there are differences in emphasis of beliefs among Druids, Wiccans, Irish Pagans, Nordic Pagans, Ukrainian Pagans, Shamans, and other indigenous or tribal religions, their core concept is the affirmation of the sacredness of the earth through traditions that honour and celebrate the living earth. What unifies these belief systems is the principle of "Love for and kinship with Nature," or "Nature venerating," and the

interconnectedness of all things (Harvey 39). These nature-based religions may be interpreted as panentheistic, believing that all things are part of the Divine, and everything in the universe is part and parcel of one whole (Harwood 377).

Sometimes, such religions are also polytheistic, animistic, and/or pantheistic, with the same goal of maintaining this oneness and harmony with nature (Adler xi). The animistic component of these nature-based religions involves the belief that all things partake of nature's life force and are animate and alive. Pantheism, at the same time, alludes that divinity cannot be separated from nature (Adler 23).

The awareness of interconnectedness and interrelatedness of all things and the Divine is part of a magickal (Magick here is spelt with a 'k' to differentiate it from the stage magic) type of consciousness which is natural (rather than supernatural). To elaborate, magickal consciousness is experiencing the world, making connections and relations with all beings, and seeing the natural world as something alive (Greenwood 7,9).

Wicca (which also has different versions such as Egyptian, Gardnerian, traditional, and eclectic), in particular, affirms the earth's sacredness through the Wiccan Rede. The rede states that as human beings, "An ye harm none, Do as you Will " (harm no living thing with our actions). Such moral code is rooted in the belief that "all things are interdependent and interrelated and therefore mutually responsible" (Harwood 377). Therefore, it follows that any individual action affects all. As an analogy, the universe is like a web wherein movement in one piece of thread affects the entire web. In a *Book of Shadows* listing down Wiccan laws, law 26 talks about communion with nature, and law 28 states that one must "Honor all living things, for we are of the stag, and the salmon, and the bee; so destroy not life, save it to preserve your own" (Cunningham 19). These laws affirm that the Divine is immanent in nature, and all actions and energies must be in harmony with nature and natural cycles. This also implies that Wiccans must lead not only responsible but also environmentally-responsible lives (Murphy-Hiscock 26).

Some Western Pagans, in particular, have translated these beliefs into tangible environmental actions such as gardening, bush-walking, ritual performances, or protests against environmental destruction. These include memberships in *green* groups such as Greenpeace or Friends of the Earth, fundraising, tree-planting, land-buying (to plant trees), or even putting up these organisations themselves (Harvey 39). Selena Fox, a craft practitioner, espouses an interfaith type of dialogue with other religious movements for the spiritual healing of the earth through working in harmony with other life forms (Buckland 162). Other manifestations include meditating for the planet, radiating thoughts or feelings of peace and well-being to the earth, and symbolic actions such as planting seeds (if stopping deforestation in another region is physically impossible, for example) (Harvey 39). These manifestations and actions are termed as "embodied performance of kin relationships with the earth," and follow the mantra "love for and kinship with nature" toward the "the survival of the eco-system" (Rountree 305–06) and the acceptance of "the eco-system as a whole" (Harwood 380). These embodied performances are seen as "pro-social environmental behaviors," wherein modern pagan beliefs drive environmentalism. In a survey conducted by Deirdre Sommerlad-Rogers, she found that 90% of pagan respondents include environmental problems in their spiritual practices. Furthermore, "reverence for the Earth and as well as the survival of the planet and humanity were significant motivations for environmental behaviors" (223).

3. Plant Kinship

Affinity and caring toward plants have been around for 3,000 years since the Chinese developed miniature landscapes or *penjing*. Garden lay-outting, on the other hand, was derived from the architecture of Egyptian tombs. Aside from their aesthetic use, various peoples (75% of the world's population) have been using plants and herbs to treat various illnesses as far back as 60,000 years ago (Pan et al. Par. 1). Caring for plants, however, is not limited to aesthetic or medicinal motivations. Wiccan believers and practitioners affirm the magick of the green world and how human

lives are closely connected to that of plants. Part of their rituals includes finding meaningful ways to learn and work with plants and attuning to nature's cycles and seasons (Kynes 9–11). Sometimes referred to as “green witchcraft,” such practices uphold the use of green elements or that which is natural or herbal and the celebration of moon cycles and green festivals (such as solstices and equinoxes). These celebrations give importance to the planting and harvesting seasons (Moura 1-22).

Breann Fallon conducted a study on the practices of modern witches, pagans, Wiccans, Australian Aboriginal and Torres Strait Islander spirituality, Abrahamic traditions, Ancient Egyptian religion, Buddhism, Hinduism, Norse mythology, and the Shinto faith (169–82). She revealed how gardening and “trees as sacred symbols” are the core of nature-based new religious movements and how these practitioners view themselves as “mother(s)” to their plants (Fallon 169–82). In Southwest Amazonia, caring for plants is equated with parenting or multi-parenting (Rivas and Biana). Such bonds are formed between the multi-parent (the human being) and the child (the plant). These plant-children are likewise named by their human parents. This plant-caring relationship is considered a type of persuasive kinship not restricted to blood or filiality.

The relationship between trees, plants and nature-based religious people is close-knit. To feel closer to plants, some even advocate talking to plants with the expectation that they understand and respond on a multi-species level (Moura 45-70). In Wiccan practice, the love for a plant is translatable to the love for all of nature and her creations (Cunningham 45). By the same token, the Canela people of Brazil have a distinct multi-species outlook based on their core values of plant intimacy that define their social cohesion.

4. The Erosion of Plant-Based Ethics

Nature-based religious and spiritual practices started to erode during the era of colonial modernism. Their existence today is an outcome of adapting to external changes, at most, in relation to changes they could not control. From the viewpoint of colonial

historiography, "premodern collectives ... [made] a horrible mishmash of things and humans" (Latour 39). As colonial science ventured to erase the supernatural views of things, paganism and shamanism remain at the centre of this reductive view of the postmodern (Latour 38). As such, Isabel Laack argues that in the representation of indigeneity in post-colonial discourse, a kind of epistemic violence was done to the indigenous peoples through the prism of "pre-rationality or [their] lack of historical development" (133). Gayatri Spivak calls this "cognitive imperialism" (281).

Recent anthropological studies suggest that the dichotomy of nature and culture does not apply to premodern societies and is simply an imposition of "materialist science on Indigenous understanding" (Laack 119; Wilkinson 292). This is particularly evident in the premodern worldview of multi-species entanglement, where plant kinship plays a central role. Where modern progress has side-stepped its responsibility for the loss of biodiversity, Indigenous Peoples' resilience offers a model of multi-species life. Incidentally, this model echoes the turn to new materialism in the human sciences (Henare et al. 1-31) in terms of its attribution of agency to nonhuman entities, drawing lessons from indigenous communities worldwide.

Alongside the so-called "ontological turn," propounded by Viveiros de Castro in anthropological sciences, the resurgence of the indigenous paradigm gives voice to the school of new animism (Morrison 39). This paradigm liberates the tradition of animism from colonial and post-colonial ideology shaped by Western goals in the name of cultural anthropology. Animism is a central object of disputation in Western discourse, reducing this premodern worldview to a mere retrospective material rather than acknowledging its prospective functional nature in the premodern ontology.

5. A Plant-Based Ecological-Religious Framework

The Western dichotomy of nature and culture leads, among others, to a skewed concept of religion as distinct from the secular or culture from society, which is a dichotomy based on the functional standpoint of the human subject (Taylor 88). To combat such

irresponsibility when it comes to nature, revisiting indigenous or religious/spiritual plant-based systems may be necessary. Such systems are already being revived by modern nature-based and/or Pagan religions. Such worldview is a kind of “ontological world-making” (Haraway, “When Species Meet,” 36) that disputes the binarism of Western epistemic categories imposed on premodern collectives. The Western dichotomisation of nature/culture stipulates a normative form of disjunctive knowledge according to which a backward sense of synthesis is attained, such as the ‘mishmash’ that manifests a poor understanding of the world and an impractical response mechanism to change. The dichotomy becomes a normative science in the sense that modern knowledge must avoid an unconditional unity of nature and culture since it supposedly borders on superstition and unproven wisdom.

In the case of the resilient people of Canela (in a region of South America devastated by development aggression in recent decades), “human-plant engagements” provide a timely model “to keep alive” (amid their experience of destruction and natural catastrophes) the multi-species network of “human-environment engagements” (Miller 45) to fight off climate change and aggressive development goals (Sharrock and Jackson 9). Canela’s experience as a people is at the heart of the global struggle against deforestation and industrialisation. Their daily struggles manifest a type of “making-kin of multi-species others” (Haraway, “Staying with the Trouble” 99-103) that portrays the Canela people’s resilience (Miller 93) and affirms the “growing-in-making of human-nonhuman relationships” (Ingold and Halam 1-24) as a sustainable mechanism to respond to and address external changes. In general, they adapt to and negotiate with external changes from the standpoint of their passive relation to nature, but not passive in the modern sense of dichotomising activity into strong and weak or active and passive.

This relation to nature reflects a passive standpoint of human agency (Deleuze and Guattari 325). By contrast, Western values celebrate the perspective of a sovereign knower. Nature-religions reject such perspective, which is the core of a multi-species orientation, a passive synthesis of all things in contrast to the

centrality of the human subject. Descola describes this form of passive synthesis in terms of observing how indigenous communities like the Achuars of Ecuador behave toward nonhuman entities, most especially plants:

Achuar women do not 'produce' the plants that they cultivate: they have a personal relationship with them, speaking to each one so as to touch its soul and thereby to win it over, and they nurture its growth and help it to survive the perils of life, just as a mother helps her children. Achuar men do not 'produce' the animals that they hunt. They negotiate with them personally, in a circumspect relationship made up, in equal parts, of cunning and seduction, trying to beguile them with misleading words and false promises (324).

Here, there is an acknowledgement of different gender thresholds or performative roles across a multilayered landscape of objects and signs, women for plant care and men for animal hunting and domestication. The key factor in maintaining a coherent social organisation, in Descola's observations above, is that both genders deflect the productionist paradigm of the West. This refers to how relationships between humans and nonhumans condition the production of the means of existence.

In the *Order of Things*, Michel Foucault insisted that this productionist paradigm began to matter only recently, relative to the history of the human species, when human beings started to exist as an ideological category (Foucault 71). This was also the high point of the era of colonialism. A human being as a sovereign subject is an alien among nature-based religious worldviews and Indigenous Peoples. In Canela culture, for example, the subject shares a common identity with nonhumans; thus, a passive subject in a coalescent organisation of multi-species life forms, a synthesis of nature. The village is a testament to this synthesis, inspired by plant morphogenesis, "a place of consanguineal and affinal kinship and care, developed mainly through consubstantial relationships among human adults and children, as well as between human gardeners and seed infants" (Miller 211). Here, plant kinship is the primary model of the village's kinship relations.

Plant kinship binds the social community in a kind of quasi-religious commitment (if we retain the sense of religion as a binding force) to a non-egoistic indifference of synthetic unity, i.e., nature. This is the same indifference of *otherwise than being* (a plant trope revived by Emmanuel Levinas' appeal to non-anthropocentrism). This is opposite to the Western phallogocentric concept of religion organised around a transcendent human figure. In a nature-based religion, nature is indifferent to the extent that it does not take sides in the egoistic battles of human affairs that typically mirror the Western paradigm of conquest, control, and domination.

If villages and forest gardens serve as models of social organisation, they demarcate danger zones in light of outside threats. In social life, gardening activities reflect people's willingness to pursue solidarity and cooperation, including a permissible breach of moral norms in festive activities and life-cycle rituals, but with a clear orientation in mind. Garden or forest plots are places of affection and engagement through crop education that shape the community's moral pacts and game-theoretic performative activities centred on individual relations to plants. Caring relationships gravitate around plant kinship through gardening activities where men and women, including couples, maintain crop children (not human children, but plant children). The enduring value of these activities can be summarised as follows: "saving seeds and cuttings, demarcating and burning-and-slashing new plots, planting, tending, singing, and engaging in ritual restrictions [and] the ritual of sharing food" (Miller 116). Gardening also reflects the community's responses to threats that define the extent of its accommodation of and repulsion to changes, especially uncontrollable circumstances. The experiences of Canela peoples and other indigenous communities in post-colonial South America provide historical examples.

The emergence of messianic movements among indigenous communities is an example of how shamanistic practices that bind the community were disrupted by external threats – colonialism, uneven development, etc. When indigenous communities become isolated by uneven terms of urban/rural development, land

grabbing, etc., resulting in their permanent "dependence on non-Indigenous people for education, healthcare, religious instruction, money, and manufactured goods" (Miller 60), their garden plots, the central topos of their world-making, are drastically affected. Village authorities naturally recoil from these uncontrollable changes and respond with a subjective interpellation (forced to assume the outsider's subject-positioning). They assume a reactionary mindset among their peoples: a) "garden work no longer mattered because the world would soon end" (Miller 61), painting a disruptive apocalyptic worldview, and b) abandon garden plots and relocate to safe areas untouched by development aggression. Such perspectives result in the loss of agro-diversity that was previously cultivated in their settlements. The central lesson here is 'when you kill the garden plots, you kill people and their world.'

6. Impacts on Sustainable Development

Plant kinship and nature-based religious orientation with a multi-species ethical sensibility define the Indigenous Peoples' redeeming potential amid the worst climate risk that humanity has faced in centuries. Squeezed in between development aggression and the community influence of emerging messianic tendencies, some Canela tribes resort to subsistence gardening. This is to minimise the structural effects of the two reactionary threats of disintegrating the community: i) the abandonment of garden plots in the wake of messianism and ii) the threat of displacement by development aggression. Subsistence gardening asserts a three-fold approach to world-making: i) reducing dependence on outsiders, ii) neutralising the implosion of a community ethos, and iii) non-reliance on a seasonal agricultural cycle where plots become exposed to natural elements, assuring them of a constant supply of food. More than anything, this defines the resilience of Indigenous Peoples in confronting external threats that they did not understand first-hand. They learned to fight for the survival of forest landscapes, riverbanks, etc. (Biana and Rivas 194), where they maintain a dual gardening system, aside from garden plots that have been regularly confronted with development aggression

and seasonal cycles that affect food supply. The indigenous response to threats is a testament to the priority of the relations of human and nonhuman subjects that determine the production of the means of their existence. The periodic rise of messianism in the community etched an enduring difference in the indigenous spiritual and economic landscape:

The custom of the Canela in times past . . . at the end of the last century [nineteenth century], was that not all the Canela worked hard before; only a few people worked. This was because the young people were always having a festival, or making love to women. But today I am seeing the way of the Canela . . . today, in all of Brazil ... they [the government] almost finished off the race of Indigenous peoples in all of Brazil. But, through policy, they cannot finish off the Indigenous race. [. . .] Today we are still preoccupied with creating gardens. Why? To not suffer from hunger. Because having rice, beans, fava beans, maize, peanut—then one can survive (Miller 63)

The resilience of indigenous peoples throughout the world provides models of “cognitive and wise legacy as a result of their interaction with nature” (Maurial 62). Moreso, their enduring worldview (Cajete 63) disputes the binarism of Western epistemology, and their essentially relational paradigm is a form of passive synthesis of nature. These engender an idea of indigenous spirituality that Western paradigms immediately relegate to religiosity, which, in turn, operationalises the superiority of modern religion premised on anthropocentric values over paganism and shamanism that favour a more holistic relationship between the personal and the community, and nonhuman ecologies.

6. Conclusion

The pagan and indigenous paradigm is premised on human-plant engagements that lie at the core of their resilience, centred on gardening and plant caring. These activities take shape in the shamanistic affection and life-cycle rituals with an eye toward sustainable development. As such, plant kinship can affect

cooperation and cohabitation, and certain plant-based actions can play a significant role in biodiversity.

Looking at religious belief systems, SDG efforts should reconsider the parallelisms of environmental beliefs and the corresponding ecological levels of action tied to them. Indigenous communities' long-standing relational ties to the environment have better and more efficient management capabilities to preserve ecological and biological diversity. At a time when the world is at the threshold of climate collapse, Indigenous Peoples' spiritual orientation to environmental ethos, which also reflects the resiliency of their animistic values that have defined them as a people, offers a type of multi-species world outlook that modern humanity needs to embrace.

Long before development became contemporary society's foremost optimal response mechanism to external challenges that threaten its survival, the spirituality of indigenous nature-based religions has already been operational as a holistic sustainability goal. They are still here and leading the forefront of humanity's struggle against climate change and the global renewal of ecological sensibility.

References

- Adler, Margot. *Drawing Down the Moon: Witches, Druids, Goddess-Worshippers, and Other Pagans in America*. New York: Penguin, 2006.
- Biana, Hazel T. and Virgilio A. Rivas. "Intersectional Environmentalism: Toward an Indigenous Peoples-Inspired Planetary Ethics." *Journal of Dharma*, 46.2 (2021): 183–98.
- Buckland, Raymond. *Witchcraft from the Inside: Origins of the Fastest Growing Religious Movement in America*. Minnesota: Llewellyn Worldwide, 1995.
- Cajete, Gregory. *Native Science: Nature laws of interdependence*. Santa Fe, NM: Clear Light Publishers, 2000.
- Cohn, Roger. "For Buddhist Leader, Religion And the Environment Are One." Yale E360, 16 April. 2015, <https://e360.yale.edu/features/for_buddhist_leader_religion_and_the_environment_are_one> (5 June 2021).

- Cunningham, Scott. *Cunningham's Book of Shadows: The Path of An American Traditionalist*. Minnesota: Llewellyn Worldwide, 2011.
- Descola, Philippe. *Beyond Nature and Culture*, trans. Janet Lloyd. Chicago: University of Chicago Press, 2013.
- Deleuze, Gilles and Guattari, Felix. *Anti-Oedipus. Capitalism and Schizophrenia*. Vol. 1, trans. Robert Hurley, Mark Seem, and Helen R. Lane. Minneapolis: University of Minnesota Press, 2000.
- Fallon, Breann. "'I Am Mother to My Plants': Trees, Plants and Private Gardens in the Practice of Modern Witches and Pagans." *Fieldwork in Religion*, 13.2 (2 December 2018): 169–82.
- Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. London: Tavistock Publications, 1970.
- Gottlieb, Roger S. *This Sacred Earth: Religion, Nature, Environment*. New York: Psychology Press, 1996.
- Greenwood, Susan. *The Nature of Magic: An Anthropology of Consciousness*. New York: Routledge, 2020.
- Haraway, Donna. *Staying with the Trouble. Making Kin in the Chthulucene*. Durham and London: Duke University Press, 2006.
- Haraway, Donna. *When Species Meet*. Minneapolis: University of Minnesota Press, 2008.
- Harvey, Graham. "The Roots of Pagan Ecology." *Religion Today*, 9. 3(June 1994): 38–41.
- Harwood, Brandon J. "Beyond Poetry and Magick: The Core Elements of Wiccan Morality." *Journal of Contemporary Religion*, 22.3 (Oct. 2007): 375–90.
- Henare, Amiria, Martin Holbraad, and Sari Wastell. "Introduction: Thinking through things." *Thinking through Things: Theorizing Artefacts Ethnographically*. Eds. A. Henare, M. Holbraad, and S. Wastell. London: Routledge, 2006, 1-31.
- Ingold, Tim, and Elizabeth Hallam. "Making and Growing: An Introduction. In *Making and Growing: Anthropological Studies of Organisms and Artefacts*. Ed. Elizabeth Hallam and Tim Ingold. Farnham, Surrey: Ashgate, 2014: 1–24.
- Joaquin, Jeremiah Joven B., and Hazel T. Biana. "Sustainability Science Is Ethics: Bridging the Philosophical Gap between

- Science and Policy." *Resources, Conservation and Recycling*, 160 (Sept. 2020): 104929.
- Koehrsen, Jens. "Muslims and Climate Change: How Islam, Muslim Organizations, and Religious Leaders Influence Climate Change Perceptions and Mitigation Activities." *WIREs Climate Change*, 12.3 (2021): e702.
- Kynes, Sandra. *Plant Magic: A Year of Green Wisdom for Pagans & Wiccans*. Minnesota: Llewellyn Worldwide, 2017.
- Laack, Isabel. "The New Animism and Its Challenges to the Study of Religion." *Method and Theory in the Study of Religion* 32 (2020): 115-147.
- Latour, Bruno. *We Have Never Been Modern*, trans. Catherine Porter. Cambridge, Massachusetts: Harvard University Press, 1993.
- Marder, Michael. *Plant-thinking: A Philosophy of Vegetal life*. Columbia University Press, 2013.
- Maurial, Mahia. "Indigenous Knowledge and Schooling: A Continuum between Conflict and Dialogue." *What is Indigenous knowledge: Voices from the academy*, ed. Ladislaus M. Semali and Joe L. Kincheloe. New York: Falmer Press, 1999: 59-77.
- Miller, Theresa. *Plant Kin: A Multi-species Ethnography in Indigenous Brazil*. Austin: University of Texas Press, 2019.
- Morrison, Kenneth M. "The Cosmos as Intersubjective: Native American Other-Than-Human Persons. *Indigenous Religions: A Companion*. Ed. G. Harvey. New York: Cassell, 2000: 109-142.
- Moura, Ann. *Green Witchcraft: Folk Magic, Fairy Lore & Herb Craft*. Minnesota: Llewellyn Worldwide, 2014.
- Murphy-Hiscock, Arin. *Wicca: A Modern Practitioner's Guide: Your Guide to Mastering the Craft*. New York: Simon and Schuster, 2019.
- Narayanan, Yamini. "Religion and Sustainable Development: Analysing the Connections." *Sustainable Development*, 21.2 (2013): 131-39.
- Pan, Si-Yuan, et al. "Historical Perspective of Traditional Indigenous Medical Practices: The Current Renaissance and Conservation of Herbal Resources." *Evidence-Based Complementary and Alternative Medicine*, 2014: e525340. <<https://doi.org/10.1155/2014/525340>> (1 May 2021).

- Rivas, Virgilio A. and Hazel T. Biana. "Plants, public health and the pandemic." *Journal of Public Health* 2021: <<https://doi.org/10.1093/pubmed/fdab244>> 4 March 2022.
- Rountree, Kathryn. "Neo-Paganism, Animism, and Kinship with Nature." *Journal of Contemporary Religion*, 27.2 (May 2012): 305–20.
- Searle, Adam, and Jonathon Turnbull. "Resurgent Natures? More-than-Human Perspectives on COVID-19." *Dialogues in Human Geography*, 10.2 (July 2020): 291–95.
- Sharrock, Suzanne and Jackson, Peter Wyse. "Plant Conservation and the Sustainable Development Goals." *Global Partnership for Plant Conservation*. Missouri: Botanical Gardens Conservation International, 2016.
- Sommerlad-Rogers, Deirdre. "Environmental Attitudes and Behaviors among Pagans." *Pomegranate: The International Journal of Pagan Studies*, 15. 1–2 (Aug. 2014): 223–49.
- Spivak, Gayatri C. "Can the Subaltern Speak?" *Marxism and the Interpretation of Culture*. Ed. C. Nelson, Urbana, IL: University of Illinois Press, 1988: 271-313.
- Taylor, Bron. "Earth and Nature-Based Spirituality (Part II): From Earth First! And Bioregionalism to Scientific Paganism and the New Age." *Religion*, 31.3 (2001): 225–45.
- Taylor, Bron. *Dark Green Religion: Nature, Spirituality, and the Planetary Future*. Berkeley: University of California Press, 2010.
- Tomalin, Emma, et al. "Religion and the Sustainable Development Goals." *The Review of Faith & International Affairs*, 17.2 (2019): 102–18.
- Wilkinson, Darryl (2017). "Is there such a thing as animism?" *Journal of the American Academy of Religion* 85 2 (2017): 289-311.
- Zagonari, Fabio. "Comparing Religious Environmental Ethics to Support Efforts to Achieve Local and Global Sustainability: Empirical Insights Based on a Theoretical Framework." *Sustainability*, 12.7 (7 January 2020): 2590.