Religious Environmental Activism in Asia
Case Studies in Spiritual Ecology

Edited by
Leslie E. Sponsel

MDPI

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About the Special Issue Editor

Leslie E. Sponsel is a Professor Emeritus in the Department of Anthropology at the University of Hawai'i. He has taught at seven universities in four countries, two as a Fulbright Fellow. He joined the Anthropology faculty at the University of Hawai'i in 1981 to develop and direct the Ecological Anthropology Program. Although retired as a Professor Emeritus in 2010, he usually teaches one course each semester, including on Sacred Places, Spiritual Ecology, and Anthropology of Buddhism. The rest of his time is devoted to research and publications. Sponsel has published numerous journal articles, book chapters, and encyclopedia entries as well as four edited books. His recent monograph, Spiritual Ecology: A Quiet Revolution, won the science category of the Green Book Award in San Francisco in 2014. It was translated in 2017 for a French edition. The companion website is: http://spiritualecology.info. Sponsel continues field research on Buddhist ecology and environmentalism, and in particular on sacred caves, on annual summer trips to Thailand.

Preface to "Religious Environmental Activism in Asia"

Environmental issues and problems are serious, some are getting worse, and periodically new ones are still being discovered. A multitude of diverse secular approaches to environmental concerns from the local to the global levels certainly have made important progress and are vitally indispensable, such as in the environmental sciences, technology, and conservation as well as in the environmental agencies, laws, and regulations of governments. Nevertheless, secular approaches have proven to be insufficient, this in spite of, among many other things, more than four decades of annual Earth Day celebrations to enhance environmental information, awareness, sensitivity, and responsibility in the USA and other countries. Most secular approaches only treat specific superficial symptoms, rather than the underlying root causes of the unprecedented global environmental crisis as a whole. Also, secular approaches have been insufficient because most ignore the fact that ultimately the environmental crisis as a whole is a spiritual and moral crisis, and that it can only be resolved by radical transformations in the ways that industrial capitalist societies in particular relate to nature. This must involve a profound shift in environmental consciousness and actions which has variously been called the Great Awakening or the Great Turning.

During this new era recognized by geologists, ecologists, and others as the Anthropocene, with so many grave and urgent environmental problems from the local to the global levels, there are also a multitude of diverse practical initiatives in religious environmentalism addressing the challenges which offer significant potential, hope, and achievements.

This special issue of Religions focuses on providing a set of captivating essays on the specifics of concrete cases of environmental activism involving most of the main Asian religions from several countries. Particular case studies are drawn from the religions of Animism, Buddhism, Confucianism, Daoism, Hinduism, Islam, and Jainism. Countries include Bhutan, China, India, Indonesia, South Korea, and Thailand. Thereby this issue offers a very substantial and rich sampling of religious environmental activism in Asia.

This is a relatively neglected subject in the journal and anthology literature which deserves far more attention. Thus, this issue of Religions begins to help fill a strategic gap. It reveals collectively a fascinating and significant movement of environmental initiatives in engaged practical spiritual ecology. Accordingly, this issue should be of special interest to a diversity of scientists, academics, instructors, and students as well as communities and leaders from a wide variety of religions, environmentalism, and conservation.

Leslie E. Sponsel
Special Issue Editor

Editorial

Introduction to "Religious Environmental Activism in Asia: Case Studies in Spiritual Ecology"

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Environmental issues and problems are serious; some are getting worse, and occasionally new ones are still being discovered (Flannery 2010; Meyers and Kent 2005; Ripple et al. 2017). A multitude of diverse secular approaches to environmental concerns from local to global levels have certainly made important progress and are vitally indispensable, such as in the environmental sciences, technology, and conservation, as well as in the environmental agencies, laws, and regulations of governments and through the activities of nongovernmental organizations (Hawken 2007; Shabecoff 1993, 2000; Uhl 2013). Among many other things, since 22 April 1970, annual Earth Day celebrations have enhanced environmental information, awareness, sensitivity, responsibility, and activism in America and other countries (Nelson et al. 2002). By now, more than one billion people participate each year, about one in every seven humans on the planet. Nevertheless, in spite of all of these positive activities, secular approaches have proved insufficient, although necessary.[1]

Most secular approaches only treat specific superficial symptoms, rather than the underlying root causes of the unprecedented global environmental crisis as a whole. Moreover, secular approaches have been insufficient, because most ignore the fact that *ultimately the environmental crisis as a whole is a spiritual and moral crisis* and that it can only be resolved by radical transformations in the ways in which industrial capitalist and consumerist societies, in particular, relate to nature (Foster et al. 2010; Gottlieb 2019; Rockefeller and Elder 1992). This has been variously called the Great Awakening or the Great Turning. This transformation from the Industrial Age (Anthropocene) to the Ecological Age (Ecocene) involves fundamental changes in world views, values, attitudes, behaviors, and institutions relating humans to nature in far more sustainable and green ways. If it is not accomplished voluntarily and incrementally, then it may be suddenly forced at far greater expense and suffering for societies, especially by global climate change as the primary catalyst (Best and Nocella 2006; Bourne 2008; Korten 2006; Raskin 2016).

In addition to vital secular approaches, spiritual ecology is responding to environmental crises, especially since the 1990s. It is generating a quiet revolution, meaning nonviolent but growing exponentially in a multitude of ways. As an umbrella term, spiritual ecology may be recognized as a vast, complex, diverse, and dynamic arena of intellectual and practical activities at the interfaces of religions and spiritualities with nature, ecologies, environments, and environmentalisms. It embraces other narrower fields, such as dark green religion, deep ecology, earth spirituality, earth mysticism, ecomysticism, ecopsychology, ecospirituality, ecotheology, green religion, green spirituality, nature mysticism, nature religion, nature spirituality, religion and ecology, religion and nature, religious ecology, religious environmentalism, religious naturalism, and sacred ecology. The qualifier spiritual is used instead of religious, because it is far more inclusive. Religion usually includes the spiritual, but

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[1]   Usually, it is obvious that the secular and the spiritual are quite separate. However, there can be instances of some overlap between them. Earth Day celebrations are mostly secular, although some individuals and organizations are spiritually or religiously motivated. The book by Bron Taylor (2010) and that by Mary Evelyn Tucker and John Grim (Tucker and Grim 2016) are examples of overlap between the secular and religious/spiritual. Another example of overlap is the parallels between aspects of modern Western science and Buddhism identified by David P. Barash (2014).

some spirituality is not associated with any particular religion (Sponsel 2012, 2014, 2019). Even some atheists are spiritual (e.g., Crosby and Stone 2018).

The core principles of spiritual ecology are the following: (1) It is necessary, and potentially pivotal, in engaging many environmental problems and issues from local to global levels. (2) It recognizes the unity, interconnectedness, and interdependence of all things, beings, and forces, as does Buddhism as well as the Western sciences of ecology and quantum physics (Barash 2014; Wolf 1999). (3) Spiritual ecology relates to the *spiritual, moral, and intrinsic values of nature*. (4) It cultivates respect, affection, and reverence for nature with caring stewardship and benevolent coexistence. These four core principles are among the commonalities of spiritual ecology underlying the diversity of many religious and spiritual traditions (see Appendix A for key resources on spiritual ecology).

Religious organizations such as the Vatican, secular ones such as the Worldwatch Institute, and hybrids such as the former Alliance of Religions and Conservation in association with the World Wide Fund for Nature (WWF) explore and implement into action ideas about the relevance of religion and spirituality in dealing with environmental issues and problems (Dudley et al. 2005; Palmer and Finlay 2003; Posey 1998). This new approach of spiritual ecology may help to at least reduce, if not entirely resolve, many environmental concerns, thereby turning global environmental crises around for the better. It is also applicable at the individual level (Hecking 2011; Pfeiffer 2013; Vaughan-Lee and Hart 2017).

Clearly, religion and spirituality can be extraordinarily influential in positive ways on many levels with their intellectual, emotional, and activist components (Gottlieb 2013; Lerner 2000; Smith 2001).[2] Many religious organizations possess vast resources such as moral capital; persuasive, motivating, and mobilizing power; large populations and social networks; sacred texts with environmentally pertinent points; print publications and other media; and land and various other assets. Religions can generate hope and mobilize followers to make a significant difference. They can arouse and guide emotions as well as reason through their powerful leaders, sacred texts, rituals, and symbols to a much greater extent than secular approaches to environmentalism (Gardner 2002, 2006).

The Anthropocene is the new era recognized by many geologists, ecologists, and others, as human impact on the environment is leaving substantial evidence on the accumulating geological record (Ellis 2018; Schwagerl 2014). An example is layers of plastic debris in sediments, sometimes solidified with sand or other rock (plastic conglomerate or plastiglomerate). Obviously, massive mining projects such as mountain top removal coal mining in Appalachia and the tar sands of Alberta also leave evidence on the geological record. Nevertheless, the Anthropocene remains a controversial issue (Moore 2016). Yet, it serves to emphasize just how far reaching human activities can be in their impact on the environment.

With so many very grave and urgent environmental problems from local to global levels, including everything in between, there is also a multitude of diverse practical initiatives in religious environmentalism addressing the challenges. They offer significant potential and actual concrete achievements (e.g., Gottlieb 2006). This Special Issue of *Religions* focuses on providing a set of captivating essays on the specifics of concrete cases of environmental activism involving most of the main Asian religions from several countries. Regrettably, authors were not available for important religions such as Shintoism and countries such as Mongolia, something inevitable with any collection short of an encyclopedia.

Here, particular case studies in spiritual ecology activism are drawn from the religions of Animism, Buddhism, Daoism, Hinduism, Islam, and Jainism. The countries discussed include Bhutan, China, India, Indonesia, and Thailand. Thereby, this Special Issue offers a very substantial and rich sampling of religious environmental activism in Asia. Importantly, the articles are grounded in extensive original

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[2] It should be mentioned that, among other issues on this subject, some authors have pointed out that religion may not be effective in dealing with environmental concerns or may even have negative environmental consequences (e.g., Taylor 2015, 2016; Taylor et al. 2016; Wexler 2016).

field research. Each article begins with an abstract, so they will not be summarized further here (on Asian religions in general, see Esposito et al. 2018).

Religious environmental activism in Asia is a relatively neglected subject that deserves far more attention in the periodical, anthological, and other literature.[3] Thus, this Special Issue of *Religions* begins to help explore a strategic gap. Collectively, the articles reveal a fascinating and significant movement of environmental initiatives engaged in practical spiritual ecology in Asia. Accordingly, this Special Issue should be of special interest to a broad diversity of scientists, scholars, instructors, and students, as well as communities and leaders from a wide variety of religions, environmentalism, conservation, and countries.

Conflicts of Interest: I declare no conflict of interest.

Appendix A. Spiritual Ecology: A Brief Resource Guide

The first general textbook on the subject is:

Kinsley, David. 1995. Ecology and Religion: Ecological Spirituality in Cross-Cultural Perspective. Englewood Cliffs: Prentice-Hall, Inc.

The most recent general text is:

Grim, John, and Mary Evelyn Tucker. 2014. Ecology and Religion. Washington, D.C.: Island Press. http://www.youtube.com/watch?v=15v6f2moleE, http://www.youtube.com/watch?v=yGJ_r-pEH64.

Among related complementary books are these:

Bauman, Whitney A, Richard R, Bohannon II, and Kevin J. O'Brien, eds. 2017. Grounding Religion: A Field Guide to the Study of Religion and Ecology. New York: Routledge (Second Edition).

Berry, Thomas. 2009. The Sacred Universe: Earth, Spirituality, Religion in the Twenty-First Century. New York: Columbia University Press.

Bohannon, Richard, ed. 2014. Religions and Environments: A Reader in Religion, Nature, and Ecology. New York: Bloomsbury Publishing.

Foltz, Richard C., ed. 2003. Worldviews, Religion, and the Environment: A Global Anthology. Belmont: Wadsworth/Thomson Learning.

Gottlieb, Roger S. 2006. A Greener Faith: Religious Environmentalism and Our Planet's Future. New York: Oxford University Press. https://www.wpi.edu/people/faculty/gottlieb#profile-faculty_profile, http://users.wpi.edu/~{}gottlieb, http://www.youtube.com/watch?v=BVpxdd1Oosg.

Rockefeller, Steven C., and John C. Elder, eds. 1992. *Spirit and Nature: Why the Environment Is a Religious Issue*. Boston: Beacon Press.

Sponsel, Leslie E. 2012. Spiritual Ecology: A Quiet Revolution. Santa Barbara: Praeger. http://spiritualecology.info.

Taylor, Bron. 2010. Dark Green Religion: Nature, Spirituality and the Planetary Future. Berkeley: University of California Press. http://www.brontaylor.com, http://www.brontaylor.com/blog/, http://www.youtube.com/watch?v=uxIvBZEBS1M8, https://www.youtube.com/watch?v=2UtmRLL5e8A.

3　There is, however, substantial literature on particular religions of Asia in relation to nature, ecology, and environment, but with relatively little attention to environmental activism. Especially noteworthy here are the substantial anthologies in the series coedited by Mary Evelyn Tucker and John Grim called Religions of the World and Ecology (Tucker 2010; Tucker and Grim 2017). These are in association with the Forum on Religion and Ecology now at Yale University, and they were published by Harvard University Press. They are a historical benchmark and foundational for this field: Chapple (2002), Chapple and Tucker (2000), Foltz et al. (2003), Girardot et al. (2001), Tucker and Berthrong (1998), and Tucker and Williams (1997). Also noteworthy is the growing recognition in recent decades of the connection between sacred places and biodiversity conservation including in Asia (Verschuuren and Furuta 2016).

Tucker, Mary Evelyn, and John A. Grim, eds. 1993. Worldviews and Ecology. Maryknoll: Orbis Books.

Vaughan-Lee, Llewellyn, ed., 2013. Spiritual Ecology: The Cry of the Earth: Point Reyes: The Golden Sufi Center.

By now there are also several major reference works:

Crosby, Donald A., and Jerome A. Stone, eds. 2018. The Routledge Handbook of Religious Naturalism. New York: Routledge.

Gottlieb, Roger S., ed. 2006. The Oxford Handbook of Religion and Ecology. New York: Oxford University Press.

Hart, John, ed. 2017. The Wiley Blackwell Companion to Religion and Ecology. Boston: Wiley-Blackwell.

Jenkins, Willis, and Whitney Bauman, eds. 2010. Berkshire Encyclopedia of Sustainability: Volume I: The Spirit of Sustainability. Barrington: Berkshire Publishing Group LLC.

Jenkins, Willis, Mary Evelyn Tucker, and John Grim, eds. 2017. The Routledge Handbook of Religion and Ecology. New York: Routledge.

Taylor, Bron, ed. 2005. Encyclopedia of Religion and Nature. New York: Continuum Press, Volumes 1-2.

There are also two academic journals focused on this subject:

Journal for the Study of Religion, Nature and Culture, and Worldviews: Global Religions, Culture, and Ecology.

The Forum on Religion and Ecology at Yale University has extensive resources and also publishes a monthly email newsletter: http://fore.research.yale.edu. (There is a similar organization-in Europe).

Finally, there is the International Society for the Study of Religion, Nature and Culture: http://www.religionandnature.com.

References

Barash, David P. 2014. *Buddhist Biology: Ancient Eastern Wisdom Meets Modern Western Science*. New York: Oxford University Press.

Best, Steven, and Anthony J. Nocella II, eds. 2006. *Igniting a Revolution: Voices in Defense of the Earth*. Oakland: AK Press.

Bourne, Edmund J. 2008. *Global Shift: How a New Worldview is Transforming Humanity*. Oakland: New Harbinger Publications, Inc.

Chapple, Christopher Key, ed. 2002. *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard University Press.

Chapple, Christopher Key, and Mary Evelyn Tucker, eds. 2000. *Hinduism and Ecology: The Intersection of Earth, Sky, and Water*. Cambridge: Harvard University Press.

Crosby, Donald A., and Jerome A. Stone, eds. 2018. *The Routledge Handbook of Religious Naturalism*. New York: Routledge.

Dudley, Nigel, Liza Higgins-Zogib, and Stephanie Mansourian, eds. 2005. *Beyond Belief: Linking Faiths and Protected Areas to Support Biodiversity Conservation*. Gland: World Wide Fund for Nature (WWF) and Alliance of Religions and Conservation.

Ellis, Erle C. 2018. *Anthropocene: A Very Short Introduction*. New York: Oxford University Press.

Esposito, John L., Darrell J. Fasching, and Todd T. Lewis. 2018. *Religions of Asia Today*, 4th ed. New York: Oxford University Press.

Flannery, Tim. 2010. *Here on Earth: A Natural History of the Planet*. New York: Atlantic Monthly Press.

Foltz, Richard C., Frederick M. Denny, and Azizan Baharuddin, eds. 2003. *Islam and Ecology: A Bestowed Trust*. Cambridge: Harvard University Press.

Foster, John Bellamy, Brett Clark, and Richard York. 2010. *The Ecological Rift: Capitalism's War on the Earth*. New York: Monthly Review Press.

Gardner, Gary T. 2002. *Invoking the Spirit: Religion and Spirituality in the Quest for a Sustainable World*. Washington: Worldwatch, Paper 164.

Gardner, Gary T. 2006. *Inspiring Progress: Religions' Contributions to Sustainable Development*. New York: W. W. Norton.

Girardot, N. J., James Miller, and Liu Xiaogan, eds. 2001. *Daoism and Ecology: Ways within a Cosmic Landscape*. Cambridge: Harvard University Press.

Gottlieb, Roger S. 2006. *A Greener Faith: Religious Environmentalism and Our Planet's Future*. New York: Oxford University Press.

Gottlieb, Roger S. 2013. *Spirituality: What Is It and Why It Matters*. New York: Oxford University Press.

Gottlieb, Roger S. 2019. *Morality and the Environmental Crisis*. New York: Cambridge University Press.

Hawken, Paul. 2007. *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No One Saw It Coming*. New York: Viking.

Hecking, Rebecca James. 2011. *The Sustainable Soul: Eco-Spiritual Reflections and Practices*. Boston: Skinner House Books.

Korten, David C. 2006. *The Great Turning: From Empire to Earth Community*. Bloomfield: Kumarian Press, Inc.

Lerner, Michael. 2000. *Spirit Matters*. Charlottesville: Hampton Roads Publishing Company.

Meyers, Norman, and Jennifer Kent, eds. 2005. *The New Atlas of Planet Management*. Berkeley: University of California Press.

Moore, Jason W., ed. 2016. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. Oakland: PM Press.

Nelson, Gaylord, Susan Campbell, and Paul Wozniak. 2002. *Beyond Earth Day: Fulfilling the Promise*. Madison: University of Wisconsin Press.

Palmer, Martin, and Victoria Finlay. 2003. *Faith in Conservation: New Approaches to Religions and the Environment*. Washington: World Bank.

Pfeiffer, Bill. 2013. *Wild Earth, Wild Soul: A Manual for an Ecstatic Culture*. Winchester: Moon Books.

Posey, Darrell, ed. 1998. *Cultural and Spiritual Values of Biodiversity*. Leiden: Leiden University Press.

Raskin, Paul. 2016. *Journey to Earthland: The Great Transition to Planetary Civilization*. Boston: Tellus Institute.

Ripple, William J., William J. Ripple, Christopher Wolf, Thomas M. Newsome, Mauro Galetti, Mohammed Alamgir, Eileen Crist, Mahmoud I. Mahmoud, and William F. Laurance. 2017. World Scientists' Warning to Humanity: A Second Notice. *BioScience* 67: 1026–28. [CrossRef]

Rockefeller, Steven C., and John C. Elder, eds. 1992. *Spirit and Nature: Why the Environment Is a Religious Issue*. Boston: Beacon Press.

Schwagerl, Christian. 2014. *The Anthropocene: The Human Era and How It Shapes Our Planet*. Santa Fe: Synergetic Press.

Shabecoff, Philip. 1993. *The Fierce Green Fire: The American Environmental Movement*. New York: Hill and Wang.

Shabecoff, Philip. 2000. *Earth Rising: American Environmentalism in the 21st Century*. Washington: Island Press.

Smith, Huston. 2001. *Why Religion Matters: The Fate of the Human Spirit in an Age of Disbelief*. San Francisco: HarperCollins.

Sponsel, Leslie E. 2012. *Spiritual Ecology: A Quiet Revolution*. Santa Barbara: Praeger.

Sponsel, Leslie E. 2014. Feature Article: Bibliographic Essay—Spiritual Ecology: Is it the Ultimate Solution for the Environmental Crisis. *CHOICE* 51: 1339–42, 1344–48.

Sponsel, Leslie E. 2019. Ecology and Spirituality. In *The Oxford Research Encyclopedia of Religion*. Edited by John Barton. New York: Oxford University Press. [CrossRef]

Taylor, Bron. 2010. *Dark Green Religion: Nature, Spirituality and the Planetary Future*. Berkeley: University of California Press.

Taylor, Bron. 2015. Religion to the Rescue (?) in an Age of Climate Disruption. *Journal for the Study of Religion, Nature and Culture* 9: 7–18. [CrossRef]

Taylor, Bron. 2016. The Greening of Religion Hypothesis (Part One): From Lynn White, Jr. and Claims That Religions Can Promote Environmentally Destructive Attitudes and Behaviors to Assertions They Are Becoming Environmentally Friendly. *Journal for the Study of Religion, Nature and Culture* 10: 268–305. [CrossRef]

Taylor, Bron, Gretel Van Wieren, and Bernard Zaleha. 2016. The Greening of Religion Hypothesis (Part Two): Assessing the Data from Lynn White, Jr., to Pope Francis. *Journal for the Study of Religion, Nature and Culture* 10: 306–78. [CrossRef]

Tucker, Mary Evelyn. 2010. World Religions and Ecology. In *Berkshire Encyclopedia of Sustainability: Volume I the Spirit of Sustainability*. Edited by Willis Jenkins and Whitney Bauman. Barrington: Berkshire Publishing Group LLC, pp. 439–43.

Tucker, Mary Evelyn, and John Berthrong, eds. 1998. *Confucianism and Ecology: The Interrelation of Heaven, Earth, and Humans*. Cambridge: Harvard University Press.

Tucker, Mary Evelyn, and John Grim, eds. 2016. *Living Cosmology: Christian Responses to Journey of the Universe*. Maryknoll: Orbis Books.

Tucker, Mary Evelyn, and John Grim. 2017. The Movement of Religion and Ecology. In *Routledge Handbook of Religion and Ecology*. Edited by Willis Jenkins, Mary Evelyn Tucker and John Grim. New York: Routledge, pp. 3–12.

Tucker, Mary Evelyn, and Duncan Ryuken Williams, eds. 1997. *Buddhism and Ecology: The Interconnection of Dharma and Deeds*. Cambridge: Harvard University Press.

Uhl, Christopher. 2013. *Developing Ecological Consciousness: The End of Separation*. Lanham: Rowman and Littlefield Publishers, Inc.

Vaughan-Lee, Llewellyn, and Hilary Hart. 2017. *Spiritual Ecology: 10 Practices to Reawaken the Sacred in Everyday Life*. Point Reyes: The Golden Sufi Center.

Verschuuren, Bas, and Naoya Furuta. 2016. *Asian Sacred Natural Sites: Philosophy and Practice in Protected Areas and Conservation*. London: Routledge.

Wexler, Jay. 2016. *When God Isn't Green: A World-Wide Journey to Places Where Religious Practice and Environmentalism Collide*. Boston: Beacon Press.

Wolf, Fred Alan. 1999. *The Spiritual Universe: One Physicist's Vision of Spirit, Soul, Matter, and Self*. Needham: Moment Point Press.

New Roles for Indigenous Women in an Indian Eco-Religious Movement

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Abstract: This article aims to study how a movement aimed at the assertion of indigenous religiosity in India has resulted in the empowerment of the women who participate in it. As part of the movement, devotees of the indigenous Earth Goddess, who are mostly indigenous women, experience possession trances in sacred natural sites which they have started visiting regularly. The movement aims to assert indigenous religiosity in India and to emphasize how it is different from Hinduism—as a result the ecological articulations of indigenous religiosity have intensified. The movement has a strong political character and it explicitly demands that indigenous Indian religiosity should be officially recognized by the inclusion of a new category for it in the Indian census. By way of their participation in this movement, indigenous Indian women are becoming figures of religious authority, overturning cultural taboos pertaining to their societal and religious roles, and are also becoming empowered to initiate ecological conservation and restoration efforts.

Keywords: India; sacred natural sites; indigenous; women; new religious movements; mobilizations

1. Introduction

This article examines a new religious movement with strong ecological articulations that is gaining ground among the indigenous or Adivasi[1] people of east-central India. The movement accords a uniquely pivotal role to women—as legitimately channeling the Earth Goddess via possession trances. As a result of this movement the sacred groves in which the Earth Goddess is believed to reside are being rejuvenated, the Adivasi women who function as her mediums are being given a new and elevated status, and Adivasi religiosity as a whole is gaining a platform from which it can voice demands for politico-legal recognition. For clarification, a sacred grove is a small patch of forest that is protected for the reason that it is believed to be sacred (see Gadgil and Vartak 1975) and it is often a site of ancestral or deity worship (see Ramakrishnan et al. 1998). This article will examine the various elements of this movement in detail. It contends that the movement intersects with the important political issues of the day—be it environmental conservation, women's empowerment, or the recognition of indigenous people's rights, demands, and ecological agency. The movement is aimed at internal and external reform—external reform is solicited by the voicing of demands for rights and recognition, and internal reform is facilitated by overturning taboos related to the role of women in Adivasi society, spearheading small-scale, socio-economic development in villages, and by sensitizing the Adivasi population in general to the dangers of ecological destruction. The linking of different issue areas has been noted in other social movements involving indigenous people—for example, linkages of this kind are reported to have taken the form of the "'ethnicization of ecological

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[1] Indigeneity is a contested identity in India (see Karlsson 2003), though one claimed by almost 10% of the Indian population (see Rycroft 2014). The term 'Adivasis' (which this paper will employ), derived from Sanskrit and meaning 'original dwellers', is generally used, to denote what are argued to be India's indigenous peoples (see Kela 2006).

destruction' as well as the 'ecologization of ethnic subordination'" (Parajuli 1996, p. 16). In India, the role of women in environmental conservation movements is well established, and was first legitimized by way of the Chipko Movement in which many rural women famously protected trees from being felled in Himalayan forests (see Jain 1984). However, within Adivasi society, traditionally, political roles for women have been delegitimized, and this has been coupled with a suspicion of women's ethno-botanical knowledge, for the reason that it is understood to be superior to that possessed by men.

The article contends that the legitimization of the new roles for Adivasi women as legitimately channeling the Earth Goddess, and as spearheading an ecological movement, is the result of an act of geographic imagination. It will examine this act of imagination in the context of the emphasis that scholars of Adivasi mobilizations have placed on the application of non-rationalistic interpretative frameworks to arrive at an understanding of Adivasi social movements—for example, in many of the Adivasi peasant insurgencies against British rule, the insurgents expressed that they felt motivated by a God (see Chaudhuri 2010). Ranajit Guha, an important postcolonial studies scholar, cautions against ignoring ways of understanding the self and the world that may not necessarily fit into rational discourse (see Guha 1988).

The fieldwork for the exploration of women's issues in this movement, which combined participant observation and interviews, has been conducted intermittently for over a decade since 2008 primarily in the Indian state of Jharkhand in east-central India—and the article will relate its arguments and empirical findings mostly to this geographical context. It was possible for the researcher to conduct research that spanned such a long period of time for the reason that the researcher grew up in a rural area in the state of Jharkhand and returns to the area on a regular basis. This, as well as the fact that the researcher maintains close contacts with participants in the Sarna Movement, has facilitated the study that this article presents. In every instance of an individual movement participant or supporter being cited, names have been changed, except for those cases in which the speaker held or has sought public office.

2. The Power of Geographic Imagination

Gayatri Spivak, a postcolonial scholar who has studied the processes by which development may create marginalizations, indicts mainstream developmentalism as a cartographic practice resulting in the exclusion of pre-capitalistic and indigenous communities to "make way for more traditional geographic elements of the map and the world today" (Spivak 1998, p. 338). To counter this, what would be needed is a new cartographic practice—one that imagines the geographic elements of the world differently. Spivak's understanding of mainstream developmentalism and the exclusions it perpetuates, is relevant to the situation in Jharkhand as the state was conceived as a homeland for the Adivasi communities of east-central India who claim an indigenous identity and some of whom continue to be oriented towards a subsistence model of economy rather than the production of surplus.

The power of geographic imagination is evinced by several ecological struggles from around the world. In the United States of America, native Americans protested against the geological burial of nuclear wastes at the Yucca Mountain in Nevada, with the explanation that they understood radioactivity to be an 'angry rock': "a spiritual being that has been taken from its home without its permission, used in ways it does not agree with, and is being returned to the land without reducing its anger" (Stoffle and Arnold 2003, p. 235). Another example of how geographic imagination can fuel environmental protest is the struggle of the Columbian U'Wa tribes-peoples against Occidental Petroleum's oil mining project on their territory—they argued that oil was the blood of the Earth which they held sacred. Consequently, mining the Earth for its blood would be a violation of the deity which they venerated (see Martinez-Alier 2004; Arenas 2007). It is interesting to note that these acts of geographic imagining that oppose mainstream developmentalism, do not just imagine the Earth alternatively, they also make use of an alternative rationality while doing so. Such a strategy has in fact been recommended by the theorist Jean Baudrillard. According to him, the solution to the problems caused by mainstream development is to make use of non-rationality and the imagination to

posit critiques and alternatives, till a point where a breakdown in mainstream thinking is achieved (see Coulter 2004).

The power of geographic imagination does not stop at its capacity to inspire protest—it has been the basis for high-level environmental policy reforms in several states as well as at the global level. At the state level, two such examples would be the enshrinement of the rights of Nature in the Ecuadorian constitution in 2008 and the passage of the 'Law for the Defense of Mother Earth' by the Bolivian government in December 2010. The championing of eco-centric rights by the Ecuadorian constitution is an affirmation of the importance of 'Buen Vivir', a Spanish term that can be translated as 'a good way of living' and which is based on the eco-communitarian cosmovision of the Andean indigenous peoples. The president of Ecuador's Constituent Assembly, Alberto Acosta, is reported to have stated, in relation to the inclusion of the concept of Buen Vivir in the constitution, that "only by imagining other worlds will this one be changed"[2]. In fact, postcolonial scholar Gayatri Spivak has also advocated a reimagination of the planet. According to her the challenge of the Anthropocene requires a new planetary consciousness—this would be an act of radical imagination, requiring humans to see the Earth the way an alien would, and to see themselves as planetary beings rather than as global agents (Spivak 2003, p. 73).

Jharkhand—Conceptualization of the State

The state of Jharkhand was conceived, by the leaders of the Jharkhand Movement (the movement for the formation of the state of Jharkhand), as a homeland for India's Adivasis and as a place where human relations with the environment could be restructured along ecological lines, in keeping with the express Adivasi understanding that Nature should be accorded primacy in human activities (see Munda and Mullick 2003). This conceptualization was an act of geographic imagination—i.e., it was aspirational and has in fact met with criticism for the reason that it did and does not correspond with lived realities that Adivasis experience (see Shah 2007) and perhaps do not unanimously aspire to. Nevertheless, after the formation of the state of Jharkhand in 2000, many would agree that its ecologically-oriented conceptualization has not manifested in state-level policy reforms that have been implemented to initiate ecological restructuring in a concrete manner. The conceptualization of Jharkhand as ecological does however continue to inspire. Jharkhand is a state that has witnessed undeterred resistance to mining. The slogan Jal-Jangal-Jameen (Water-Forests-Land) which was used to rouse support for the creation of the state of Jharkhand, continues to reverberate in its villages today, as struggles to maintain a sustainable livelihood on its natural resources remain undiminished. The politico-religious movement that this article will go on to describe and discuss, derives from the school of Adivasi ecological conceptualization and political strategizing that the Jharkhand Movement represents.

3. The Empowerment of Women in Indian Religions—A Focus on Adivasi Religiosity

Within Indian religious traditions such as Hinduism, there are numerous examples of women exercising authority as female gurus—these women are often from social backgrounds that would not ordinarily accept a woman in an authoritative role (see Charpentier 2010). In Adivasi society, women occupy an ambivalent position. On the one hand Adivasi women are accorded status—and several examples of this have been documented. For example, as per tradition, which is still in place in some areas, when Mundas go from one village to another, their wives lead them. The knowledge of the admixture of the roots used to brew rice beer, which is a sacred drink, is kept by women, and a woman's ethno-botanical knowledge, particularly as pertaining to healing, is highly valued, and yet simultaneously suspect (Mullick 2000, p. 344). In case of the Saoras, Verrier Elwin describes the

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2   (Buen Vivir 2018): https://www.rapidtransition.org/stories/the-rights-of-nature-in-bolivia-and-ecuador/.

legitimized, indeed valued healing role of the female Saora shaman—a role, however, that is prohibited for women by most other Adivasi groups:

> ... it is in the treatment of the sick that the shamanin, or the female shaman finds her greatest scope and fulfilment. Her methods of diagnosis and cure are varied and ingenious—she uses the fan and the lamp, the bow and the sword, handfuls of rice and pots of wine. Now she dances in ecstasy, now lies lost to the world in trance. When she has found the cause of disease or tragedy, she is at infinite pains to heal the wounds; she sucks infection from her patient's body, burns it with flashes of gunpowder, bites and kisses it, massages it to expel the evil, orders the sacrifice of goat or buffalo, speaks healing and consoling words.
>
> <div align="right">(Elwin 1955, p. 148)</div>

At the same time, any discussion of Adivasi women's religiosity cannot be de-linked from the issue of witchcraft beliefs and related accusations that are prevalent in Adivasi society. Belief in witchcraft is currently widespread in Jharkhand—a report suggests that it is as high as 75% in the state's population (Sahu 2018, p. 86). Crimes derived from the belief that a certain woman is a witch are also not uncommon. Jharkhand is reported to have witnessed 414 murders of suspected witches from 2001 to October 2013 (Sahu 2018, p. 85). Addressing the widespread belief in witchcraft among the Adivasis of Jharkhand, Madhuparna Chakraborty has argued that it is derived from the relatively high status that women are accorded in Adivasi society, and that in relation to women, belief in witchcraft is an "acknowledgement of their power and a reflection on the fundamental illegitimacy of that power" (Chakraborty 2014, p. 81). She goes on to argue that Adivasi culture, with a particular emphasis on Oraon society, evinces a firm belief in the dichotomy between black and white magic—witchcraft is associated with black magic, whereas white magic is associated with shamanism. Nevertheless, practitioners of white magic, i.e., shamans, are understood to be exclusively male (see Chakraborty 2014). According to Samar Bosu Mullick, belief in witchcraft is derived from a fear of the female principle. He also argues that belief in witchcraft is a new phenomenon in Adivasi societies and that it is derived from Hinduized ideas of female spiritual power, overlaid with a fear of this very same power (see Mullick 2000). A Santhal folktale describes a gendered spiritual contest, whereby knowledge of witchcraft was supposed to have been transmitted from the Adivasi supreme being to men, but by way of trickery women managed to learn it instead (see Bodding 1948). W. G. Archer described how Santhal women were excluded from the sacred grove (jaher than) and were prohibited from being present when sacrifices were offered there (see Archer 1974)—this is still the case today in several Adivasi groups, as per orthodox norms (Mullick 2000, p. 353).

The widespread perception of witchcraft in Jharkhand is particularly striking in the context of the Adivasi religious-political movement which this article will go on to describe. By their participation in this movement, Adivasi women overturn many of the taboos instituted to exclude women from an active religious/spiritual role—ordinarily this would have earned them charges of witchcraft (see Mullick 2000). Furthermore, the women who participate in the movement are outspoken, as Adivasi women who are branded as witches are reported to be (see Skaria 1997). In fact, an important aim of this movement seems to be a facilitation of this outspokenness. In relation to the movement, many of the participating women function as shamanesses—a role that is prohibited for women among all Adivasi groups except for the Saoras, Koyas and Kondhs (see Chakraborty 2014). Perhaps most interestingly, they conduct regular worship ceremonies in sacred groves, where, as mentioned earlier, their presence is prohibited, and claim to be possessed by a goddess who is known as Chala Pachcho among the Oraons and Jaher Era among the Santhals. In popular depictions of the goddess in poster art she appears as an old woman wrapped in a white cloth. Finally, this movement is explicitly political and by participating in it as religious authority figures, women are playing a legitimized political role.

4. The Sarna Movement

The movement that this article is concerned with, is known as the Sarna Movement, as since the 1990s, sacred groves, which are known as sarnas by an Adivasi group known as the Oraons, have become the focus of devotional worship by Adivasi women. The movement is strongest in the state of Jharkhand and it is reported to have been initiated by a series of cases of divine possession among Adivasi women (mostly Oraons, but also Mundas). The women would believe themselves to be possessed by the sacred grove goddess, whom they commonly referred to as Sarna Mata. When possessed, these women claimed to experience a trance-like state during which they would be led to sacred groves—in some cases, these were places that the women claimed were forgotten sacred groves which had fallen out of worship. Such sites were subsequently sacralized. While experiencing trances, the women would whirl their heads at high speed or fling their hair from side to side. The worship of sacred groves in connection with experiences of possession by Sarna Mata has taken on the character of an eco-religious movement, and by way of it several sites have been sacralized, have been planted with saplings and have become the weekly focus of the religiosity of Adivasi women (see Borde and Jackman 2010).

The central feature of this movement is a weekly worship ceremony which is conducted on Thursday in the sacred groves. The ceremonies are highly structured and include a prayer and hymns that are sung each time the ceremony is enacted—there are in fact even hymn books in print. Interestingly, the prayer is made to Dharmesh, who is the supreme being according to the Oraons, and is understood to be a sky-God (see Xaxa 1992), as well as to Sarna Mata who is known more traditionally by the Oraons as Chala Pachcho. The rituals also include the circumambulation of a tree (which is usually of the *shorea robusta* species) growing out of a central earthen platform, and the offering of rice grains and incense. It seems that the offerings are made both to Dharmesh and to Sarna Mata. The women also bring pots of water to the sacred grove and pour some of it onto the tree which they circumambulate. The women express that this is a religious-symbolic act and that while enacting it they imagine that they are cooling the Earth in which they understand great heat to have accumulated at the current time (Fieldwork Notes 2008). It seemed that this expression of the heating of the Earth was the women's own understanding of the climate change which they had been witnessing. In the course of the ceremonies, the women also water the saplings which they have planted as part of their efforts at the ecological restoration of the sacred groves. It is interesting to note that in Adivasi society certain trees are considered auspicious while others are seen as being inauspicious. The women make efforts to plant tree saplings such as those of the *shorea robusta* species for the reason that it is considered to be highly auspicious.

It is not uncommon for men to be present at these ceremonies, though they do not have as active a role as the women, apart from playing a drum known as a mandar while hymns are being sung, and participating in the offering of rice grains, incense, etc. However, on some occasions the village priest or pahan may also be present, and when this occurs he leads the principal prayer, and may add a speech/sermon on socio-cultural matters to it. These weekly ceremonies are known as Sarna Prarthana Sabhas. Spontaneous and often mass possession is commonly witnessed during the ceremonies. These usually occur when hymns are being sung. In very rare cases, men are reported to have become possessed—in almost all cases however, it is women who experience possession, and it not uncommon for teenage girls to get possessed as well. While possessed, the women approach the central earthen platform, sometimes on their knees, as they whirl their heads. A range of articulations can be heard to be made by the possessed women, in most cases relating to their own empowerment or the empowerment of women in general. Some of the articulations that have been recorded during fieldwork are presented below:

"Where is my rope? Mother, where is my rope? I have lost my rope!"
"Why do men hate women? If it wasn't for women, how would men be born?"
"Mother, give me wisdom, give me wisdom for my studies!"

"Mother, I have no interest in eating or drinking. No interest in eating or drinking!".

(Fieldwork Notes 2008, 2019)

While the possessed women are making these articulations, in most cases while gathered around the tree in the central earthen platform, and sometimes even circumambulating it while on their knees, if a pahan is present, he stands to one side without intervening in the women's possession experiences. If however, the possessions go on for a very long time (roughly more than 15 or 20 minutes on most occasions), the pahan may intervene by instructing the possessed women to come out of their trances by touching their foreheads to the ground—this instruction is always followed, with the desired effect (Fieldwork Notes 2019). On special occasions such as when a new site is being sacralized, or when the women participating in the ceremony have been fasting for long periods of time prior to it (this does occur and in one instance a teenage girl is claimed to have fasted for three weeks), no attempt is made to intervene in the possession trances even when they go on for longer than an hour. Another aspect of this religious movement is the prohibition of alcohol consumption and the promotion of vegetarianism (Fieldwork Notes 2008).

4.1. The Evolution of the Sarna Prarthana Sabhas

The answer to how the Sarna Prarthana Sabhas have acquired their structure lies in a trend of socio-cultural introspection among Adivasis that can be traced to the post-independence period in India and which was interlinked with Gandhian ideas of politico-religious mobilization. A prominent leader vis-à-vis this trend was Kartik Oraon, a parliamentarian from Jharkhand. He initiated a practice of holding weekly prayer meetings called Parha Prarthana Sabhas at which Adivasis would pray, solve legal disputes and discuss rural development issues—it can be argued that this was not dissimilar to the institution of the Atmiya Sabha which was founded by Raja Ram Mohan Roy in 1815 and was later renamed the Brahmo Samaj (Jones 1989, p. 33), and as such Adivasi assertion movements can trace a legacy (if they would want to) to Hindu revivalist movements of the 19th century. Unlike the Brahmo Samaj, the institution of the Parha Prarthana Samaj did not survive the death of its founder and after Kartik Oraon's death in 1981 the institution became dysfunctional. However, a little over a decade later, when, as mentioned earlier, the spontaneous possession of Adivasi women started occurring, and when this led to the gathering of women in sacred groves, the revival of the institution of the Parha Prarthana Sabha was initiated. The emerging Adivasi political leaders of the time gave the phenomenon of possession by Sarna Mata a new context. They incorporated the experiences of possession by women into the earlier Parha Prarthana Sabha structure and started what is now known as the Sarna Prarthana Sabha. The Sarna Prarthana Sabha is therefore structured along the lines of the older prayer meeting but includes primarily large numbers of Adivasi women as active participants, and legitimizes the women's experiences of possession by providing space for it, both literally and metaphorically. Instead of holding the Sarna Prarthana Sabhas in the akhras (meeting grounds) or dumkurias (dormitories) as the Parha Prarthana Sabhas were, they started holding them in sarnas (and sometimes newly instituted ones), in an acknowledgement of the significance of the sites to which the women experiencing possession believed to be led—this was of course, also an acknowledgement of the significance of Adivasi women's religious experiences and of their legitimate religious role (see Borde 2016).

4.2. The Movement for an Adivasi Dharam Code

The Sarna Movement must be viewed within the context of an important contemporary development within Adivasi society in India which is the demand for a 'Dharam Code' i.e., a religious code in the census that would allow followers of Adivasi religions to claim their religion under a particular name. A code of this kind did exist in Indian censuses that were conducted in colonial times. Followers of Adivasi religiosity were counted in the various censuses from 1871 to 1941 under a separate category that was termed differently from one census to the next—such as

'Tribal Religions', 'Animists', or 'Aboriginals'. However, in 1951 the government of independent India dropped the practice of counting the followers of Adivasi religions under a separate category (Oddie 2016). Since then, Adivasis who want to emphasize that they do not follow Hinduism can choose to be counted under a category known as 'Other religions and persuasions'. In the census of 2011, 7,937,734 people were counted as belonging to this category. Most numerous of the followers of the various religions listed under this category, were the followers of 'Sarna'—4,957,467 people chose to express their affiliation to this religious group (Census Data 2011). This is not to say that 'Sarna' is being claimed as the official religion of the Adivasis across India. In fact, it is reported that a consensus had been reached vis-à-vis the possible names under which the claim for religious recognition would be made—the three options being 'Prakriti Dharam', 'Adi Dharam', or simply 'Adivasi' (Interviews 2018). In the conceptualization of what the religion of Adivasis is, and how it would be represented, Adivasi leaders have been emphatic on the point that sacred natural sites and their worship are an important aspect of Adivasi religiosity. They have also been emphatic on the point that Adivasis have protected Nature for all Indians and that they should be rewarded for this effort. At a protest in New Delhi aimed at gaining recognition for the distinctiveness of Adivasi religiosity, one Adivasi leader declared that the day there is not a single Adivasi left is the day there will not be anyone else left on planet Earth because it is Adivasis who ensure, by their acts of environmental care, that water and air are preserved for all other human beings (Fieldwork Notes 2019). Adivasi leaders have in fact been keen to emphasize the Nature worship aspects of their religiosity from the inception of political articulations surrounding it. In the mid-fifties, Jaipal Singh Munda, the leader of the movement for the formation of the state of Jharkhand, encouraged Adivasis to stress their spiritual/religious difference from Hinduism by emphasizing its naturalistic and pantheistic elements, coupled with the significance it granted to sacred natural sites.

However, in relation to the new roles that women are finding for themselves in the Sarna Movement it is important to note that to obtain an official recognition of Adivasi religiosity as distinct from Hinduism, the first step is obviously a consolidation of this religiosity and the strengthening of communal expressions of it. With this objective in view, it is easy to see how a sacrificial religiosity that is performed by a religious specialist such as a priest on only a few occasions every year, may be understood to require augmentation. The fact that women had shown themselves, quite spontaneously, to be able and willing to perform the "cultural labor of ritual" which involves time, attention and effort (Smith 1978, p. 88), may have been seized upon as an opportunity to supply the necessary augmentation. Furthermore, Adivasi women have also been actively involved in the ecological restoration of sacred natural sites. In this regard, it is also important to keep in mind the "role of place in the construction of community" (see Kong 2001)—the specificity of the place that has become the locus of Adivasi religiosity must not be ignored. In a climate of political contestation over space for Adivasis (both secular and sacred), in which the slogan Jal-Jangal-Jameen has become synonymous with the assertion of Adivasi rights, it is perhaps not coincidental that patches of protected forest that are claimed as sacred, are playing an increasingly important role in strengthening Adivasi communal life.

4.3. The Empowerment of Women in the Sarna Movement

An important question that still remains is how Adivasi politicians facilitated the participation of women in ceremonies in a sacred space where their presence is traditionally understood to be taboo. Additionally, what are the intersections between the legitimization of Adivasi women's religiosity as expressed in this manner, and the widespread belief among Adivasis that women are capable of witchcraft. Lastly, since this Adivasi religious-political movement is not aimed at the empowerment of Adivasi women per se, the question remains as to what extent it has facilitated the empowerment of Adivasi women. The article will take up each point, one by one.

In relation to the overturning of the taboo related to the presence of women in sarnas, Adivasi leaders use a language that is reminiscent of the introspection that occurred during the Indian independence movement, i.e., of the necessity of purging society of the 'social evils' that have crept into

it over time. The taboo against the presence of women in sacred groves is constructed as one of these 'social evils' and the active involvement of women in regular worship ceremonies in sacred groves is seen as a return to an original and uncorrupted Adivasi tradition (Fieldwork Notes 2008, 2009).

Adivasi leaders such as Birender Bhagat who instituted the Sarna Prarthana Sabhas do speak out against witchcraft, but not in such a way as to deny its existence (Fieldwork Notes 2008, 2009). What must be remembered is the strong notion that is prevalent among the Oraons, of the dichotomy between black and white magic. It seems that the experiences that Adivasi women are now having in sacred groves are legitimized for the reason that they are seen as being beneficial to society—indeed a form of white magic.

As for the empowerment of women within the Sarna Movement, or the enhancement of their status, it is important to take note of the following points. The Sarna Prarthana Sabhas are held every Thursday morning. As per Adivasi customs, Thursday is significant in its being the one day in the week when it is prohibited to give brides away, plough the land or cut trees. It is considered the day of the Mother. The villages in which Sarna Prarthana Sabhas are held regularly have also instituted Sarna Prarthana Samitis. These are bodies with formally elected members and heads. These Samitis have initiated several community welfare projects, including agricultural development, cottage industry development, the installation of common stoves and a successful mushroom cultivation program. Many of these welfare projects target women specifically, and indeed Adivasi women have added to their incomes by participating in these projects (Fieldwork Notes 2008). Moreover, the Sarna Movement's stance against the consumption of alcohol has implications vis-à-vis reduction of the domestic violence that Adivasi women suffer. In fact, if one of the women known to the Sarna Movement participants is reported have been beaten by a male family member, large numbers of the women gather outside that particular house and publicly and collectively shame the offender. Several of the young women who participate in the Sarna Movement have been encouraged and supported by their older counterparts to enroll for university degree programs (Fieldwork Notes 2008)—one Adivasi woman was emphatic that girls needed to 'go ahead' (Rajmuni Toppo, April 2008).

However, perhaps the most significant contribution that Sarna Prarthana Sabhas have made towards the empowerment of women is the conferral of authority onto them. Women and teenage girls have expressed this in terms of the manifestation of Sarna Mata's power. They believe that when the goddess possesses them, they are able to address public gatherings and speak at length on topics they had not known they would be able to—and these speech acts are legitimized. It is certainly true that some of the women and girls who participate in the Sarna Prarthana Sabhas are later able to speak with eloquence and confidence. This was perhaps most evident at a dharna or sit-in protest that had been organized in New Delhi in February 2019. The dharna was aimed at rousing support for the official recognition of Adivasi religiosity by the Indian government. Adivasi representatives from many states were present and speeches were made by Adivasi women from Jharkhand—and these women played a prominent role at this high visibility event (Fieldwork Notes 2019). Many of these speeches contained strong political assertions, and Phulmani Oraon (name changed), a young Oraon woman from Jharkhand, speaking from a lectern on a dais, even threatened the Indian government with serious consequences if it risked denying the official recognition of Adivasi religiosity—"if they do that then they will learn that it is blood and not water that flows in our veins" (Phulmani Oraon, March 2019). She went on to state that Adivasis were no longer suppressed. That they had the means to travel to New Delhi to show their strength to the Indian government. Another young Adivasi woman from Jharkhand asserted that Adivasis would boycott the next election and the next census if their demands were not met (Fieldwork Notes 2019). For outspoken women, who overturn taboos and enact roles of religious and indeed political authority that were earlier denied to them, to be publicly legitimized—this can be seen as a concrete example of the empowerment of women within the Sarna Movement.

4.4. Backlash—The Sarna Movement, Sacred Groves and Gendered Conflicts

An important issue that must not be left unaddressed relates to the backlash provoked by the reworking of tradition on the scale that the Sarna Movement has engaged in. After a speech against the consumption of alcohol, in the village of Boreya in the Kanke block of Ranchi district in Jharkhand, local manufacturers of country liquor decided to put a stop to the Sarna Prarthana Sabhas that were held regularly in the sacred grove in the village—the reason being that the Adivasi leader who made the speech was involved with organizing the ceremonies. The manufacturers initiated this by prohibiting women from entering sacred groves, reinstating the Adivasi taboo against the presence of women in sarnas. The women attending the Sarna Prarthana Sabhas attempted to counter this move and on the 12 November 2009 this led to an outbreak of violence in the area outside the sarna in the village of Boreya. This conflict was situated within a larger political dynamic which is described subsequently.

In 1995, the Bible Society of India published a Bible in Kurukh (the Oraon language)—known as the 'Nemha Bible'. It was reported to contain derogatory references to non-Christian Adivasis and sarnas. These remarks were publicized by Hindutva-influenced activists at a village in the district of Gumla in Jharkhand state in 2008, contemporaneously with the outbreak of violence against Christians in the adjacent state of Odisha. However, in recognition of the imminent crisis, a united front was formed between the Church, the Adivasi Students Union and other Adivasi institutions, after a Catholic cardinal apologized for the remarks in the Nemha Bible, citing errors in translation. Nevertheless, after this was over, some Adivasi leaders saw the act of joining hands with the Church as an unnecessary compromise and broke off from others with whom they had been previously involved in organizing Sarna Prarthana Sabhas, to start a splinter group known as the Sarna Raksha Manch which is reported to be supported by the Rashtriya Swayamsevak Sangh (RSS), a pan-Indian Hindu right-wing organization. The Sarna Raksha Manch is understood to be emphatic on the importance of maintaining orthodox Adivasi traditions including prohibiting the presence of women in sarnas.

The Sarna Raksha Manch is reported to have provoked the violent gendered conflict in the village of Boreya. Women who wanted to enter and worship in the sarna in the village were attacked by men and women who were involved in local liquor businesses—the Sarna Raksha Manch is understood to have co-opted local anxiety provoked by the anti-alcoholism propaganda of the organizers of the Sarna Prarthana Sabhas. The local pahan's (priest's) resentment of the increasing (secular) authority of the women who were attending the Sarna Prarthana Sabhas also played a role. This resentment is understood to be related to the pahan's role in liaising with the Block Office to ensure that village development schemes were being properly implemented. According to the villagers, the pahan was known to be ineffective and as the women who participated in the Sarna Prarthana Sabhas in the village of Boreya started gaining prominence and confidence, they began to circumvent his authority and liaison with the Block Office themselves (Borde 2016).

5. Conclusions

This article has explored how a new religious-political movement may be facilitating the empowerment of Adivasi women in India, specifically in the state of Jharkhand. It has described how several socio-religious taboos were overturned to allow this to take place. However, it has not explored why Adivasi women started participating in this movement in the first place i.e., why they started experiencing possessions. It is by refraining from doing so that the article demonstrates its alignment with Ranajit Guha's injunctions—the article will not attempt to rationalize the Adivasi women's experiences of possession (see (Smith 2006) for similar injunctions), rather it will bracket them off, or remove them from consideration, out of respect for the interpretation of these experiences that the Adivasi women themselves have. Nevertheless, it is interesting to note that there has been important scholarly work on the interweaving of eco-political movements and spirit possession (see Beban and Work 2014). David Hardiman's study of the Devi Movement which arose among the Adivasis of the state of Gujarat in the 1920's also documents instances of possession by a goddess and he discusses how this was interwoven with social reform (see Hardiman 1987). The Sarna Movement

gains added significance in light of the widespread belief in witchcraft in Jharkhand, and the historical propensity of Adivasi societies to cleanse witches out of the body politic before a major rebellion or movement (see Kelkar and Nathan 2001).

The article has also described how this religious-political movement is constructing itself along ecological lines. As such, the movement is aligning indigenous religiosity in India with its legitimized, even celebrated, international image. However, it is important to note that scholars have cautioned against an international eco-politics that freezes indigenous peoples as ecologically moral—particularly the self-construction of indigenous peoples in ways that fit into this discourse (see Grande 1999; Conklin 1997). It has been argued that an eco-politics such as this offers indigenous peoples ecological rights and agency as incentives for adhering to standards of ecological stewardship that may not in fact be theirs (see Lindroth and Sinevaara-Niskanen 2013). At the same time, scholars argue that these discourses are useful as they provide indigenous groups room for maneuver, as well as a means for articulating and legitimizing their concerns (see Agrawal 1997; Li 1996). This is precisely what the participants in the Sarna Movement seem to be doing. According to Alpa Shah, the representation of indigenous people as opposed to modernity and "as representing the core values of the eco-community" is problematic (Shah 2007, p. 1824), as this may not correspond with the realities of Adivasi lives. However, by representing themselves and their religiosity in ecological ways, Adivasis are carving a space for themselves, from which their voices gain legitimacy and strength.

This brings us to question whether the Adivasi women who participate in the Sarna Movement are in fact ecofeminists. The term ecofeminism is one that these women would not be familiar with, and the same can be said for the concept of ecofeminism as it has been theorized. However, the women do act in favor of their empowerment as a collective and do often voice this push for empowerment in gendered terms. The women are also ecologically oriented and are acting in practical terms to protect and nurture the environment. Ecofeminism can be argued to be an amalgamation of agendas and the term is often voiced from an etic perspective. Some strands of ecofeminist thought theorize a psycho-biologistic connection between women and nature—Susan Griffin states: "We are Nature seeing Nature" (Griffin 1978, p. 226). Others theorize a connection derived from women's ecological labor and engagement: "We saw that the impact on women of ecological disasters and deterioration was harder than on men, and also, that everywhere, women were the first to protest against environmental destruction" (Mies and Shiva 1993, p. 3). This article contends that the women who participate in the Sarna Movement act as ecofeminists, but without necessarily seeing the linkages between their actions which empower women and those that protect or restore the environment. It is also important to note that their identity as challengers of the status quo (an identity they express pride in claiming) is centered more on their role as activists for an Adivasi cause—that of obtaining official recognition of the distinctiveness of Adivasi religiosity.

For the larger Adivasi society within which the Sarna Movement is contextualized, the legitimizing of the participation of Adivasi women in worship ceremonies in sacred groves can be called an act of geographic imagination—a space where the presence of women was understood to be prohibited is now accepted as one they can legitimately claim. Furthermore, it is by the claiming of this sacred space by Adivasi women that Adivasi society as a whole is aspiring towards the official recognition of its religiosity. Additionally, the space that is being claimed is a natural site and an important part of the claims-making process that the women engage in, is the ecological restoration of these sites—this has implications for the manner in which Adivasi religiosity is constructing itself nationally and it also has implications vis-à-vis its perception at the international level at which the linkages between indigenous religiosity and ecological conservation are both established and celebrated (see Rode 2015; Verschuuren et al. 2010; Lee and Schaaf 2003). Further research into the nuances of this act of imagination is certainly needed and must be conducted with the sort of open-mindedness Ranajit Guha advocates.

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References

Agrawal, Arun. 1997. Community in Conservation: Beyond Enchantment and Disenchantment. In *CDF Discussion Paper*. Gainesville: Conservation and Development Forum.

Archer, William George. 1974. *The Hill of Flutes, Life, Love and Poetry in Tribal India: A Portrait of the Santals*. London: George Allen and Unwin.

Arenas, Luis Carlos. 2007. The U'Wa Community's Battle against the Oil Companies: A Local Struggle Turned Global. In *Another Knowledge is Possible: Beyond Northern Epistemologies*. Edited by Boaventura de Sousa Santos. London: Verso, pp. 120–47.

Beban, Alice, and Courtney Work. 2014. The Spirits Are Crying: Dispossessing Land and Possessing Bodies in Rural Cambodia. *Antipode* 46: 593–610. [CrossRef]

Bodding, Paul Olaf. 1948. *Traditions and Institutions of the Santhals: Horkoren Mare Hapramko Reak Katha*. New Delhi: Bahumukhi Prakashan.

Borde, R. 2016. The Sarna Movement. In *Force of Nature: Essays in History and Politics of Environment*. Edited by Sajal Nag. New Delhi: Manohar, vol. 1, pp. 177–90.

Borde, Radhika, and Alana Jules Jackman. 2010. The Devi as Ecofeminist Warrior. In *Sacred Natural Sites: Conserving Nature and Culture*. Edited by Bas Verschuuren, Jeffrey McNeely, Gonzalo Oviedo and Robert Wild. London: Earthscan, pp. 272–79.

Buen Vivir: The Rights of Nature in Bolivia and Ecuador. 2018. Available online: https://www.rapidtransition.org/stories/the-rights-of-nature-in-bolivia-and-ecuador/ (accessed on 23 April 2019).

Census Data. 2011. C-01 Appendix: Details of Religious Community Shown Under 'Other Religions and Persuasions' in Main Table C-1-2011 (India & States/UTs). Available online: http://www.censusindia.gov.in/2011census/population_enumeration.html (accessed on 24 April 2019).

Chakraborty, Madhuparna. 2014. Witchcraft, Shamanism and the Tradition of Healing among the Adivasi Societies of India. *Journal of Adivasi and Indigenous Studies (JAIS)* 1: 76–89.

Charpentier, Marie-Thérèse. 2010. *Indian Female Gurus in Contemporary Hinduism: A Study of Central Aspects and Expressions of Their Religious Leadership*. Åbo: Åbo Akademi University Press.

Chaudhuri, Binay Bhushan. 2010. Revaluation of Tradition in the Ideology of the Radical Adivasi Resistance in Colonial Eastern India, 1855–1932—Part II. *Indian Historical Review* 37: 39–62. [CrossRef]

Conklin, Beth A. 1997. Body Paint, Feathers, and VCRs: Aesthetics and Authenticity in Amazonian Activism. *American Ethnologist* 24: 711–37. [CrossRef]

Coulter, Gerry. 2004. Reversibility: Baudrillard's "One Great Thought". *International Journal of Baudrillard Studies* 1: 1.

Elwin, Verrier. 1955. *The Religion of an Indian Tribe*. Bombay: Oxford University Press.

Gadgil, Madhav, and V. D. Vartak. 1975. Sacred groves of India: a plea for continued conservation. *Journal of the Bombay Natural History Society* 72: 313–20.

Grande, Sandy Marie Anglás. 1999. Beyond the Ecologically Noble Savage: Deconstructing the White Man's Indian. *Environmental Ethics* 21: 307–20. [CrossRef]

Griffin, Susan. 1978. *Woman and Nature: The Roaring Inside Her*. San Francisco: Harper & Row.

Guha, Ranajit. 1988. The prose of counter-insurgency. In *Selected Subaltern Studies*. Edited by Ranajit Guha, Gayatri Chakravorty Spivak and Edward Said. New York: Oxford University Press, pp. 46–47.

Hardiman, David. 1987. *The Coming of the Devi: Adivasi Assertion in Western India*. New Delhi: Oxford University Press.

Jain, Shobhita. 1984. Women and People's Ecological Movement: A Case Study of Women's Role in the Chipko Movement in Uttar Pradesh. *Economic and Political Weekly* 19: 1788–94.

Jones, Kenneth W. 1989. *Socio-Religious Reform Movements in British India: 1 (The New Cambridge History of India)*. Cambridge: Cambridge University Press.

Karlsson, Bengt G. 2003. Anthropology and the 'Indigenous Slot': Claims to and Debates about Indigenous Peoples' Status in India. *Critique of Anthropology* 23: 403–23. [CrossRef]

Kela, Shashank. 2006. Adivasi and peasant: Reflections on Indian social history. *The Journal of Peasant Studies* 33: 502–25. [CrossRef]

Kelkar, Govind, and Dev Nathan. 2001. Gender Relations in Forest Societies in Asia. *Gender, Technology and Development* 5: 1–31. [CrossRef]

Kong, Lily. 2001. Mapping 'new' geographies of religion: politics and poetics in modernity. *Progress in Human Geography* 25: 211–33. [CrossRef]

Lee, Cathy, and T. Schaaf. 2003. *The Importance of Sacred Natural Sites for Biodiversity Conservation*. Paris: United Nations Educational Scientific and Cultural Organization.

Li, Tania Murray. 1996. Images of Community: Discourse and Strategy in Property Relations. *Development and Change* 27: 501–27. [CrossRef]

Lindroth, Marjo, and Heidi Sinevaara-Niskanen. 2013. At the Crossroads of Autonomy and Essentialism: Indigenous Peoples in International Environmental Politics. *International Political Sociology* 7: 275–93. [CrossRef]

Martinez-Alier, Joan. 2004. *The Environmentalism of the Poor*. New Delhi: Oxford University Press.

Mies, Maria, and Vandana Shiva. 1993. *Ecofeminism*. Melbourne: Spinifex Press.

Mullick, Samar Bosu. 2000. Gender Relations and Witches among the Indigenous Communities of Jharkhand, India. *Gender Technology and Development* 4: 333–58. [CrossRef]

Munda, Ram Dayal, and Sanjay Bosu Mullick. 2003. *The Jharkhand Movement. Indigenous Peoples' Struggle for Autonomy in India*. Chaibasa and Copenhagen: Birsa & IWGIA.

Oddie, Geoffrey A. 2016. The Emergence and Significance of the term "Hinduism". In *Hinduism in India: Modern and Contemporary Movements*. Edited by Will Sweetman and Aditya Malik. Los Angeles: Sage.

Parajuli, Pramod. 1996. Ecological ethnicity in the making: Developmentalist hegemonies and emergent identities in India. *Identities: Global Studies in Culture and Power* 3: 14–59. [CrossRef]

Ramakrishnan, P. S., K. G. Saxena, and U. M. Chandrashekara. 1998. *Conserving the Sacred for Biodiversity Management*. New Delhi: Oxford and India Book House.

Rode, Robert. 2015. Rode, Robert 2015. Recognition of Indigenous Peoples' Sacred Natural Sites and the Cultural Dimension of Sustainable Development. In *Perceptions of Sustainability in Heritage Studies*. Edited by Marie-Theres Albert. Berlin: De Gruyter.

Rycroft, Daniel J. 2014. Looking Beyond the Present: The Historical Dynamics of Adivasi (Indigenous and Tribal) Assertions in India. *Journal of Adivasi and Indigenous Studies* 1: 1–17.

Sahu, Kamlesh Kumar. 2018. Witch hunting in Jharkhand: Does mental health has any business on it? *Open Journal of Psychiatry and Allied Sciences* 9: 85–87. [CrossRef]

Shah, Alpa. 2007. The Dark Side of Indigeneity?: Indigenous People, Rights and Development in India. *History Compass* 5/6: 1806–32. [CrossRef]

Skaria, Ajay. 1997. Women, Witchcraft and Gratuitous violence in Colonial Western India. *Past and Present* 155: 109–41. [CrossRef]

Smith, Jonathan Z. 1978. The wobbling pivot. In *Map Is Not Territory: Studies in the History of Religions*. Edited by Jonathan Z. Smith. Leiden: E.J. Brill, pp. 88–103.

Smith, Frederick. 2006. *The Self Possessed: Deity and Spirit Possession in South Asian Literature and Criticism*. New York: Columbia University Press.

Spivak, Gayatri C. 1998. Cultural Talks in the Hot Peace: Revisiting the "Global Village". In *Cosmopolitics: Thinking and Feeling Beyond the Nation*. Edited by Pheng Cheah and Bruce Robbins. Minneapolis: University of Minnesota Press, pp. 329–50.

Spivak, Gayatri C. 2003. *Death of a Discipline*. The Wellek Library Lectures Series. New York: Columbia University Press.

Stoffle, Richard W., and Richard Arnold. 2003. Confronting the angry rock: American Indian's situated risks from radioactivity. *Ethnos* 68: 230–48. [CrossRef]

Verschuuren, Bas, Robert Wild, Jeffrey Mcneely, and Gonzalo Oviedo. 2010. *Sacred Natural Sites: Conserving Nature and Culture*. Oxford: Taylor & Francis.

Xaxa, Virginius. 1992. Women and Gender in the Study of Tribes in India. *Indian Journal of Gender Studies* 11: 345–67. [CrossRef]

River Goddesses, Personhood and Rights of Nature: Implications for Spiritual Ecology

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Abstract: Designating rights for nature is a potentially powerful way to open up the dialogue on nature conservation around the world and provide enforcement power for an ecocentric approach. Experiments using a rights-based framework have combined in-country perspectives, worldviews, and practices with legal justifications giving rights to nature. This paper looks at a fusion of legal traditions, religious worldviews, and practices of environmental protection and advocacy in the context of India. It takes two specific legal cases in India and examines the recent high-profile rulings designating the rivers Ganga, Yamuna, and their tributaries and glaciers as juristic persons. Although the rulings were stayed a few months after their issuance, they are an interesting bending of the boundaries of nature, person, and deity that produce Ganga and Yamuna as vulnerable prototypes. This paper uses interview data focusing on these cases and document and archival data to ask whether legal interventions giving rights to nature can become effective avenues for environmental activism and spiritual ecology. The paper also assesses whether these legal cases have promoted Hindu nationalism or 'Hindutva lite'.

Keywords: India; rivers; Hinduism; rights of nature; spiritual ecology; Ganga; Yamuna

1. Introduction

Designating rights for nature is a potentially powerful way to open up the dialogue on nature conservation around the world and provide some enforcement power for an ecocentric or nonhuman approach. Experiments using a rights-based framework have combined in-country perspectives, worldviews, and practices with legal justifications for giving rights to nature. This paper looks at such a fusion of legal traditions, religious worldviews, and practices of environmental protection and advocacy within India. It takes two specific cases and examines the recent high-profile rulings designating the rivers Ganga, Yamuna, and their tributaries and glaciers as juristic persons. The two cases, both heard in the High Court of Uttarakhand, India by the same bench of two Judges, are *Mohd Salim v. State of Uttarakhand and others* and *Lalit Miglani v. State of Uttarakhand and others*. These cases represent an earnest attempt by petitioners, advocates, and judges to enforce river and broader resource conservation by creatively combining religious and legal concepts of deity and person with a rights of nature approach.[1] However, the Supreme Court stayed these rulings a few months later, and by doing so rendered them a paper tiger (Mathur 2015). This paper nevertheless argues that these rulings are an interesting bending of the boundaries of nature, person, and deity that warrants an assessment of motivations and effects for religious and environmental practice in India. When thinking of spiritual ecology as a framework and method of practice that links religious practices with environmental concerns, the paper considers the role of legal vectors within this ambit to ask if legal interventions

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[1] I have made this assessment after interviews with High Court and Supreme Court petitioners and advocates and a friendly meeting with the Judge in these cases in October 2018.

giving rights to nature have so far been beneficial for devotees or could be effective avenues for spiritual activism or religious environmentalism. The paper also addresses the critical question of whether there may be dangers involved with promoting legal rights to sacred nature if these initiatives also lead to religious nationalism or *Hindutva*.

The problems faced by the rivers of India in terms of pollution, reduced flows, and obstructions from dams have received a great deal of attention. Within this general concern, the rivers Ganga and Yamuna and their tributaries have grabbed the lion's share of the focus because they are important sacred rivers with distinct meanings and roles (Alley 1998, 2000, 2002; 2015; Alley and Drew 2012; Drew 2017; Eck 1982a, 1982b; Haberman 2006; Markandya and Murty 2000; Rauta 2015; Sanghi 2014; Tare and Roy 2015). These rivers have also drawn the attention of the courts and the new environmental tribunal. Some legal cases targeting them have become landmarks in global environmental justice.[2]

This paper analyzes the motivations for and the effects of these rights of nature rulings within the context of concerns related to spiritual ecology or religious environmentalism. Spiritual ecology is an international movement that highlights cases where religious and/or spiritual values and practices are interwoven with concerns and activities involving environmental or ecological protection or advocacy. Considering spiritual ecology as a broad framework for a diversity of approaches combining religious, environmental, and/or scientific advocacy, this paper asks the following questions in the Indian context of Hinduism, where religious and ecological values have complex historical relationships (Chapple and Tucker 2000). These questions, whose answers may not be mutually exclusive, are: How are these specific legal initiatives related to spiritual ecology or how do these principles become entwined with religion, spirituality and ecology in India? Do legal pronouncements such as these help devotees of rivers to revitalize them? Do the pronouncements strengthen existing cleanup activities or punitive orders against polluters? And since these judgements operate in a political context of government administration, do they help to forward other political or ideological goals apart from river conservation and cleanup? Since the political context also involves complex entanglements of religious interpretations and interests, the paper must also ask how and to what extent these rulings relate to the broader phenomenon of Hindutva, or Hindu nationalism. Do they promote Hindu nationalism, and to what degree? Extending the scholarship on Hindutva (e.g., Jaffrelot 2007, 2013, 2016; Ludden 2006; Zavos et al. 2004), Dasgupta (2015) and a few others have described what they call 'Hindutva lite', a 'softened approach' that draws on mainstream culture to promote Hindu values in less conspicuous ways. Dasgupta (2015, p. 123) explains, "Hindutva lite is that version of Hindu fundamentalism that avoids militancy yet gently upholds Hindu imageries to narrate an ideology."[3] Is Hindutva or Hindutva lite a condition or consequence of these legal initiatives?

To answer these questions, the paper needs to explain the full extent of the meanings and trajectories embedded in the landmark judgment, since the notions of deity/Goddess, person, and nature have their own histories yet are blended together in the Judges' orders. This sets up a new legal logic, and the paper aims to assess it. The Judges link deity and person by invoking case precedents that have treated idols and deities as juristic persons. The Justices also explain how the deity or Goddess, as a potential juristic person, is also nature, and can therefore be granted rights of nature. The paper explains the legal logic and then shows whether such a logic is convincing and beneficial for

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[2] See the order dated 20 September 2018 in Original Application No. 673/2018 In *The Matter of: News Item Published in 'The Hindu' authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB* for a summary of cases focusing on these rivers. See also (Alley 2008).

[3] Pillalamarri (2018) takes a more benign definition of Hindutva lite: "Most Indians are neither Hindu nationalists nor secular liberals, but somewhere in between, as evidenced by the fact that the Congress Party's president, Rahul Gandhi, seems to have picked up with his newfound interest in Hinduism, derided by some on the right as 'Hindu-lite,' or 'Hindutva-lite.' But Hindu-lite is actually a good term to describe the beliefs of the middle class, the urban youth, and the emerging upwardly mobile lower-middle class. These groups are at once proud of and interested in India's past and culture, but also willing to apply these customs selectively at a personal and familial level, while being open to new ideas and cultural influences from around the world. Moreover, these groups remain skeptical of Hinduism as a political movement, and aren't interested in anti-Muslim rhetoric, instead seeing Hinduism more as a mascot for their identity."

devotees and activists of sacred rivers and whether it becomes a tool for advocacy, water conservation or pollution prevention.

First, a few of the central linkages from the judgement can be presented, before explanation of their historical origins is fleshed out. The Judges began the Salim ruling by describing briefly the sacredness of rivers for Hindus. They then cited several cases in which deities were determined to be juristic persons. For example, they wrote: "In 1969 (1) SCC 555 their Lordships of Hon. Supreme Court in 'Yogendra Nath Naskar v. Commission of Income-Tax, Calcutta' have held that a Hindu idol is a juristic entity capable of holding property and of being taxed through its Shebaits who are entrusted with the possession and management of its property." In the following, they cited, "1999 (5) SCC 50, their Lordships of Hon. Apex Court in the case of 'Ram Jankijee Deities & others v. State of Bihar & others' where the Judges further held that the deity/idol are the juridical person entitled to hold the property."[4] They wrote further: "In AIR 2000 SC 1421, their Lordships of Hon. Supreme Court in the case of 'Shiromani Gurudwara Prabandhak Committee, Amritsar v. Shri Som Nath Dass & others' have held that the concept 'Juristic Person' arose out of necessities in the human development-Recognition of an entity as juristic person- is for subserving the needs and faith of society."[5]

The oldest part of their logic rests in the notion of juristic personhood. I begin by tracing the articulation of the category of juristic person in colonial India. I lay out the interconnections among legal notions, religious narratives and leadership, and colonial politics. The notion of juristic person is then explained in terms of postcolonial cases arbitrating religious property in India and then explained within the emerging transnational discourse on rights of nature after 2010. This overview provides background for a discussion of the nuances in individual motivations for the rights of nature approach in the two Indian cases on rivers. While describing these motivations and other responses to the rulings, the paper offers an assessment of whether Hindu nationalism or Hindutva emerges in full-fledged or lite form through this advocacy for rights of sacred nature. Then the paper addresses the implications of this rights of nature ruling for devotees who revere these rivers as Mother Goddesses. It also investigates whether these legal interventions helped devotees in cleanup or advocacy related to sacred rivers or whether the rulings drew the support of well-known advocates for river conservation.[6]

2. Methods and Data

This paper uses data collected in September and October of 2018 during interviews with participants in the legal cases described below.[7] These interview data have been stripped of identifiers and pertain only to the nature of the legal arguments and procedures and the commentary on them. Interviews were also conducted with a sample of residents who work or live along the riverbanks of the river Ganga in Varanasi. Those interviews were tape-recorded and transcribed for use in the quotes appearing in this paper. Identifiers were stripped from these transcriptions. The sample of Varanasi residents was selected by walking transects along the riverbank steps (*ghat*) and selecting people performing a variety of tasks and activities. Pilgrims and tourists were not interviewed as their understandings of the pollution problems were not as clear as those of residents. The interview data were thematically analyzed and incorporated into the generalized statements described in the latter half of this paper. Other observations and generalizations made in the paper are drawn from the author's thirty years of fieldwork. This fieldwork involved interviews and surveys and participant

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4   Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. pp. 5–6.

5   Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. p. 7.

6   For example, social science theory and interpretations of human–nonhuman relations have accounted for relations between human and nonhuman animals and entities (e.g., Gagne 2018; Govindrajan 2018), human engagements with material agencies (Latour 2004), and spiritual ecology (Vaughan-Lee et al. 2016; Sponsel 2012, 2019), to name a few.

7   All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by Auburn University IRB number 16-229 EP 1606.

observation among residents and pilgrims in cities and towns along the riverbanks and among legal practitioners in the Supreme Court, High Courts, and National Green Tribunal.

3. Juristic Persons, Deity's Rights, and Rights of Nature

The notion of a juristic person underlines the Judges' argument for rights for river Goddesses and the argument that river Goddesses also constitute nature. Other legal and legislative initiatives in which rights of nature have been articulated around the world give some basis for this, as they have joined cultural or indigenous ideas of personhood with the preservation and conservation of nature (La Follette and Maser 2017; Nash 1989; Pecharroman 2018). These experiments have drawn from the concept of juristic person, first defined in Roman law as *persona ficta*. This is a category of law used for nonhuman entities when societies want to recognize them as subjects of rights and obligations (Sohm 1892). In India, the notion of juristic person first emerged in the context of colonial rule and in negotiations between British officials and members of religious communities. The notion drew upon Hindu interpretations of the personhood of deities. During colonial rule, the British established religious idols as juristic persons to decide land, property, and entitlement disputes. This 19th century notion of idols as juristic persons, Doctor (2018) explains, was "a legal fudge, devised by British jurists as a way of getting out of the tedious process of sorting out the claims of various Indian parties, with their complexities of caste and community practices. It is convenient and flattering to devotees, but remains a fudge, with problems that will only show up with time." Doctor (2018) elaborates:

> "When these complexities met British laws it usually ended up in Court. And as British judges dealt with increasing disputes over temple property, they hit on the idea of treating the deity as a legal person in whom ownership could rest. At one stroke this avoided having to sift through all the claims of tradition, while also neatly appearing to respect Indian sentiments by treating the idols as living persons. In 1869 the Privy Council, the judges who made up the highest court of appeal in the British Empire decided the case of Maharani Shibessouree v. Mothooranath Acharjo by declaring that the shebait, the manager of the deity, could only act as a trustee on behalf of the deity. In 1875, in another case, the Privy Council articulated that the shebait had to act "as the manager of an infant heir." And in 1887, in what is called the Dakor Temple case, the Bombay High Court finally stated explicitly that the "Hindu idol is a juridical subject and the pious idea that it embodies is given the status of a legal person." As Birla notes, the time was ripe, since this was just a year after the Indian Income Tax Act was passed which allowed exemptions for religious or public charitable purposes."

Over time, the concept of a juristic person became a legal shell, employed to argue for a deity's property claims (Davis 2010), for the preservation of temple endowments for public use, as well as for their removal from the commercial sphere (Birla 2009; Das Acevedo 2016; Sontheimer 1965),[8] and for temple land acquisition (Mehta 2015). As Das Acevedo (2016, p. 858) notes, "Worshippers who are able to propitiate deities clearly benefit from the existence of temples, but case law has consistently upheld the deity as the official—if figurative—beneficiary of the temple's assets. Assets endowed to a temple are rarely if ever dedicated to the general public; rather they are dedicated to a purpose (rituals, support for pilgrims) which colonial law anthropomorphized in the figure of the deity, or they are

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[8] Endowments were held to: (1) remove assets from the commercial sphere according to the intentions of private individuals, (2) transform assets into the private property of deities, and (3) leave assets in the management of individuals who existed in private contractual relationships with the deity (Birla 2009). Das Acevedo (2016, p. 858) adds, "Lack of differentiation between beneficiaries of the temple (that is, of the very existence of an institution in which one may worship and participate in a religious community) and beneficiaries of the temple's assets is responsible for much mischief (see, for instance, Michael C. Baltutis, 'Recognition and Legislation of Private Religious Endowments in Indian Law', in Baird, Religion and Law in Independent India, p. 449 in which this distinction is not maintained)."

dedicated to the deity itself."[9] Interestingly, then, the deities' rights could advance the interests of Hindu religious communities to claim property and assets, but such a rights attribution to deities also ensured broad-based public access to such property and wealth. The rights attribution also supported the practices of visiting these temples and using their spaces and facilities. When British adjudicators declared the rights of deities, as persons, to own land in India, this reaffirmed the ritual of *prana pratistha*, where the life spirit of the god or goddess is invited into the idol (*murti*) to establish personhood.

Generally, in Hindu philosophy and practice over the last couple of centuries, deities have been viewed as personifications of abstract energies and qualities or as real beings embodying divine energies and qualities. Both views have resulted in worship; either the spiritual aspirant's worship is directed toward the energy symbolized by the deity or the deity epitomizes the energy or quality that is the object of devotion. In the worship of Ganga today, these approaches are commingling, for Ganga is 'the Supreme Shakti of the Eternal Shiva', "our *tarini*" (remover of sin), and a personified goddess in several mythological stories (Alley 1998, 2002; Eck 1982b, p. 219). In one story, she was a daughter of King Himavat and Queen Menavati. In another, Ganga was devoted to Lord Krishna in his divine abode, and this made Radha jealous. In another, Ganga's devotion to Shiva made Parvati jealous, and she cursed Ganga to drop down to earth and flow as a river. Ganga is conceived by all as a Mother and provider; devotees bathe in her waters to be cleansed of their sins; the ashes of the dead are immersed in her waters and lead the departed soul to a higher birth; and her name is chanted with the belief that it will bestow freedom from poverty and protection and lead to liberation. Yamuna is the daughter of Surya (the sun god) and Saranyu. The Lord of death, Yama, is her brother (Haberman 2006; Kumar and James 2013).[10]

These are two trajectories from within Indian Hinduism and law. Another logical trajectory evolves from a Rights of Nature framework developing out of conservation debates in the 1970s. Today environmental activists and cause lawyers around the world are arguing that bestowing rights to natural entities such as national parks, rivers, water sources, and others can help in conservation and protection (Gleeson-White 2018; Lafollette and Maser 2017; Pecharroman 2018. Lafollette and Maser argue that the rights of nature framework "uses western legal constructs, such as personhood and rights-based approaches, to shift the status of nature from property to a subject in law in an effort to protect the natural world" (Gleeson-White 2018). The United States has not made much headway in setting up a legal framework despite the fact that the earliest conceptual writings emerged from there (e.g., Stone 1972). But New Zealand, Ecuador, Colombia, Bolivia, and now India offer interesting experiments (Colwell et al. 2017; O'Donnell 2018; O'Donnell and Talbot-Jones 2018; Shelton 2018).[11] This rights designation, as we see in the Indian cases, fuses a lesser known deity's rights framework with this rights of nature framework.

India's strong traditions of social action, investigative journalism, and human rights activism spawned the vibrant tradition of public interest litigation, which is the avenue through which the rights of nature approach has been recently applied. This public interest in legal activism is now expressed through cases in the High Courts, the Supreme Court, and now most forcefully in the National Green Tribunal (hereafter NGT). The NGT is an environmental tribunal established in 2010 to take the environmental case load off the Supreme Court (Kumar 2016). The majority of the cases heard in the NGT involve pollution (31%) and environmental clearances (35%).[12]

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[9] Das Acevedo (2016, p. 858 note 44) says: "this ruling redefines public and private, keeping the temple and its wealth both public in the sense of open to all people, yet private in the sense that the deity owns the space and wealth. It is explicitly not private property for any other commercial or political entity however".

[10] http://www.mahavidya.ca/2015/03/10/yamuna/.

[11] While the mentioned countries created frameworks that were upheld by citizen vote, in Bolivia, some citizens objected to the 2012 Framework Law of Mother Earth and Integral Development for Living Well, which constituted and operationalized the Earth as a juridical subject and gave it seven rights. They objected on the grounds that it usurped the traditional rights to preserve their land and customs (Calzadilla and Kotzé 2018).

[12] See (Amirante 2012) and (Shrotria 2015). Environmental Clearances, required for 39 types of projects, are supposed to assess and, thereby, avoid or minimize environmental impacts.

Central to these new rulings is the constitutional right to life which Indian legal advocates in these cases argue should be applied to juristic persons such as deities and river goddesses. The Indian constitution contains articles called Directive Principles that add environmental values to the constitutional right to life. These Directive Principles declare the duty of states and citizens to "protect and improve the natural environment". Court actors have used these provisions on environmental protection to flesh out the constitutional right to life for humans in public interest cases. However, the Courts have read the Directive Principles into the Fundamental Rights to argue that humans have environmental responsibility without declaring directly that a human person has a right to water or any other resource. This creates an interesting template upon which to argue for a rights of nature framework (Alley and Mehta 2019).

In the spirit of opening uses of the law to all citizens, High Court and Supreme Court Justices have also liberalized grievance procedures so that they can accept letters, appeals, and newspaper editorials as writ petitions for the public interest. More importantly for these rights of nature cases, the public interest tradition has also allowed Judges to use suo motu powers to bring a case forward without a petitioner (Latin: 'of his or its own accord'; an action initiated by an authority on its own). In the cases examined here, Judges declared the rivers Ganga and Yamuna and their glaciers and tributaries as persons with juristic rights just like humans, and they named specific guardians to enforce those rights.[13] These suo motu powers allowed the Judge's worldview, convictions, and abilities to shape the trajectories of the case and the writing of orders and judgements (Bhuwania 2017).

4. Ganga and Yamuna as Persons

On 20 March 2017, the High Court of Uttarakhand ruled that, "The Rivers Ganga and Yamuna, all their tributaries, streams, every natural water flowing with flow continuously or intermittently of these rivers, are declared as juristic/legal persons/living entities having the status of a legal person with all corresponding rights, duties and liabilities of a living person in order to preserve and conserve river Ganga and Yamuna."[14] The landmark ruling was inspired by the case of the Whanganui river in New Zealand (Gopalan 2017; Lokgariwar 2017), where the Maori pushed to declare the river a living entity with full legal rights in the country's parliament. In the *Salim* case, the advocate brought the New Zealand parliamentary decision on Rights of Nature to the attention of the judges when pleading for directions on river protection and coordination of river management among state administrators.[15] When asked about the motivations to bring in Hindu notions of the sacred, one advocate denied a connection between his motivations and the interest in promoting Hindu narratives and ideologies.[16] Rather, he noted that the original party named in the suit was a Muslim man involved in a dispute over encroachment along the Ganga canal. The implication of this response was that the original intent of the case was to defend a Muslim resident's claims to his land; thus, when the case information from New Zealand was introduced, it was not intended to forward Hindu worldviews and interests. However, the landmark ruling was related to contemporary concerns that rivers are dying, and those rivers are sacred to many.[17] He said:

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[13] I am thinking here of prototypes in the sense developed from Wittgenstein, as provoking graded categorizations extending from a best example. These emerging categories can be traced out using an ethnoscience methodology.

[14] Interestingly, the judge did not say "human person" in the ruling. The media has incorrectly termed it that way. The Judge said, "juristic person".

[15] The direct inspiration from the transnational discourse on rights of nature and this ruling are not explicit in the judgment but were communicated during interviews. The advocate cited the New Zealand case in the hearing, and one Judge followed up by exploring the literature and cases on rights of nature from around the world.

[16] Interview taken in October 2018.

[17] "The extraordinary situation has arisen since rivers Ganga and Yamuna are losing their very existence. This situation requires extraordinary measures to be taken to preserve and conserve rivers Ganga and Yamuna," says the order by Justices Rajiv Sharma and Alok Singh. Http://economictimes.indiatimes.com/articleshow/57818653.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.

"The gist of the judgement, the main judgement . . . .forget about the status of the Goddess, etc. The whole concern of the court is to maintain the free flowing of the river, irrespective of the community needs, etc. This is the main concern of the Court. Yes anybody can interpret it in their own fashion. But the main concern is to maintain the piousness as well as the free flowing of the Ganga and its tributaries."[18]

After the Judge was presented with information on the New Zealand case, he proceeded to develop the rationale, articulating rights of nature through the Indian context where deities have also been considered juristic persons. The Judge's narrative discussed below did not appear to be centrally concerned with advocating a Hindu nationalist or political ideology, but it did validate Hindu notions of sacred ecology and used them as part of a conservation ethic. This kind of approach was also used by the Chairperson of the NGT, Swatanter Kumar, in orders in the MC Mehta case.[19]

The Judge's interpretation of the rights of nature framework was not entirely new within India. A year or two earlier, the Community Environmental Legal Defense Fund and a group of 25 religious leaders of different faiths made a similar declaration for sacred rivers. Justice Sharma began his ruling in the *Salim* case by stating that, "Rivers Ganges and Yamuna are worshipped by Hindus. These rivers are very sacred and revered." He continued, "The Ganga is also called 'Ganga Maa'. It finds mentioned [sic] in ancient Hindu scriptures including 'Rigveda'."[20] Following these references to Hindu values, he cited precedents in cases where Hindu idols were considered juristic entities entitled to property and guardianship. This paved the way for linking the views of Ganga and Yamuna as Goddesses and persons and the views of them as powerful yet endangered and therefore in need of rights.

In the *Salim* case, the Court declared that recognition of Ganga as a juristic person is for "subserving the needs and faith of society." This sounds like support for a specific community in India; the text of the ruling indicates that the Judge acknowledged and supported faith-based justifications but then added scientific and legal definitions and reasoning to argue for the preservation of the rivers. However, the Judges and advocates were not explicitly advancing the interests of Hindu communities alone or attempting to divide the favored community from other minority communities. The Judges noted:

All the Hindus have deep Astha in rivers Ganga and Yamuna and they collectively connect with these rivers. Rivers Ganga and Yamuna are central to the existence of half of Indian population and their health and well being. The rivers have provided both physical and spiritual sustenance to all of us from time immemorial. Rivers Ganga and Yamuna have spiritual and physical sustenance. They support and assist both the life and natural resources and health and well-being of the entire community. Rivers Ganga and Yamuna are breathing, living and sustaining the communities from mountains to sea.[21]

Therefore, the Judges intended to connect views of the sacred with views of physical and natural or ecological properties. While invoking and operating within a Hinduized discursive space and iterating a notion of the sacredness of these rivers, the ruling did not extend into the Hindutva ideological space to cater to the political interests of a specific religious community or leader or party. Similarly, Berti (2015) has shown that Judges in a neighboring state acknowledged a religious interpretation of the importance of local Gods and their territorial claims but then decided on the basis of constitutional human rights. In these cases, as well, a specific community's interests as defined by their common worship of a deity were not promoted by the court orders. However, it appears that when notions of sacred entities and spaces enter legal discourse in High Court cases, the Judges bend the law slightly by recognizing the importance and territories of these deities (which have no evidentiary basis in official

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[18] Interview with a senior advocate dated October 2018.
[19] Original Application No. 200 of 2014. (C.Writ Petition No. 3727/1985), (M.A. No. 594/2017 & 598/2017) Judgement dated 13 July 2017.
[20] Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. p. 4.
[21] Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. p. 11.

documents) but then decide the matter according to human constitutional rights and laws on property and assets (Berti 2015, p. 23).

Such a kind of legal mingling is evident in these rights of nature cases where the Judge uses the spiritual and religious importance that these rivers have to legitimize the need to assign juristic rights to them. This makes sense in terms of the general view of Goddesses as persons exemplified in the colonial and postcolonial cases and expressed more fully in Hindu mythologies and practices of worship. The right to life is then given to the Goddess as a juristic person and then justified by scientific reasoning that considers these Goddesses as rivers and natural entities subject to environmental and climatic conditions. The entrance way for justifying such rights appears to be a Hindu worldview and values, but the outcomes are considered to be beneficial for ecology, water, all humans, and their adaptations to climate change. This is an interesting mix of Hinduism and science that is not the same as the Hindutva science arguing for the Hindu origins of scientific achievements or the scientific basis of Hindu mythology (Kumar 2019).

The next step in the judgement dealt with the assignment of guardianship to sacred rivers. In other rights of nature cases, power has rested with a guardian who must ensure the right to life of the natural entity. This is inherently problematic in the Indian context, for, as Das Acevedo notes, "the spectacle of a deity claiming a constitutional right to religious freedom is breathtakingly circular" (Das Acevedo 2018, p. 15). The Judges' selection of guardians in these cases was immediately disputed. The selection of guardians was justified, not in terms of protecting the deities' gifts, land, and property, as colonial cases did when involving the shebait, the guardian, or a trust administering the deity's assets. Rather, the selection was justified by the need to protect the life survival of the deity. These High Court rulings show that the matter is not one of protecting the property rights of the deity, claiming a deity's property rights, or declaring a tax status for a specific entity due to the flow of income and property. This selection of guardians assigned blame for the deity's extreme harm, in fact for her ability to survive, and located responsibility for her protection. As I explain below, these assignments are directed at government officials and meant to give more serious force to their responsibilities. In terms of legal technicalities, these proposed protections make sense under a right to life rubric in a legal tradition that has targeted government malfeasance and noncompliance to the country laws and policies.

The High Court Judge appointed three guardians—the director of Namami Gange (the national level Clean Ganga Program director), the chief secretary of the state of Uttarakhand, and the advocate general of the state as "persons in loco parentis [meaning 'in place of a parent']—the human face to protect, conserve and preserve the Rivers Ganga and Yamuna and their tributaries."[22] By this order, the officers were bound "to uphold the status of [the rivers] and also to promote the health and well-being of these rivers" (Gopalan 2017). The court confirmed that any harm done to these rivers would be a cognizable offence, and the state would initiate criminal proceedings without waiting for a petitioner.

This designation of guardians had more to do with an interest in identifying persons that could be held accountable for the increasing pollution load in these rivers and did not have any direct connection to specific Hindu communities or to setting up antagonistic relations between Hindus and Muslims or other non-Hindu groups. Ten days later, in the *Miglani* case, the same bench designated the glaciers, lakes, and wetlands of these basins as "legal persons".[23] In that case, the Judge developed the rights of nature approach within a scientific or evidenced-based framework and left off references to the law on

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[22] Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. pp. 11–12.
[23] W.P.PIL No. 140 of 2015, *Lalit Miglani v. State of Uttarakhand* declared glaciers, including Gangotri and Yamunotri, rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs, and waterfalls as legal persons (Shivshankar 2017; Studley 2017); The Sad State Of These Persons Called Ganga & Yamuna—Can State Protect Them? South Asian Network for Dams, Rivers and People, 11 April 2017 https://sandrp.wordpress.com/2017/04/11/the-sad-state-of-these-persons-called-ganga-yamuna-can-state-protect-them/.

deities as juristic persons. The second ruling in the *Miglani* case did not reference Hindu values of sacred ecology as the *Salim* case did. An advocate in the *Miglani* case stressed, however, that Hindu values are fundamental to the worldview of the Goddess, and Hindus had every right to worship her according to those values.[24]

5. Benefits for Devotees

Hindu religious values pertaining to deities are foundational to the *Salim* ruling, but the judgement was not well known among Hindu devotees who visit these rivers for their spiritual rituals and bathing. In Varanasi, for example, most residents had not heard about the ruling when I surveyed them. After explaining the ruling to them a year later, a sample of Varanasi residents explained that the notion of a juristic person was foreign to them. But they said they liked the idea of Ganga and Yamuna having rights. A few disagreed, pointing out that Ganga is a Mother Goddess and does not need *human* rights. Her powers as "*Tarini*" or remover of sin are far more omnipotent. Most respondents claimed they view Ganga as a Mother but do not consider her a regular "person". She is a Mother whose flow provides for everyone. Devotees feel related to her as a child to a Mother, and they seek protection from her. Devotion and worship rituals are critical to ensuring that protection. One Varanasi resident said:

Researchers: Do you see Ganga as a person?

Respondent: No I see Ganga as a Goddess. No Person. She is no person. Nobody sees her as a person. She is a pure Mama. It is all about your feeling, your understanding and trust. I have been connected with people from all over the world. Since 6 years I am living with the tourism life. I have seen many changes but nothing good is happening. The government has wasted a lot of money but no good is going on.

Another resident adds in greater detail:

Respondent: We do not agree that she is a person. She is a Devi . . . Not an ordinary lady. She is a God lady.

Researcher: So being a lady is only her form?

Respondent: Yes, like there is Kali, Durga, Parvati, Ganga. They are Devis . . . .Ganga is amrit (nectar), she is not a river . . . After a person does a lot of karm (good work), he can become a God . . . There is a path, a link road. For us Hindus, Ganga is amrit. Ganga is mokshadani (giver of liberation). Big people come bringing dead bodies and the ashes to immerse in her waters. Why do they come? In this way if we immerse the ashes of our ancestors, fathers, grandfathers, or for the death of anyone, we bring the body to Ganga for moksha. So Ganga is amrit. The Gita and our pandits say whatever dharm-karm a person does, they do it on the riverbank of Ganga, like in Hardwar.

Researcher: So why did Parvati curse Ganga to be a river? Why was it a curse? If she is such a good form, etc., why is she created by a curse? What is the meaning?

Respondent: The curse occurred because thousands and thousands of people come to see her, come to take her water (jal). This is for humanity. It is for kalyan, humanity. It is good.

Researcher: So the curse means it is for the good of humanity. But to me a curse means it is related to something bad.

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24 Interview by Alley in October 2018.

Respondent: Well this is like the branches of government. There are branches such as raksha mantralaya, videsh mantralaya, rajya mantralaya. Everyone is in the meeting. So if one man does a bad work they take him out, no? In this way the history of Ganga occurred. At that meetings occurred and the rishis looked and when there was a bad action, then they were opposed to that. If there is any wrong work like in an office, then the person is disciplined. In the meeting a bad matter comes up so the rishis are noticing it. So in this way a curse was made and they said, go in the form of a river! You will work for humanity, for liberation. This is for kalyan (well-being), for moksha (liberation), for shraddha (offering for deceased), for service (seva).

Researcher: So she came for seva.

Respondent: Yes she came for seva and will do so as long as she is alive. Up until her death she will remain and do so. Until she becomes lupt (invisible). Thousands of years from now Ganga will not be here. After thousands and thousands of years, she will be gone. There will be rivers but not Ganga. Like the Saraswati river in Allahabad is finished. Yamuna river will also go like this.

These statements and others mentioned below indicate that the court rulings had almost no impact on the sentiments and everyday lives of devotees. The rulings were not directly connected to them, but they considered the sentiments close to their concerns for Ganga's survival. While the legal strategy linking deity's rights with rights of nature served a juridical logic, it did not create a cultural logic with any immediate valence in Varanasi. While Varanasi residents disputed whether Ganga could be a person, they all agreed that she was endangered, so they could see the bigger importance of the rights discourse the rulings were trying to promote. To these residents of Varanasi, the notion of giving rights to Ganga and Yamuna sounded good, but they do not perceive that these specific legal rights are necessary for their (the Goddesses') survival, since previous government and legal interventions had not done much good. They immediately linked the legal ruling with their perceptions of the inefficiencies of government and the unreliability of government agencies in preventing rampant pollution and obstruction of flows. There was a good amount of complaining about the continuing flows of wastewater, through open drains, into the river especially near locations of ritual bathing. Many lamented, as they have in the past, that government officials just "eat" the financing that should go toward cleaning the river and properly treating wastewater. This is a continuation of expressions I have heard over many years, going back to the early days of the government's cleanup program, the Ganga Action Plan (Alley 1994, 1998). This resident's answers to our questions were similar to others I have heard:

Respondent: There is no change from the Ganga Cleanup program (Ganga safai). There should be cleaning but there is no change over the last 3–4 years.

Researcher: Should Ganga have rights? And if the Court gives the order and Ganga gets rights who should oversee them?

Respondent: If the drains (nalas) that are running into the river are not stopped then how can Ganga cleaning happen? They are running (chaalu). Some are closed but others are not. There is one there, one here. There is dirtiness (gandagi) remaining. Modi has said they will be stopped and that there will be change but there is no change.

Researcher: Do you see Ganga as a person, as in an ordinary woman or as a God (Bhagwan)?

Respondent: We see her in the form of Ma Ganga, as Bhagwan.

Researcher: So should she be given rights or not?

Respondent: Why not? She should be given them.

Researcher: Who should argue for her [to exercise those rights]? People or the government?

Respondent: People should argue for her otherwise who can? What will the Government do? They will just eat the money. People in a movement can argue but government will just get the money from above (uper se) and eat it. What goes to Ganga safai will be eaten by them. It's true isn't it?[25]

Looking beyond this case toward others noted in the national media recently, we can see that the act of giving a God or Goddess a right to life can produce controversial and conflicting sociocultural responses. For example, controversial and conflictual responses have arisen from the Supreme Court case involving the rights of the God Ayyappan of the Sabarimala temple in Kerala. In that case, the Supreme Court ruled against the state's ability, as administrator of the temple, to enforce a ban on temple entry to women between the ages of 10 and 50. Religious practices and the state's defense of them had supported the notion that the God had a right to restrict entrance to women of menstruating age who might tempt or pollute him. A subset of devotees perceived that the Supreme Court ruling striking down the state's continuation of a gender discriminatory rule undermined the deity's rights to temple administration and also, in one submission, to the deity's right to privacy. Responses for and against this ruling arose immediately and vociferously in the media. Shortly thereafter, political parties stepped in to court those for and against the rulings.[26] While the immediate effects of that ruling on right to life appear tense in the Sabarimala case, community responses in terms of mobilizing for conservation and against pollution are almost non-existent in the rights of nature cases. The responses of residents in Varanasi indicate that devotees of Ganga and Yamuna feel that their goddesses are already neglected and not properly attended to in the Clean Ganga or Namami Gange campaigns pushed by the central government. Generally, the public understands that the Clean Ganga Campaign has been directly connected to the political rhetoric of the Prime Minister. Thus, in their skepticism of such central government initiatives, they appeared less interested in giving cultural legitimacy to a legal ruling that had no local input.

6. Government Motivations

Given that the Indian Prime Minister has made the Namami Gange (Clean Ganga) project and large religious bathing festivals such as the Kumbh Mela into programs and events for galvanizing votes and party support, we are led to ask why the leadership would not use this landmark ruling as an ideological way to further centralize their power. To answer this, we need to look deeper into institutional politics at the central and state levels. It came as a surprise to petitioners and advocates in these cases when, a few months later, state and central governments submitted appeals in the Supreme Court to impose a stay on the rulings in both these cases. A petition for a stay of a High Court order is called a "Special Leave Petition" in the Supreme Court. The governments' main motivation appears to be that they did not want the named officers to assume liability as guardians. The aim of the High Court ruling was to fix responsibility in key government officials, designating them as loco parentis, "the human face to protect, conserve and preserve the Rivers Ganga and Yamuna and their tributaries".

To probe the motivations of the state and central governments as petitioners in the two Special Leave Petitions, one for each case, we must consider the relations between the central government (or Union government) and the state governments at the time these cases were being heard. There are two key context points. First, the states have significant power over water in the state list of the Constitution. Secondly, the Prime Minister contested his seat the first time from the Samajwadi Party

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[25] Interview by Kelly Alley, October 2018.
[26] https://www.business-standard.com/article/news-ians/lord-ayyappa-at-sabarimala-too-has-rights-under-article-21-sc-told-118072601325_1.html; (Das Acevedo 2018).

(SP) stronghold of Varanasi and in the process claimed Ganga cleanup as his mission. His first election victory cast a shadow on the state Chief Minister of the SP party and provoked a competitive spirit among them in matters related to Ganga rejuvenation. The result was that the state government began dragging its feet on central government Namami Gange initiatives and misused government funds. In 2017, the dynamics changed when the SP lost its majority in Uttar Pradesh and the BJP took control in Uttar Pradesh and Uttarakhand. From this time to the present, the BJP has held control of both the central and state governments as the party in control and won re-election in May 2019.

Before this single party control across state and central governments was established, the Judges took it upon themselves as *parens patriae* to propose that interstate coordination boards should be established when planning river uses in the basin. In the *Salim* case, Judges ordered a Ganga Management Board, and in the *Miglani* case, they directed reconciliation of the Inter State Council under Article 263 of the Constitution. Both the Board and the Council are meant to be used to negotiate the various uses of the river such as for hydropower, irrigation, potable supply, and water and wastewater treatment. The *Salim* ruling explicitly links centre–state coordination and personhood: "The Constitution of the Ganga Management Board is necessary for the purpose of irrigation, rural and urban water supply, hydropower generation, navigation, industries. There is utmost expediency to give legal status as a living person/legal entity to rivers Ganga and Yamuna r/w Articles 48-A and 51A(g) of the Constitution of India."[27] Yet coordination was not on the central government agenda at the time, especially when other parties were running the states.

When elections were over at the end of March 2017, control of the two states of Uttarakhand and Uttar Pradesh had flipped from the opposition party to the BJP. Knowing that centre–state alignment could be achieved through the everyday working of the single party bureaucracy, the Uttarakhand state government in July, and the union government in October filed appeals of both the *Salim* and *Miglani* judgements.[28] In the appeal of the *Salim* case ruling, the Supreme Court stated:

> "The order had put the state government in a quandary. Since the rivers flow through several states, only the Centre could frame rules for their management. The ruling also raised questions like whether the victim of a flood in the rivers can sue the state for damages and also about whether the state and its officers will be liable in case of pollution in the rivers in another state through which it flows."[29]

In these petitions to appeal, both the state and central governments appeared interested in avoiding liability and responsibility for the grievances and criminal charges that people could bring to them in the name of Ganga's rights.

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[27] Order dated 20 March 2017 in Writ Petition (PIL) No. 126 of 2014 Mohd. Salim v State of Uttarakhand and others. p. 11.

[28] Special Leave to Appeal (C) No(s). 016879/2017 *The State of Uttarakhand and Ors. Versus Mohd. Salim and Ors.,* Order dated 7 July 2017, stayed the ruling in the *Salim* case. Special Leave Petition (Civil) Diary No(s). 34250/2017 *Union of India vs Lalit Miglani*, order dated 27 November, 2017 stayed the ruling in the *Miglani* case. The copy of the original pleading is difficult to obtain because the case is still sub-judice (in progress). Thus, in the absence of the original document, we can only quote *The Times of India* as it reported the stay: "The state government contended that the two holy rivers played a very important role in supporting the life and well-being of people in the country but that could [was] not a ground to declared them as living entities. "Only to protect the faith of the society river Ganga and Yamuna cannot be declared as legal person," state government said in its petition. "If there arises any dispute in respect any kind of different illegalities being committed in other states, then how can the Chief Secretary pass any instruction against any other states or Centre," it said. The government said that Centre had been given the right under the constitution to frame rules for efficacious management of all the interstate rivers and the HC did not examine the provision while passing the order. "The High Court has gravely erred in declaring Ganga and Yamuna as legal person/living entity. Hence, in case of coming of flood vis-a-vis someone dying in these rivers due to such flood, therefore, the effective party can file suit for damages against the Chief Secretary of the State and then in that case State Government will be liable to bear such financial burden," the petition said." (https://timesofindia.indiatimes.com/india/sc-stays-uttrakhand-hc-order-declaring-ganga-yamuna-as-living-entities/articleshow/59494002.cms).

[29] http://archive.indianexpress.com/news/sc-stays-2g-court--summons-to-ravi-ruia/1100575/.

7. Rights of Nature and Hindutva Lite

It appears that the government's interest in avoiding liability trumped their possible interest in drawing political gain from these interpretations of rights of nature or in using Hindu values to set the foundation for the interpretation of the law in the Supreme Court. In the Special Leave Petitions, the state and central governments argued that the transboundary nature of the river would complicate the work of guardians, who while living in one state cannot decide matters occurring in the other states through which these rivers flow. In doing so, government administrators intimated that these new legal rights would encumber them in a tangle of responsibilities and liabilities that they were not eager to have. In addition to the interstate problems, we can also surmise that government officials did not want the ruling to impinge on their decisions regarding river water extractions and dams that reduce or change flows, especially since these transactions are garlanded by money-making agreements and clearances (Alley 2017). Looking at the ruling from the environmental activist's angle, the appointment of only a few guardians would have narrowed the checks and balances on water resource uses, endangering more quickly the survival of these critical rivers.

In these appeals, the potential to forward a Hindutva agenda was therefore muffled by the Supreme Court stay. This muffling revealed the government's lack of interest in taking on the liability that a rights-based ruling would inspire. This is surprising to the High Court advocates because the central government was at the same time highlighting their interest in river cleanup as a flagship initiative. Their actions to quash the order giving rights and thus more protections to these rivers occurs at a time when Hindu devotees are exposed to more dangerous levels of pollutants in their everyday ritual practices.

The *Salim* case shows that the High Court Judges were willing to invoke the Goddesses as "juristic/legal persons/living entities having the status of a legal person with all corresponding rights, duties and liabilities of a living person" as a way to make the more profound application of the fundamental right to life to rivers, glaciers and all tributaries.[30] These imaginaries create Ganga and Yamuna as vulnerable and not all powerful goddesses, in need of guardians. Yet for many residents of Varanasi, Ganga remains "our *tarini*". For them, it appears contradictory that, on the one hand, these rivers are abused and overused by humans, and on the other, that legal authorities call for their protection by naming the same humans that abuse and overuse them. This is an ontological turn from *shakti* to vulnerability at a time when guardians are highly suspicious. As mentioned earlier, Varanasi residents do not see them as competent to care for critical resources with a mind to sustainability.[31]

8. Conclusions: Rights of Nature and Spiritual Ecological Activism

Given that the rulings did not support devotees of these rivers in their everyday practices, and that the rulings were also quashed by the very government officials who could have turned them into ideological tools, we can finally ask: How have these legal initiatives helped or hindered spiritual ecological activism or religious or scientific environmentalism involved with protecting sacred rivers? Have these legal pronouncements helped activists in advancing their conservation and cleanup plans? This ruling could have garnered support among environmentalist communities, but there was little if any activist movement attached to it, apart from the celebratory media reports announcing that Indian law had joined the global discourse on rights of nature. Immediately after the judgements, there were demonstrations for and against the *Salim* ruling by residents of the area around Hardwar. Those demonstrations involved the original problems of encroachment addressed at the outset of the petition. Once the orders and rulings were issued, some residents were evicted from their homes on the banks of the Ganga canal, and they protested for that reason. For seasoned activists using varying

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[30] See also Studley (2017) on philosophical approaches to the juristic personhood of nature in cases around the world.
[31] These were the phrases I reported on in the 1990s. Corruption and eating the money meant for Ganga rejuvenation remain prominent themes in local discourse.

combinations of spiritual ecological, religious environmental or science advocacy, the rulings were not a useful support for their demands and activities, and they did not lead to any petitions submitted in the courts at any level.

For example, a hardline activist fighting against pollution and the over-extraction of water from these rivers, Dr. G. D. Agarwal or Swami Sanand was opposing government policies on hydropower development that were reducing instream flows. Swami Sanand argued for continuous flow (*aviral dara*), or what ecologists and hydrologists call environmental flows, through a variety of pressure tactics. These tactics involved letter-writing to the Prime Minister, conferences with state and central government officials, court petitions, and personal fasting for long periods of time. This activist was well known to other river activists in India for his strategy of fasting as a way to move government officials toward his demands. But his direct actions did not reference these High Court rulings or use the support of them in specific grievances or writ petitions. The leader of a religious organization, Parmarth Niketan, also gave verbal agreement to the High Court order but did not use the ruling for any direct ideological, religious or legal action.[32] Activists involved with the South Asian Network on Dams, Rivers, and People celebrated the ruling but then criticized the fact that there was no implementation road map to declare extractions and obstructions of flow as illegal actions (Goswami 2017). A science advocacy organization, The Center for Science and Environment, also highlighted the rulings but did not campaign against the Supreme Court stay orders.

Returning to the conceptual creativity of these rulings, there is a question of whether it is helpful to make these rivers into vulnerable prototypes of nature/person/Goddess. This kind of inclusive conceptualizing matches the movement of the rights of nature discourse across countries. The conceptualizing is rhizomatic, joining branches from domains of knowledge that are sometimes overlapping in Indian legal and religious practices. In interviews, respondents have been able to work with the overlapping notions of person and deity; legal respondents found their roots in colonial law, while devotees and some activists found support by agreeing that the Mother Goddesses should have rights. But defining Ganga and Yamuna as vulnerable does not have full support among devotees. Some Varanasi residents have countered that Ganga cannot, in her role as "*Tarini*", be vulnerable and need human protection. Moreover, she does not get much protection from government which is generally corrupt and exploitative.

Nevertheless, the rhizomatic movement of the notion of juristic personhood from colonial law to postcolonial rights of nature designates the rivers as potential rights bearers and could help to set the stage for other legal actions focused on cleanup and protection. More importantly, the fusion breaks down boundaries between realms of thought and practice (e.g., law, science, religion) and gives all these viewpoints an interpretive space in the understanding of river predicaments. Even if protections cannot be enforced by guardians who are responsible and accountable, the prototype construct helps to prevent pigeon-holing the problem as a scientific one or a legal one or a religious one. A prototype does not invite a sense of bounded identity but engenders grades of likeness, so that other entities can be likened to the original prototype with more flexibility. Designated as nature/person/deity, these prototypes can then stand for the predicaments of many other entities, for rivers that are sacred and not so sacred, and for other forms of nature.

A semantically creative effort does not mean it will translate into a powerful tool for devotion or activism. The key disabling feature is that devotees and environmental activists associate the legal initiative with general government malaise and corruption in the implementation of pollution prevention and conservation programs. Thus, if the ruling requires a vigilant government to enforce it, then devotees are immediately skeptical. The benefits of the ruling for people and these rivers seem to be confined to the conceptual framework and not to any grounded change.

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[32] "Mother Ganga: A Juristic Person", *Kanooni Patrika*, August 2017. https://www.parmarth.org/mother-ganga-a-juristic-person-kanooni-patrika-august-2017/.

References

Alley, Kelly D. 1994. Ganga and Gandagi: Interpretations of Pollution and Waste in Benaras. *Ethnology* 33: 127–45. [CrossRef]

Alley, Kelly D. 1998. Idioms of Degeneracy: Assessing Ganga's Purity and Pollution. In *Purifying the Earthly Body of God: Religion and Ecology in Hindu India*. Edited by Lance Nelson. Albany: State University of New York Press, pp. 297–330.

Alley, Kelly D. 2000. Separate Domains: Hinduism, Politics and Environmental Pollution. In *Hinduism and Ecology*. Edited by Christopher Key Chapple and Mary Evelyn Tucker. Cambridge: Harvard University Press.

Alley, Kelly D. 2002. *On the Banks of the Ganga: When Wastewater Meets a Sacred River*. Ann Arbor: University of Michigan Press.

Alley, Kelly D. 2008. Legal Activism and River Pollution in India. *Georgetown International Environmental Law Review* 21: 793.

Alley, Kelly. 2015. Rejuvenating the Ganga. *Global Water Forum*, July 13. Available online: http://www.globalwaterforum.org/2015/08/13/rejuvenating-the-ganga/ (accessed on 24 August 2019).

Alley, Kelly D. 2017. Modes of governance in India's hydropower development. *WIREs Water* 4: e1198. [CrossRef]

Alley, Kelly D., and Georgina Drew. 2012. "Ganga". In *Hinduism, Oxford Bibliographies*. Oxford: Oxford University Press.

Alley, Kelly D., and Tarini Mehta. 2019. The Experiment with Rights of Nature in India. In *Sustainability and the Rights of Nature in Practice*. Edited by Cameron La Follette and Chris Maser. Boca Raton: CRC Press.

Amirante, Domenico. 2012. Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India. *Pace Environmental Law Review* 29: 441–69.

Berti, Daniela. 2015. Gods' Rights vs. Hydroelectric Projects: Environmental conflicts and the Judicialization of Nature in India. In *The Human Person and Nature in Classical and Modern India*. Edited by Raffaele Torella and Giorgio Milanetti. Supplemento n°2 allaRivistaDegliStudiOrientali, n.s. Pisa: Fabrizio Serra Editore, vol. LXXXVIII, pp. 111–29.

Bhuwania, Anuj. 2017. *Courting the People: Public Interest Litigation in Post-Emergency India*. Cambridge: Cambridge University Press.

Birla, Ritu. 2009. *Stages of Capital: Law, Culture, and Market Governance in Late Colonial India*. Durham: Duke University Press.

Calzadilla, Paola Villavicencio, and Louis J. Kotzé. 2018. Living in Harmony with Nature? A Critical Appraisal of the Rights of Mother Earth in Bolivia. *Transnational Environmental Law* 7: 397–424. [CrossRef]

Chapple, Christopher Key, and Mary Evelyn Tucker. 2000. *Hinduism and Ecology: The Intersection of Earth, Sky, and Water*. Cambridge: Harvard University Press.

Colwell, Renata, Savannah Carr-Wilson, and Calvin Sandborn. 2017. Legal Personality of Natural Features: Recent International Developments and Applicability in Canada. Unpublished paper.

Das Acevedo, D. 2016. Divine Sovereignty, Indian Property Law, and the Dispute over the Padmanabhaswamy Temple. *Modern Asian Studies* 50: 841–65. [CrossRef]

Das Acevedo, D. 2018. Pause for Thought: Supreme Court's Verdict on Sabarimala. *Economic and Political Weekly* 53: 12–15.

Dasgupta, Simanti. 2015. *Bits of Belonging: Information Technology, Water, and Neoliberal Governance in India*. Philadelphia: Temple University Press.

Davis, Richard H. 2010. Temples, deities, and the law. In *Hinduism and Law: An Introduction*. Edited by Timothy Lubin, Donald R. Davis and Jayanth K. Krishnan. Cambridge: Cambridge University Press, pp. 195–206.

Doctor, Vikram. 2018. Hoping for Divine Justice: When Gods Become Litigants. Available online: blogs. economictimes.indiatimes.com (accessed on 10 August 2018).

Drew, Georgina. 2017. *River Dialogues: Hindu Faith and the Political Ecology of Dams on the Sacred Ganga*. Tucson: University of Arizona Press.

Eck, Diana L. 1982a. *Banaras, City of Light*. New York: Alfred A. Knopf, Inc.

Eck, Diana. 1982b. Ganga: The Goddess in Hindu Sacred Geography. In *The Divine Consort: Radha and the Goddesses of India*. Edited by Hawley John Stratton and Donna Marie Wulff. Boston: Beacon Press, pp. 166–83.

Gagne, Karine. 2018. *Caring for Glaciers: Land, Animals, and Humanity in the Himalayas*. Seattle: University of Washington Press.

Gleeson-White, Jane. 2018. It's only natural: The push to give rivers, mountains and forests legal rights. *The Guardian*, March 31. Available online: https://www.theguardian.com/australia-news/2018/apr/01/its-only-natural-the-push-to-give-rivers-mountains-and-forests-legal-rights (accessed on 24 August 2019).

Gopalan, Radha. 2017. Why the Court Ruling to Humanise the Ganga and Yamuna Rivers Rings Hollow. *The Wire*, March 27.

Goswami, Urmi A. 2017. Will granting legal rights to rivers like the Ganga, change the on-ground situation? *The Economic Times*, March 25.

Govindrajan, Radhika. 2018. *Animal Intimacies: Interspecies Relatedness in India's Central Himalayas*. New Haven: Yale University Press.

Haberman, David L. 2006. *River of Love in an Age of Pollution: The Yamuna River of Northern India*, 1st ed. Berkeley: University of California Press.

Jaffrelot, Christophe, ed. 2007. *Hindu Nationalism: A Reader*. Princeton: Princeton University Press.

Jaffrelot, Christophe. 2013. Refining the moderation thesis. Two religious parties and Indian democracy: The Jana Sangh and the BJP between Hindutva radicalism and coalition politics. *Democratization* 20: 876–94. [CrossRef]

Jaffrelot, Christophe. 2016. Narendra Modi between Hindutva and subnationalism: The Gujarati asmita of a Hindu Hriday Samrat. *India Review* 15: 196–217. [CrossRef]

Kumar, Anuj. 2016. National Green Tribunal: A New Mandate towards Protection of Environment. Available online: http://www.legaldesire.com/national-green-tribunal-a-new-mandate-towards-protection-of-environment/ (accessed on 24 August 2019).

Kumar, Sanjay. 2019. In India, Hindu pride boosts pseudoscience. *Science* 363: 679–80. [CrossRef] [PubMed]

Kumar, Bidisha, and George James. 2013. Yamuna. In *Brill's Encyclopedia of Hinduism*. Edited by Knut A. Jacobsen, Helene Basu, Angelika Malinar and Vasudha Narayanan. Leiden: Brill.

La Follette, Cameron, and Chris Maser. 2017. *Sustainability and the Rights of Nature: An Introduction*. Boca Raton: CRC Press.

Latour, Bruno. 2004. *Politics of Nature: How to Bring the Sciences into Democracy*. Translated by Catherine Porter. Cambridge: Harvard University Press.

Lokgariwar, Chicu. 2017. The Sad State of These Persons Called Ganga & Yamuna—Can State Protect Them? *Blog of the South Asian Network for Dams, Rivers and People*, April 11. Available online: https://sandrp.wordpress.com/2017/04/11/the-sad-state-of-these-persons-called-ganga-yamuna-can-state-protect-them/ (accessed on 24 August 2019).

Ludden, David. 2006. *Making India Hindu: Religion, Community, and the Politics of Democracy in India*. New York: Oxford University Press.

Markandya, Anil, and M. N. Murty. 2000. *Cleaning-Up the Ganges: A Cost Benefit Analysis of the Ganga Action Plan*. Delhi: Oxford University Press.

Mathur, Nayanika. 2015. *Paper Tiger: Law, Bureaucracy and the Developmental State in Himalayan India*. Cambridge: Cambridge University Press.

Mehta, Deepak. 2015. The Ayodhya dispute: The absent mosque, state of emergency and the jural deity. *Journal of Material Culture* 20: 397–414. [CrossRef]

Nash, Roderick Frazier. 1989. The rights of nature: A history of environmental ethics. In *History of American Thought and Culture*. Madison: University of Wisconsin Press.

O'Donnell, Erin L. 2018. At the Intersection of the Sacred and the Legal: Rights for Nature in Uttarakhand, India. *Journal of Environmental Law* 30: 135–44. [CrossRef]

O'Donnell, Erin L., and J. Talbot-Jones. 2018. Creating legal rights for rivers: lessons from Australia, New Zealand, and India. *Ecology and Society* 23: 7. [CrossRef]

Pecharroman, Lidia Cano. 2018. Rights of Nature: Rivers That Can Stand in Court. *Resources* 7: 13. [CrossRef]

Pillalamarri, Akhilesh. 2018. Road to 2019: India's Two Main Parties. *The Diplomat*, December 20. Available online: https://thediplomat.com/2018/12/road-to-2019-indias-two-main-parties-converge/ (accessed on 24 August 2019).

Rauta, Rama. 2015. The Ganga: A Lament and a Plea. In *Living Rivers, Dying Rivers: A Quest through India*. Edited by Ramaswamy Iyer. New Delhi: Oxford University Press.

Sanghi, Rashmi, ed. 2014. *Our National River Ganga: Lifeline of Millions*. Cham: Springer.

Shelton, Dinah. 2018. Nature as a legal person. *VertigO—La revue Électronique en Sciences de l'environnement [En ligne]*. [CrossRef]

Shivshankar, Goutham. 2017. The Personhood of Nature. In *Law and Other Things: A Blog about India's Laws and Legal System, its Courts, and its Constitution*. Available online: http://lawandotherthings.com/2017/04/the-personhood-of-nature/ (accessed on 24 August 2019).

Shrotria, Sudha. 2015. Environmental justice: Is the National Green Tribunal of India effective? *Environmental Law Review*, September 1.

Sohm, Rudolf. 1892. *The Institutes of Roman Law*. Moscow: РиполКлассик.

Sontheimer, Günther-Dietz. 1965. Religious Endowments in India: The Juristic Personality of Hindu Deities. *Zeitschrift für vergleichende Rechtswissenschaft* 67: 45–100.

Sponsel, Leslie E. 2012. *Spiritual Ecology: A Quiet Revolution*. Santa Barbara: ABO-CLI Press.

Sponsel, Leslie E. 2019. Ecology and Spirituality. In *The Oxford Research Encyclopedia of Religion*. Edited by John Barton. New York: Oxford University Press.

Stone, Christopher D. 1972. Should Trees Have Standing?—Towards Legal Rights for Natural Objects. *Southern California Law Review* 45: 450–501.

Studley, John. 2017. Juristic Personhood for Sacred Natural Sites: A potential means for protecting nature. Unpublished paper.

Tare, Vinod, and Gautam Roy. 2015. The Ganga: A Trickle of Hope. In *Living Rivers, Dying Rivers: A Quest through India*. Edited by Ramaswamy Iyer. New Delhi: Oxford University Press.

Vaughan-Lee, Llewellyn, Sandra Ingerman, Joanna Macy, Nhât Hạnh, Bill Plotkin, Father Richard Rohr, Vandana Shiva, Brian Swimme, Mary Tucker, and Wendell Berry. 2016. *Spiritual Ecology: The Cry of the Earth*. Point Reyes Station: The Golden Sufi Center.

Zavos, John, Andrew Wyatt, and Vernon Marston Hewitt. 2004. *The Politics of Cultural Mobilization in India*. New Delhi and New York: Oxford University Press.

The Anuvrat Movement: A Case Study of Jain-inspired Ethical and Eco-conscious Living

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Abstract: From proclaiming the equality of all life forms to the stringent emphasis placed upon nonviolent behavior (*ahimsa*), and once more to the pronounced intention for limiting one's possessions (*aparigraha*), Jainism has often been pointed to for its admirably ecofriendly example. Incorporating some of this eco-friendliness into its design for ethical vow taking, the Jain-inspired Anuvrat Movement, founded in 1949 by Acharya Sri Tulsi, today offers some arguably vital relevance for the urgent modern task to live eco-consciously. While such relevance includes, most explicitly, Anuvrat's final vow (vow eleven) which calls for practitioners to "refrain from such acts as are likely to cause pollution and harm the environment," and to avoid the "cutting down of trees" and the "wasting of water,"[1] it also includes several of Anuvrat's other vows as well, which carry significance on a more implicit level. Hence, presenting some of the basic history and philosophy behind Anuvrat, this article also analyzes its potential for ensuring ethical (and eco-conscious) behavior via its hallmark mechanism of vow restriction—a modality of arguably potent strategic and motivational value. Altogether, while first providing a brief inventory of Jain ecological practice in general, the article will then turn its attention to Anuvrat, arguing that when it comes to the modern eco-conscious imperative to "live simply so that others may simply live" (as the popular adage has it), there is indeed much that Anuvrat has to offer.

Keywords: Jainism; Anuvrat Movement; eco-conscious living; ecology; ecological vow-taking

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Jainism has often been celebrated for its admirably ecofriendly example. As L.M. Singhvi has shown in his brief but compelling "The Jain Declaration on Nature," for instance, the various ecological aspects of this tradition are indeed numerous and widely-varying, and go well beyond *ahimsa* (nonharm to all living things) and *aparigraha* (limited possession)—the ethical and religious principles with which, in addition to *anekantavada* (non-absolutism), Jains have typically been most closely associated.[2] With this being said, at a time when the world urgently needs a greater embrace of eco-conscious simplicity as well as a far broader awakening of animal rights, the ecological value of *ahimsa* and *aparigraha* should by no means be understated. Seeing how Jains (and especially Jain mendicants) regularly take these two virtues to their utmost furthest extreme, they can naturally provide some vital insight in terms of what it looks like to dedicate oneself to, as well as meticulously execute, an eco-conscious and bio-friendly lifestyle. Still, as Singhvi and others have shown, a broader survey of Jain religious practice reveals a host of other meaningfully eco-conscious elements as well. Among others, these

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1   (Anuvrat Global Organisation (Anuvibha) n.d.): accessible via http://www.anuvibha.in/Code-of-Conduct.htm.
2   (Singhvi 2002, pp. 217–24).

include: *jiva-daya* (compassion and charity shown to the non-human living world), a recognition of the basic interdependence of life (all organisms being in some way mutually dependent upon each other), the practice of *gupti* (self-restraint) and *samyaktva* (equanimity)—both of which, like *aparigraha*, guard against the human eco-destructive desire to materially accumulate—and lastly the practice of *pratikramana* (ethical introspection), which calls upon Jains to actively reflect upon their own daily minor transgressions (especially concerning *ahimsa*) and then aim to do even better.

However, though each of these practices contain rich ecological significance, it is important also to remember that Jainism originated first and foremost as a soteriological religious pathway, focusing on spiritual liberation at the personal level. Hence, as a number of recent scholars have been keen to point out, constructions of Jainism as being inherently 'green' or 'environmentalist' must be called into question,[3] for on the one hand issues of ecology have never been Jainism's primary or defining emphasis (or end-goal), and on the other, as John Cort has noted, Jain ecological practice is in a sense fundamentally estranged from modern environmentalism, seeing how the former is based on ancient teachings and the latter represents only a very recent "field of inquiry" (episteme).[4] Nevertheless, even if a fully-fledged modern Jain environmental ethic has yet to be formulated (or even if this is an impossible task in the first place), by no means should this prevent, at least in the opinion of this author, the looking upon of certain Jain teachings or practices as being, relative to our modern times, ecologically meaningful, applicable, or even perhaps quite timely and necessary. In fact, I would suggest that this latter potential represents a rather reasonable and vital potential, taking up as it does one of the key directives of UNESCO's 2000 *Earth Charter* declaration, which calls for modern individuals to "recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being."[5]

Thus, in accordance with this directive, while first offering a brief inventory of Jain ecological thought and practice in general, this article will then analyze the eco-conscious dimensions of the modern Jain-inspired Anuvrat Movement—a social reform campaign established in 1949 by the late Jain (Shvetambara Terapanth) mendicant leader, Acharya Sri Tulsi. A widely celebrated and inspirational figure not only for modern Jains but also Indian citizens more broadly, a key teaching of Tulsi's was his view that positive social change depended first and foremost upon the ethical and spiritual conduct of *the individual*. Putting this philosophy into practice, Tulsi thus formulated for Anuvrat a series of 'small vows' (*anuvrat*) of ideal conduct, something he envisioned would beneficially impact both individual as well as society alike. Notably, among these 'small vows' was one fully devoted to ecological concern: namely, Anuvrat's final vow, vow eleven, which calls for practitioners to "refrain from such acts as are likely to cause pollution and harm the environment," and to avoid the "cutting down of trees" and the "wasting of water."[6] Beyond the explicit ecological significance contained within vow eleven, moreover, eco-conscious relevance was also expressed through several of Anuvrat's other vows as well, albeit on a more implicit level. Thus, exploring each of these vows in further depth as well as touching upon some of the basic history and philosophy behind Anuvrat, this article will also analyze Anuvrat's potential for ensuring ethical (and eco-conscious) behavior via its hallmark mechanism of vow restriction—a modality of arguably potent strategic and motivational value. Altogether, while first taking a brief inventory of Jain ecological practice in general, the article will then explore how when it comes to the modern eco-conscious imperative to "live simply so that others may simply live" (as the popular adage has it), there is indeed much that Anuvrat has to offer.

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[3] As one notable example, see (Cort 2002), "Green Jainism? Notes and Queries toward a Possible Jain Environmental Ethic."
[4] (Cort 2002, p. 66).
[5] (Pojman and Pojman 2008, p. 664).
[6] Anuvrat code citation: accessible via http://www.anuvibha.in/Code-of-Conduct.htm.

1. Jainism and Ecology: A Brief Overview of Recent Scholarship

Prior to launching into our analysis of the Anuvrat movement, let us first touch upon the topic of Jainism and ecology in general. An important point to initially consider here is that, as with certain other Indic religious pathways, Jainism's *primarily ascetic* origins and characteristics have elicited a healthy degree of contemporary skepticism towards the basic ecological soundness of its teachings. Historically speaking, given the by and large dismal ecological track record of dualism and transcendence focused worldviews, both religious and secular, many modern folks have found themselves sharply in criticism of such world-devaluing perspectives, choosing (rather understandably) to favor more world-affirming and relational approaches instead. However, in line with Larry Rasmussen's notion of an "earth-honoring asceticism,"[7] considering the earth's current population and also the unsustainable rate at which humans currently participate in eco-destructive forms of material consumption, it is quite arguable that Jainism nevertheless offers some truly crucial ecological insight and value. Also, as another important preliminary point to consider, it bears noting that responding effectively to ecological crisis will require of humanity to make key changes at not just one but a variety of different levels: that is to say, *structurally* (making adjustments politically and economically, for instance); at the level of our various cultural and individual *thought-paradigms* (challenging anthropocentric, patriarchal, and racially prejudiced thinking, for example); as well as, on a more basic and external level, making the necessary changes (or sacrifices) to our own *personal lifestyle patterns*. And among these three distinct and arguably indispensable levels, it is especially this latter one—that of making key adjustments to our own (often heretofore eco-destructive) lifestyles—where I believe Jain teachings and practices may be especially valuable for the unique inspiration and insight they can offer.

Before launching into an analysis of specific teachings, however, it first merits discussing a basic divide which has recently surfaced within Jainism and Ecology scholarship. This refers to how ecological principles have recently been assessed vis-à-vis their modern relevance and viability, revealing in this respect a fundamental difference in approach. Though this basic methodological divide cannot be reduced to any one singular factor, I would suggest that it has much to do with how scholars tend to respond—whether more affirmatively or skeptically—to the following key series of questions (as posed by Christopher Chapple in his introduction to *Jainism and Ecology: Nonviolence in the Web of Life*):

> "Is this worldview compatible with contemporary ecological theory? How might a Jain ethical system respond to the challenges of making decisions regarding such issues as the development of dams, the proliferation of automobiles, overcrowding due to overpopulation, and the protection of individual animal species? Can there be a Jain environmental activism that stems from a traditional concern for self-purification that simultaneously responds to the contemporary dilemma of ecosystem degradation?"[8]

Though these questions are individually distinct from one another (and therefore in each case invite a distinct set of reflections to be made), it is worth noting that as a whole they have tended to be met by scholars of Jainism with either a prevailing sense of optimism, or otherwise a prevailing sense of hesitation. While on the one hand there exists a number of scholars (and scholar-practitioners) whose work presumes there being a rather workable compatibility between these two contexts, with whatever incongruities there may be being seen as either of a non-essential nature, or otherwise being eligible to be adaptively worked around; on the other hand such incompatibilities have tended to inspire a far more dubious (or at least cautious) sentiment. And because there are important distinct reasons upon which the latter feeling has been grounded, these different reasons should be briefly acknowledged. At the risk of oversimplification, I would suggest that they revolve around three primary concerns, in

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[7] (Rasmussen 2013, p. 252).
[8] (Chapple 2002b, p. xxxvi).

particular—namely: (1) contextual incompatibility; (2) selective distortion; and (3) world-denial. Let us begin with the former:

(1) *Contextual incompatibility*: as already hinted at above, here we see a reluctance to assert that Jain religious teachings, formulated as they were during an entirely different era, are somehow nevertheless compatible with the various circumstances and concerns of modern environmentalism. As Cort has, for instance, noted:

> "The reason I say that there is no Jain environmental ethic is that environmentalism is a relatively new episteme worldwide. It has arisen out of a set of physical, technological, and increasingly moral and intellectual challenges of the past several centuries, but has attained its position as a distinct field of inquiry—an episteme—only within the past decades."[9]

The challenge that Cort poses here can be seen as a corrective reaction against the tendency for Jain religious teachings to be considered inherently and unquestionably "green" or "environmental," and that is to say, without such teachings first being shown to be able to adequately account for the various complex nuances and realities of contemporary ecocrisis (as involving, for instance, a variety of different structural, globalized, and patently modern phenomena). Hence, until Jain teachings are creatively reformulated or adapted in order to meaningfully speak to these more modern and complex realities and concerns, Jain ecological teachings are bound to remain relevant in only a somewhat limited or partially applicable manner. In short, for a Jain ecological ethic to be considered comprehensively sufficient to our contemporary circumstances, further creative envisioning and articulation would be needed.

(2) *Selective distortion*: here we see suspicions raised relative to how common portrayals of Jain ecological practice have heretofore tended to be constructed in an oversimplified and conveniently selective manner—for instance, all too often 'cherry-picking' out the exclusively positive dimensions (certain isolated practices or verses of scripture, for example), while simultaneously ignoring or downplaying some of the more problematic ones. The upshot here is that if Jain teachings are going to be assessed—and, by extension, more often than not celebrated—for the various measures of ecological value they contain, then also included within such an evaluative process should be a fair and even-handed accounting for whatever so-called 'shadow aspects' may be lurking. This general issue is also, it is important to note, not just a problem of selective distortion, but also *selective cooptation.* As Paul Dundas briefly explains, "Contemporary environmentalism seems to be a particular issue into which Indian religious traditions are coopted somewhat uneasily if their own highly ambivalent presuppositions about nature and the world are not fully taken into account."[10] Hence, as with the Jain perspective of *anekantavada* (non-absolutism; many-sidedness), Jainism and ecology scholarship needs to ensure that it takes into account more than just the rosier elements of tradition. Lastly, between warnings against cooptation and criticisms of cherry-picking, one may wonder if all of this simply boils down to scholars needing to do a better job to present a more fair and balanced portrayal of Jain ecological teachings—again, a sense of being willing to include the bad along with the good, and the questionable along with the clearly laudable—or if instead the entire endeavor might be considered to be more or less shipwrecked from the outset (that is to say, that the positive dimensions are not only *diluted* by the more problematic elements, but are instead either *undermined, canceled out, or are rendered no longer credible* by them). Though my own opinion on this leans more towards the former being true, I ultimately leave this as an open question for the reader.

(3) *World-denial*: this final point of skepticism involves Jainism's fundamental tendency for world-denial, a characteristic it shares with a variety of other Indic-samsaric religious pathways. Here, similar to above, there is a sense that whatever positive ecological aspects are identifiable within Jainism, in the larger scheme of things they are critically undermined by the Jain tendency for espousing religious and philosophical views of the more 'world-denying' sort. As Jeffery Long summarizes:

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9   (Cort 2002, pp. 65–66).
10   (Dundas 2002, p. 111).

"Other scholars of Jainism, on the other hand, have called this view into question, arguing on the basis of Jain textual traditions that Jainism has more typically expressed a world-denying ethos of extreme asceticism which, far from positively valuing the world—and by implication, the physical environment—sees it as an obstacle to overcome. A re-envisioning of Jainism as a 'green' tradition therefore involves inevitable distortion."[11]

However, with this being said, Long also proceeds to point out:

"Although, as some scholars have pointed out, the j*iva*—like the *purusha* of Samkhya philosophy—implies a dualism as radical as the Cartesian dualism that has facilitated the Western devaluation and exploitation of the natural world as mere material for consumption, Jain practice would seem to belie this. Although [Jain] philosophy may be world negating, its practice issues in a negation of this negation: a profound mindfulness of one's environmental impact in life."[12]

Thus, Jainism's standpoint of metaphysical dualism—between *jiva*, sentience, and *ajiva*, insentience, as well as between *jiva* (here as a sense of one's indwelling soul) and that of one's body and their accumulation of karma—has *in practice* tended actually to be expressed rather innocuously, by and large managing to steer clear of the negative ecological ramifications that have so disastrously arisen from the widespread embrace of other such world-negating metaphysical dualisms—such as that of the Enlightenment-based Cartesian formulation. Indeed, while traditional Jain teachings have tended to discourage world engagement (largely on account of the fear of increasing one's own samsaric entanglement), at the heart of Jain ethics there has at the same time always existed an undergirding emphasis placed upon compassion (*anukampa*), nonviolence (*ahimsa*), and the willingness to radically minimize the negative impact one has upon their surrounding environment. And while it is true that a Jain's prerogative for the avoidance of accruing negative personal karma plays an important justifying role (or central motivation) behind such nonviolent and ecological practice, I believe a charge of non-altruistic individualism would be misplaced—failing to take into account the primarily *religious* (i.e., based on the core worldview of samsara, karma, etc.) and not ethical basis for such an emphasis. Still, when evaluating the ecological value of Jain teachings, it is important to take its dualist presuppositions into account, for such a worldview can indeed often lead to subtle negative ecological implications being expressed in both thought as well as practice (as has in fact sometimes historically been the case—even within Jainism[13]).

Altogether, I would suggest that the question of taking a more affirming versus a more skeptical approach towards the modern relevance of Jain ecological teachings is not so much a matter of one side being "right" and the other "wrong," as much as whichever direction one tends to lean towards natural carrying with it its own intrinsic advantages as well as shortcomings. And the reason I personally favor the more affirmative approach is because, simply put, I do not think it is actually such a stretch for these ecofriendly Jain teachings and practices—whether they need to first be creatively adapted, or not—to be made relevant to our contemporary circumstances. Furthermore, seeing how the vast majority of Jainism's teachings of ecological pertinence operate on more of a personal level of practice (again, addressing the eco-conscious lifestyle aspect), I believe this fact amplifies their potential for being adopted, or at least learned from, in a more or less universal (or trans-historical) manner. Of course, these questions also do not exist in a vacuum, and now with contemporary ecological crisis presenting a valence of superseding ethical urgency, like many others I believe it would actually be unwise to *overthink* or become *overly careful* in terms of our collectively gathering ecological inspiration from around the

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[11] (Long 2009, p. 181).
[12] (Ibid., p. 182).
[13] For instance, among other examples, some scholars have I believe rightly criticized certain Jain animal shelters (*pinjrapoles*) as expressing a commitment to life-extension over and above the offering of comfortable (and humane by Western standards) living conditions.

world. Finally, it is also important to note here that, semantically speaking, asking the question "Does Jainism have a modern environmental ethic?" (in other words, one that is fully-developed and adequate to contemporary circumstances) is a far and away different question from asking "Are there teachings within Jainism that in our present day contain relevant ecological value?" Point being, while it is fairly easy to respond affirmatively to this latter question, the former presents a much harder case, and we should therefore be careful not to conflate the two.

2. Jainism and Ecology: A Brief Overview of Key Principles

Transitioning now into a brief overview of Jain ecological thought, let us begin with the Jain principle of nonviolence (*ahimsa*). Jainism's overriding emphasis upon this virtue is no less than foundational, as can be witnessed in the encapsulated traditional saying '*ahimsa paramo dharma*'—that 'nonviolence is the highest law' (or 'the highest religion'). A driving principle behind innumerable Jain teachings and practices, ahimsa necessitates going to great lengths in order not to kill (or for that matter, harm) life forms of any kind—including even the tiniest of microorganisms (*nigodas*). In this respect Jainism is known for the uncommon extremes in which its adherents strive to steadfastly fulfill this practice on a daily basis. Though certainly applying at the less stringent lay (or householder) level of practice as well, Jainism's radical commitment to non-violence is most clearly expressed by its mendicant practitioners in particular, whose entire lives become scrupulously regulated. As Vallely notes:

> "The entire logic of the ascetic's daily routine is dictated by the ethic of ahimsa, or nonharm. It is in interactions with the nonhuman world that the ascetics are most highly attentive, observant, and mindful—that is, when they are most quintessentially ascetic. Interactions with 'nature'—with the air, water, soil, and vegetation—define both lay and ascetic Jains by determining the boundaries of their ethical being."[14]

A large extent of what Vallely is referring to here comes down to Jainism's behavioral rules for self-control (*gupti*) and carefulness (*samiti*) which mendicant practitioners must at all times strictly adhere to, and which together become expressed at levels of one's bodily movements, speech and even inner thoughts. Presenting a prime historical example of this supreme degree of nonviolent punctiliousness is the enlightened Jain tirthankara (teacher; 'ford-maker') Mahavira, whose exemplary model is vividly recorded in the Kalpa sutra:

> "Henceforth the Venerable Ascetic Mahavira was houseless, circumspect in his walking, circumspect in his speaking, circumspect in his begging, circumspect in his accepting (anything), in the carrying of his outfit and drinking vessel; circumspect in evacuating excrements, urine, saliva, mucus, and uncleanliness of the body; circumspect in his thoughts, circumspect in his words, circumspect in his acts [. . .] His heart was pure like the water (of rivers or tanks) in autumn."[15]

More than simply an ideal case dating back to an ancient bygone era, the extremely attentive level of nonviolent behavior that Mahavira heroically embodies here—that is to say, being 'circumspect' in all things, so as not to needlessly harm life forms of any kind—also very much percolates into the level of lay practice. Although when compared to the mendicant context, lay Jainism happens to be far more moderate and relaxed, Jain laity must nevertheless observe a number of measures that outsiders to this tradition would surely interpret as being radically nonviolent. Most notably, such measures include (among other such practices): the adherence to a strictly nonviolent dietary code (one that is vegetarian and avoids various soil-grown and bulbous foods); avoiding the use of leather, silk, and pesticides; choosing not to eat before dawn or after sunset (lest one's cooking fires or process of eating

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14 (Vallely 2002, p. 199).
15 (Jacobi 1884, p. 260).

become hazardous to the hordes of airborne insects that are believed to be especially active at this time); and choosing a regular vocation in the world that is maximally non-violent (for instance, as a banker, or as a merchant).

Though the practice of *ahimsa* is largely justified by Jains through the prism of their own distinctive version of karma theory, where violent thoughts and actions are understood to attract the most spiritually-destructive forms of karma and should therefore be avoided as much as conceivably possible, nonviolent practice is also grounded in basic Jain perspectives on cosmology and biology. In this latter case, every life form is seen as being inviolably sacred and worthy of reverence—a recognition which entails, at the very least, each and every life form's inherent right to be respected and not harmed or interfered with. Supporting this deeply conservationist attitude is the belief that every living organism enjoys at its innermost level the existence of a spiritually boundless and luminescent *jiva*—with 'soul' providing an approximate (though not entirely accurate or unproblematic) translation of this term. Rather notably, the *jiva* is as an entity that is seen as being laterally equal to all others, where each and every *jiva* is believed to inherently possess an unlimited amount of energy, vigor, knowledge and bliss.[16] However, the major caveat to this is that the particular manifestations of each creature's bodily faculties and accumulation of personal karma serve to thickly cloud over and obscure such indwelling sentience and spiritual radiance, thus in reality manifesting a wide variance at which each creature may actually *access* and *experience* such innate luminosity from within. Still, from a Jain cosmological and biological standpoint each and every creature—no matter how macrobiotic (humans and others five-sensed living beings, for instance) or microscopic (e.g., tiny insects and microorganisms)—enjoys a natural right to live, flourish and karmically and spiritually evolve in the world. Put differently, and to summon the words of the pioneer of deep ecology Arne Naess, all of life according to Jains is seen to be imbued with 'autotelic value'[17]—that is to say, all of life has a *telos*, or driving purpose behind it, and therefore also (again to quote Naess) an "*equal right to live and blossom.*"[18]

In addition to nonviolence, another core Jain virtue commonly recognized for its ecological significance is that of *aparigaha* (non-possession). Seeing how this practice intersects with many of the ecological dimensions found in Anuvrat, I will only briefly touch upon it here, saving further analysis for later in the article; however, one point to note for the time being is that *aparigraha* refers both to the physical limiting of one's possessions, as well as one's achieving, in relation to whatever sparse possessions one may still possess, a general state of spiritual detachment. Thus, when practicing *aparigraha* a Jain must seek to avoid, in the words of P.S. Jaini, "harboring such false notions as 'this is mine' or 'I made that' and imagining that one can hold on forever to what he [or she] now 'has.'"[19] The starkest image of *aparigraha* is represented by the Jain Digambara ('sky-clad') male mendicant practitioner, who is required to endure a permanently naked existed and whose only personal items consist of a water gourd and, for the gentle sweeping away of insects, a peacock-feathered feather duster. While the rationale here also involves the spiritual opportunity provided through having to endure a sustained form of austerity by way of one's body being tested through its exposure to the elements and to the fluctuation of hot and cold weather; just as important as this is the overcoming of the shame of being naked (*lajja*)—considered by Digambara Jains to be a subtle but also key hindrance to spiritual growth—as well as the relinquishing and freedom from all possessions except that which is the very utmost essential. Additionally of note here is that for Jains the virtues of *ahimsa* and *aparigraha*, while enjoying an independent status from one another, are also considered to be closely interlinked. This is because feelings of possessiveness, no matter how subtle or seemingly insignificant, are understood to inevitably cause a sense of greed and selfishness to arise within an individual—with the added

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[16] One small exception to this is that there are certain *nigodas* (one-sensed microscopic beings) which are considered to be unable to gain liberation. See for instance: Paniker 2010, *Jainism: History, Society, Philosophy and Practice*, p. 53.
[17] (Naess 2008, p. 225).
[18] (Ibid., p. 216).
[19] (Jaini 1979, p. 177).

potential for subtly violent forms of thought and action to then arise (since having possessions tends to cause one's feeling a need to guard and defend such possessions from others). While this point will be revisited later, for now it bears noting that the central ecological significance of *aparigraha* rests in the fact that having fewer possessions can drastically lessen the ecologically-damaging material footprint one brings about in the world. In essence, it allows a person to free of the accumulation of manufactured goods—products which are ultimately rather resource extractive as well as waste and pollution causing.

Similar but also distinct from the virtue of *aparigraha* is that of equanimity (*samyaktva*). From a Jain point of view, equanimity can perhaps be best understood though the individual who has risen above one's egotism and who has conquered the four fierce "passions" (*kashayas*) of anger, greed, pride and deceit, in order to arrive at a peaceful and—at some level awakened—spiritual disposition in life. Being non-reliant upon material need, the practitioner who embodies *samyaktva* may then be far more successful in terms of resisting the need to materially accumulate things. And thus we see how *aparigraha* and *samyaktva* both in turn robustly support one's adopting a lifestyle of material simplicity and eco-conscious minimalism. This practitioner of *aparigraha* and *samyaktva* naturally remains non-exploitative of one's environment, as illustrated by a classic Jain metaphor from the Dashavaikalika sutra. Here, the practice of Jain mendicant alms-seeking (*gochari*) is insightfully compared to the natural eco-friendliness of the bumblebee in its instinctual mode of gathering pollen in a sensitive and eco-conscious manner:

> "As a bumble-bee sucks pollen from flowers just a little at a time and satisfies its need without harming the flowers in any way, so are these absolutely detached *shramans* (Jain ascetics). They seek and gather faultless food from numerous houses exactly as the bumble-bees gather pollen from flowers."[20] (Dashavaikalika sutra 1.2-3)

Serving as one of the four mula sutras (root scriptures) that Shvetambara Jain mendicants must accustom themselves upon becoming initiated (*diksha*), the Dashavaikalika sutra lays out ideal conduct for such mendicants, in this case outlining the required protocol for the going about and begging for one's daily portion of food (*gochari*)—which is to say in a sustainable and non-avaricious manner. Besides illustrating the cherished Jain principles of contentment and spiritual detachment (the Jain mendicant not taking one's source of food for granted or becoming attached to one's benefactors), this verse is also taken to clearly endorse a sensitivity towards resource conservation and the importance of not overly imposing one's needs or desires to the detriment of any natural habitat. However, in order to do this, a Jain mendicant must assuredly first exhibit discipline (*vinaya*) as well as self-control (*gupti*) and equanimity (*samyaktva*).

And though less acknowledged from an ecological standpoint, the Jain practices of regular ethical introspection (*pratikramana*) and repentance (or forgiveness-asking—*prayaschitta*), also arguably offers some rather compelling eco-conscious significance. The practice entails first recollecting one's ethical transgressions over a recent limited period of time (especially relative to whatever lapses in nonviolent carefulness one may have succumbed to), and then expressing sincere contrition for these lapses, asking for forgiveness and also embodying the necessary mental and spiritual resolve in order for one's behavior to become properly rectified in the future. As a mendicant, this ritual must be practiced twice daily, while for lay Jains it is optional but encouraged as a highly meritorious rite. Both lay and mendicant Jains must also perform *pratikramana* during the last day of the eight-day annual observance (or ten, in the case of the Digambara tradition) of the very important Jain tradition of Paryushan/Das Lakshana. At the end of this 8 (or 10 day) annual observance, Jains take great care to ritually atone and ask forgiveness for their transgressions, which includes thoroughly reflecting upon one's behaviors

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[20] Dashavaikalika sutra 1.2-3. As printed in (Up-Pravartak, Shri Amar Muni n.d., p. 9).

over the last year and recognizing one's faults therein. As Jaini notes about this ritual (in a passage revealing the rite's laudably animal-friendly basis):

> "The admission of sins, and accompanying pleas for forgiveness (ksama), are directed not only to a teacher but to all of one's family and friends, irrespective of age or sex. Letters are written to those relatives and acquaintances not in attendance, repeating the same acknowledgements of wrongdoing and solicitations of pardon. Finally, the participant in a samvatsari extends his own forgiveness to all beings and asks that they grant the same favor to him; this is done by repetition of a famous verse which points up the real spirit of pratikramana—the establishment of universal friendship and goodwill: 'khamemi savvajive save jiva khamantu me/metti me savva bhuesu veram majjha na kenavi//I ask pardon of all living creatures; may all of them pardon me. May I have a friendly relationship with all beings and unfriendly with none.'"[21]

Thus, not only does this practice require a high level of moral accountability and the humility to admit and feel remorse over one's accumulated instances of subtle transgression, but it also, in the asking "pardon of all living creatures" reinforces a highly progressive animal-friendly ethic, wherein not just humans but all creatures must be supplicated for forgiveness.

Ecologically speaking, I would suggest that the main significance of this rite is actually two-fold. On the one hand, the rite clearly instills an ethic of deep compassion and care towards one's fellow living beings in the world, providing the opportunity for Jains to really pause and consider how one might improve one's ethical consistency in this regard. Seeing how eco-conscious living requires a strong sense of living mindfully and intentionally in the world (as well as a commitment towards proceeding cautiously), I would suggest that such a practice as this offers some excellent potential for emulation at the level of eco-conscious practice (those who are pursuing an eco-conscious life reflecting back at regular intervals on how well one is managing to meet the ideal, and why again one is again engaging such a practice in the first place). Secondly, also of significance here is the relationally-oriented ethic that the rite invokes, wherein one actually takes some time to dwell upon the fundamental sanctity of all other life forms, thereby empowering one's future actions to be all the more naturally motivated. Highlighting the essential importance of such a relationally-based ethic, as ecology pioneer Aldo Leopold once noted: "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in."[22] One is naturally here reminded of the importance of arousing *genuine feeling* towards nature and living beings, as opposed to acting out of a cold and heartless sense of mere obligatory action or perfunctory routine. Such a proactive and affirming attitude as this also happens to be a fundamental insight of spiritual ecology, and as Bhagchandra Jain 'Bhaskar' succinctly states to this effect (in his chapter on "Ecology and Spirituality in the Jain Tradition"), "The global ecological crisis cannot be solved until a spiritual relationship is established between humanity as a whole and its natural environment."[23] Thus, the Jain *pratrikramana* and *prayaschitta* rites thereby provide a regular opportunity for cultivating this kind of interconnected, compassionate and attentive relationship with the non-human world, which again requires first opening up the necessary space in one's life order to allow such feelings to truly and deeply permeate. Hence, in committing themselves to the *pratrikramana* rite, Jains may regularly recognize how we as humans, as Chapple puts it, "have been given the special task and opportunity to cultivate increasingly rarified states of awareness and ethical behavior to acknowledge that we live in a universe suffused with living, breathing, conscious beings that warrant our recognition and respect."[24] And with this being said, and also with this larger

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[21] (Jaini 1979, p. 216).
[22] (Leopold 2008, p. 168).
[23] (Bhaskar 2002, p. 170).
[24] (Chapple 2002a, p. 130).

brief survey of Jain ecological practice coming to a close, let us now shift our attention over to the Anuvrat Movement—which iitself offers a great deal of eco-conscious relevance and inspiration.

3. Anuvrat's Background, Philosophy and Ecological Import

Aiming at the "moral and spiritual regeneration" of Indian society,[25] the Anuvrat Movement was launched on 2 March 1949—a mere two years after India's gaining Independence as a sovereign nation-state. While Tulsi's impetus for the movement cannot be boiled down to any one singular factor, it is fair to say it revolved around what he perceived to be a general, multifaceted moral deterioration within Indian society. Prior to this, for the sake of achieving Independence a strong spirit of national unity had been forged across Indian society—a sense of self-sacrifice and the putting aside of differences in order to unite around a common, collective cause. However, not long afterwards this positive and unified spirit had largely dissipated, with outbreaks of selfishness and bitter divisiveness taking root instead. Though freed from the oppressive shackles of British colonial rule, Indian society had nevertheless become newly afflicted by what Kanakprabha describes as "fissiparous tendencies,"[26] a "degenerative miasma"[27] and a "scourge of all pervading corruption."[28] And as Tulsi himself summed up the situation: "Indiscipline, craving for high position, ambitiousness, regional and language controversies—these cropped up in the wake of freedom. All these were responsible for the growing deterioration in character and increasing mental agonies of the public."[29] Hence, seeking to counteract such selfishness, "communalism (i.e., political parochialism), and general moral deterioration, Tulsi conceived of Anuvrat as a way to address this issue at its very root: namely, what he saw as being a lack of self-restraint and ethicality being expressed at the individual level.

It was here that, in order to help remedy the situation in concrete and specific terms, Tulsi came to propose Anuvrat's list of individual moral and spiritual vows. Tracing the historical evolution of this list, originally thirteen in number, the vows soon became vastly expanded, ballooning all the way up to a compendious eighty-four, before finally becoming distilled back down to a more manageable set of eleven. Important to note here is that, as a Jain mendicant practitioner, Tulsi chose to model the vows largely along traditional lines, with Jainism's five "great vows" (incumbent upon mendicants) and its five "small vows" (incumbent upon layfolk) providing the primary ideological inspiration. Specifically, these five categories of vows include *ahimsa* (non-violence), *aparigraha* (non-possession), *asteya* (non-stealing), *brahmacharya* (celibacy), and *satya* (truthfulness)—these five being the same as the five *yama* (self-control) vows of Classical Hindu Yoga. However, in lieu of spiritual liberation (*moksha*, *kevala*) being the ultimate end goal (as is the case within Jainism more broadly), for Anuvrat it was instead moral regeneration and social uplift that provided the ultimate and prevailing *telos*. And while no doubt shaped by a distinctively Jain religious standpoint, the movement nevertheless opened itself to any and all who might be willing to pledge, irrespective of their particular gender, caste, religion, or ethnicity. This spirit of universalism and nonsectarian inclusivity also deeply suffused Tulsi's own personal attitude: "I am a human being first and then a religious man," he once explained, "as regards my being a Jain and Head of a Jain sect, I put these positions in the third and fourth places, respectively."[30] Thus, although historically speaking Jains themselves have accounted for the majority of Anuvrat's overall base of practitioners, the movement has also gained extensive support and participation from a large number of Hindus, Muslims, Sikhs and Christians, as well as those of a more non-religious persuasion.[31] Lastly, as far as Anuvrat's current representation is

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[25] (Gandhi 1987, p. 6).
[26] Kanakprabha, Sadhvipramukha. 1985. *Acharya Tulsi: A Life Sketch*. Translated by Narendra Moray.
[27] Ibid., p. 5.
[28] Ibid., p. 6.
[29] (Mahaprajna 1994, pp. 3–4).
[30] (Mahapragya 2017, p. 14).
[31] (Mahaprajna 1994, p. 17).

concerned, the movement is currently being promoted by four main entities, in particular: first and foremost by Acharya Sri Mahashraman (the current head of Terapanth and official present-day leader of the movement)[32]; by Terapanth's order of semi-renunciant global missionaries (called *samanas* and *samanis*, respectively); by the Anuvrat Mahasamiti[33]; and lastly by the Anuvrat Global Organization (ANUVIBHA)[34]—a volunteer-led organization that promotes Anuvrat on an international stage and that participates in the U.N. as well as other such key global assemblies.

With Anuvrat's main hallmark and emphasis consisting of its personal code of conduct—the eleven vows, that is to say—the overarching guidelines for the movement are as follows:

Aims

1. To inspire people to observe self-restraint irrespective of their caste, color, creed, country or language.

2. To establish the values of friendship, unity, peace and morality.

3. To create a society free from all kinds of exploitation.

Means

1. To inspire a maximum number of people to be anuvratis (those who pledge themselves to observe basic vows in their daily life).

2. To bring about a revolution in thinking and action.

Eligibility

All those who believe in leading a pure life will be entitled to become anuvratis.

Code of Conduct

1. I will not kill any innocent creature.
I will not commit suicide.
I will not commit feticide.

2. I will not attack anybody.
I will not support aggression.
I will endeavor to bring about world peace and disarmament.

3. I will not take part in violent agitations or in any destructive activities.

4. I will believe in human unity.
I will not discriminate on the basis of caste, color, creed etc., nor will I treat anyone as an untouchable.

5. I will practice religious tolerance.
I will not rouse sectarian frenzy.

6. I will observe rectitude in my dealings with other people.
I will not harm others in order to serve any ends.
I will not practice deceit.

7. I will set limits to the practice of continence and acquisition.

8. I will not resort to unethical practices in elections.

9. I will not encourage socially evil customs.

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[32] For a general profile of Mahashraman available on the web, see: www.acharyamahashraman.in/profile/anurvat-anushasta.
[33] To visit this organization's official website (available in Hindi), go to: www.anuvratmahasamiti.com.
[34] See official ANUVIBHA website at: www.anuvibha.in.

10. I will lead a life free from addictions.
I will not use intoxicants like alcohol, hemp, heroin, tobacco, etc.

 11. I will do my best to refrain from such acts as are likely to cause pollution and harm the environment.
I will not cut down trees.
I will not waste water.

Anuvrat Sadhana (regimen of proactive practices)

1. I will practice Preksha Meditation.

2. I will have a reconciliatory attitude for the sake of a peaceful domestic life.

3. I will practice restraint in individual possession and consumption.

4. I will exercise control over eating.

5. I will practice diligence, self-reliance and simplicity.[35]

Among the eleven vows of Aunvrat's code of conduct, clearly it is the eleventh one which is the most directly and explicitly ecological. Though at the time when Anuvrat was established, India (and the world at large, for that matter) was experiencing far different ecological circumstances than now, not only do the four basic injunctions of vow eleven (to not pollute, harm the environment, cut down trees, or waste water) remain fully relevant to today's world; if anything their relevance over time has only greatly intensified. For example, relative to our present times, the eleventh vow's requirement not to cause pollution or harm the environment naturally intersects with a modern person's duty for strictly limiting (if not outright avoiding) behaviors identified as being the most responsible for worldwide climate change. In light of this, the fulfillment of this eleventh vow would therefore today entail a wide range of eco-conscious behaviors, include (to name just a few): the curbing of one's accumulation of personal goods, the boycotting of eco-unfriendly products and companies, and the reduction of carbon dioxide emissions through one's regularly choosing, for instance, public over private modes of transportation. With regard to conserving water, moreover, it would also entail such considerations as, "What kind of toilets and showerheads do people buy? [And] how often do they wash their cars or water their lawns?"[36] as Shivani Bothra has noted (in her own work on the Anuvrat Movement[37]). Similarly, when regularly and meticulously practiced, seeking to limit one's use of water while washing the dishes or brushing one's teeth represent two other impactful water-conserving behaviors to consider—and these, too, would fall under the jurisdiction of vow eleven.

Still, however much Anuvrat's vow eleven can be said to encompass the fuller range of ecological concerns and practices, by no means is it the only one that encourages (at some level of another) an eco-conscious mode of life. In looking to vows seven, ten and four, for instance, there is plenty of eco-conscious potential that presents itself here as well, albeit perhaps in a more implicit manner. Let us now turn our attention to these additional dimensions of eco-conscious relevance.

Beginning with vow seven, to "set limits to the practice of continence and acquisition,"[38] here we must consider the more ecologically pertinent 'acquisition' aspect of this vow, with this dimension being intimately related with the cornerstone Jain virtue of *aparigraha* (non-possessiveness)—one of Jainism's five main mendicant and lay vows, as touched upon earlier. Seeing how the emergence of a variety of dimensions of worldwide ecological crisis have been shown to critically hinge upon mass trends of material acquisition and human consumption, the ecological relevance of vow seven is actually quite striking. For instance, just to name a few of the most serious of the ecological ramifications that this

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[35] Anuvrat code citation: accessible via http://www.anuvibha.in/Code-of-Conduct.htm.
[36] (Bothra 2013, p. 58).
[37] For an excellent work exploring the Anuvrat Movement from a wider investigative lens, see (Bothra 2013). This Master's thesis is currently available as an open-access online resource.
[38] Anuvrat code citation: accessible via http://www.anuvibha.in/Code-of-Conduct.htm.

human desire to acquire and consume has largely been complicit in producing, these include (among others): global deforestation, rampant pollution, and, across the globe, the build-up of unprecedented amounts of ecologically-harmful waste material (the Great Pacific Garbage Patch representing but one conspicuous example). Beyond producing these disastrous effects alone, however, such widespread consumptive, consumeristic behaviors also inevitably connect back to the issue of anthropogenic climate change. To speak to this latter point, as one leading environmental research organization has recently found,[39] in the U.S. "an estimated 42% of [the nation's] total greenhouse gas emissions come just from the provision of consumer goods [alone]."[40] To contextualize this staggering statistic, beyond the more obvious concern of how such a massive stockpile of goods can possibly be responsibly disposed in the first place, what most consumers fail to take into account here is how mass patterns of consumerism also inevitably create effects that are said to be "up-stream" from one's actually purchasing and using a certain product—factors which include, for instance, the highly energy-intensive processes of materials manufacturing (and to a lesser degree, packaging), as well as the severe ecological repercussions that come with shipping goods across sometimes extraordinarily vast distances. And though these lesser-acknowledged effects may receive less critical attention (being more or less chalked up to the perceived-as-necessary realities of global and regional commerce), as this NWEI statistic shows, in terms of their producing vast quantities of carbon dioxide they are essentially just as culpable a factor as any other. Clearly, then, to live eco-consciously in today's world must invariably include a sense of "setting limits" to one's practices of acquisition, which is precisely what Anuvrat's vow seven calls for. Whether 'up-stream' or 'down-stream,' in other words, obviously no ecologically-damaging effects can result from goods which happen not to be purchased in the first place.

As for vow number ten, to "lead a life free of addictions,"[41] though for Tulsi this was meant to specifically refer to the use of intoxicants such as "alcohol, hemp, heroin, tobacco, etc.," ecologically speaking it can also be arguably extended to encompass our various *societal addictions* as well. Naturally, this would then implicate developed (and developing) nations from around the world for their more often than not chronic addiction to fossil fuels—most notably, petroleum, coal, and natural gas. Here, the applied basis of vow ten again involves, as was seen also with vow seven, a general calling for self-restraint and the setting of limits to an individual's—or in this a society or specific nation's state's—habitual patterns of consumption.

Lastly, vow four's mandate to "affirm human unity" reinforces the essential importance of striving for global solidarity as we collectively aspire towards creating ecologically sustainable societies, and that the choosing of self-interest of divisiveness (over that of self-sacrifice and cooperation) may ultimately, if unchecked, become the central cause of our own demise. On the other hand, vow four also serves as a reminder that environmental destruction and the effects of climate change tend to affect people across the world disproportionally, with citizens from so-called "third world" and equatorial nations, for reasons both political and climatological, all too often bearing the immediacy and brunt of the negative effects. Most notably, such disastrous effects include more intense and more frequent hurricanes and famines, vast desertification, the rising of sea levels, unprecedented levels of flooding, and a variety of other such life-endangering phenomena. In this respect, Anuvrat's call for human unity thus requires the broadening of one's ecological conscience and purview to extend beyond one's immediate region or nation-state alone, thereby encouraging a far more inclusive and just vision of our world as an interconnected and interdependent whole.

As a final point of analysis, although not directly related to ecology, Anuvrat's prohibition against feticide (as contained in the first vow) needs to be briefly acknowledged here, as I would imagine many Western reproductive-rights advocates may naturally perceive this aspect to be a surprising,

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[39] Namely, the state of Oregon's Department of Environmental Quality (DEQ).
[40] (Mihm 2017, p. 48).
[41] Anuvrat code citation: accessible via http://www.anuvibha.in/Code-of-Conduct.htm.

unnecessarily polarizing, or perhaps even reprehensible component of Anuvrat's overall ethical vision. Putting aside judgments towards its moral justifiability one way or another, however, it is important to realize that this injunction against feticide can only very loosely be interpreted as a weighing in upon the pro-life versus pro-choice debate that continues to today feverishly divide Western (and especially American) political landscapes. That is to say, far more than advocating for the right of embryonic human life over that of women's bodily and reproductive rights, the vow is more simply a logical extension of the all-important Jain imperative for "*ahimsa paramo dharma*"—that nonviolence (in relation to all life-forms) is one's supreme ethical and religious duty. Furthermore, one must also note that for Tulsi the vow against feticide had the additional significance of aiming to lessen India's alarmingly high rate of female infanticide, which is an issue that remains of major moral concern even today.[42] But the more essential point to keep in mind here is that for Jains the non-killing and non-harming of all life forms represents a moral imperative that must be taken extremely seriously—whether pertaining to human embryos, animals, or for that matter even insects and microorganisms. Thus, when evaluating this vow from an outside cultural lens, one must therefore remember that Jains tend to be overridingly "pro-life" at a fundamental level, but for reasons typically very different than, say, what the general outlook of a pro-life American Christian would be.

4. Anuvrat: Ethical Vow-taking and Eco-conscious Living

In her classic work *The Body of God: An Ecological Theology*, eco-feminist scholar Sallie McFague points out just how intrinsically complex the issue of global ecological deterioration happens to be, considering the radical extent to which we humans are ourselves at the very heart of the problem: "Ecological deterioration is subtle and gradual: it involves the daily, seemingly innocuous, activities of every person on the planet ... We are, then, dealing with a wily, crafty enemy: *ourselves*, as the perpetrators of ecological crisis."[43] As unfortunate and inconvenient as it may be, there is much that can pointed to in support of McFague's point here. For one, we must come to terms with the stark truth that over the last half-century (between 1970 and 2016) our global population has nearly doubled in size, thus in the process putting unimaginable strain upon the earth's overall carrying capacity, its ability to withstand humanity's effects amid such unprecedented population growth. If this were not enough, however, according to the Northwest Earth Institute (NWEI),[44] during this same period of time the extraction of the earth's natural resources not only doubled (as one might reasonably expect), but has in fact more than tripled.[45] Thus, with McFague's so-called "seemingly innocuous" human activities only set to further compound and multiply as time goes on, the need for a greater embrace of eco-conscious living becomes only all the more necessary and urgent. As religion and ecology scholar Larry Rasmussen puts the matter, "in a humanly-overpopulated world, asceticism is a mandatory pathway to sustainability ... we must transform ourselves from nature's children to nature's guardians by learning to say 'enough' to ourselves."[46] Adding to this argument, Alex Mihm from the NWEI advocates for essentially the same approach, though in has case framing the matter in terms of 'simplicity,' (that is to say, jargon devoid of religious overtones): "Simplicity, as the crux of thoughtful consumption," Mihm states, "is not hollow, feel-good fluff devoid of scientific substance. According to the latest research on materials management, it is our best bet for how to live in accord with the finite limits of our only world. It is our past, and it will need to be our future."[47] Thus, though approaching the issue of ecological crisis from rather distinct religious and philosophical standpoints, it is important to note how McFague, Rasmussen and Mihm each happen to agree about eco-remedial

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[42] (Bothra 2013, p. 43).
[43] (McFague 1993, p. 3).
[44] A non-profit think tank based out of Portland, Oregon that progressively promotes grassroots ecological efforts.
[45] (Cagle 2017b, p. 15).
[46] (Rasmussen 2013, p. 252).
[47] (Mihm 2017, p. 48).

action needing to entail, at a very basic level, the curbing of normal, heretofore taken-for-granted human behaviors. As a Christian eco-feminist (McFague), a proponent of "earth-honoring asceticisms" (Rasmussen), and someone who could be said to broadly representative of the standpoint of secular humanism (Mihm), what each of these three end up confirming in their own way is once again the need for modern individuals to "live simply so that others may simply live."

By no great coincidence, the prescriptive consensus stated above happens also to closely parallel what Tulsi had positively envisaged as a "restraint-oriented society"[48] taking shape, by which he meant one predominantly comprised of individuals who have spiritual and ethical willpower, are able to practice self-control, and are committed to living in accordance with high moral standards. Relative to living eco-consciously, moreover, such "restraint-oriented" individuals are able to more or less keep in check their own selfish and greedy egoic passions (known in Jainism as the four *kashayas*) and additionally be able to model the Jain virtue of *aparigraha* (non-possessiveness),[49]–with both of these values also being amply incorporated into Tulsi's vision for Anuvrat. However, not only does Anuvrat itself clearly discourage a greedy, possessions-laden eco-unfriendly lifestyle, but rather notably it also, through the key mechanism of vow-taking, provides the essential means by which self-restraint and simplicity *may actually be successfully implemented in practice.* This point cannot be emphasized enough. For while it is one thing to be able to simply recognize the vital importance of eco-conscious living, it is quite another thing altogether to be able to actually embody the necessary mindset and life-habits to follow through and do it. And in this respect, ethical vow-taking (as modeled by Anuvrat) can provide some truly vital assistance.

This latter point becomes arguably all the more significant when we consider basic human psychology, and just how complacent and backsliding humans tend to be when it comes to our various efforts towards self-growth and ethicality—whether pertaining to eco-conscious living, or otherwise. For example, observing how "every man likes to swim along the current,"[50] Tulsi also once noted how "many people want to imbibe morality but are forced to give up half way in the face of adverse circumstances."[51] This is a key point, for as we all know adversity is woven into the fabric of life, and nowhere did Tulsi ever say that becoming an ethically scrupulously citizen would be easy, just as the same is true for one's achieving a high standard of eco-conscious living. As eco-psychologists Allen Kanner and Mary Gomes point out, on a similar note: "There is a great deal of loss involved in giving up the fantasy of a consumer paradise or in falling out of love with technology. Alternative, more sustainable ways of living are bound to appear boring and perhaps even depressing in comparison. Doubt and despair will emerge as people ponder whether change is possible or worth the effort."[52] Hence, as Kanner and Gomes here recognize, for the vast majority of us breaking out of our normal, 'business as usual' eco-destructive life patterns may be a far more difficult endeavor than we might at first imagine it to be. Just consider, for instance, all that the average modern person is ultimately up against: one's own selfish egotism, the indwelling forces of human desire, apathy and laziness, the tendency for becoming distracted at a moment's notice—and now in our modern times techno-addicted besides.

However, arguably presenting just the right tool for overcoming such forces of adversity and inertia, what ethical vow-taking enables a person to do is essentially "draw a line in the sand" relative to his or her own ongoing personal behavioral patterns—something which amounts to a significant (if not decisive) overall strategic advantage. Tulsi thus recognized how, in a clearly demarcated way (i.e., one either honors each of the Anuvrat vows, or one does not), ethical vow-taking has the power to

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[48] (Bhatnagar, R. P., ed. and Transl 1993, p. 7).

[49] From a Jain perspective, the practice of limited possession (*aparigraha*) is of vital ethical and spiritual import; just as it frees a practitioner from the concomitant worry and attachment that comes with owning and looking after numerous personal possessions, it is also understood to prevent the egoic, *himsic* (violent, aggressive) tendencies that surface as one seeks to safeguard and protect one's possessions from others.

[50] (Tulsi 1998, p. 16).

[51] Ibid., p. 16.

[52] (Kanner and Gomes 2005, pp. 89–90).

ensure that one becomes, in essence, fully ethical (or eco-conscious) in all that he or she does—thereby becoming a sealed container, as it were, for the expression of ethical (or eco-conscious) behavior alone. The efficacy of this strategy has much owing to the power of one's basic sense of vow commitment and integrity of word: through the psychologically motivating mechanism of vow-taking, one may helpfully latch onto something tangible and thereby enter into a binding covenant one is not likely to casually defy. The potency of this insight—that is to say, the crucial role that vows can play towards ensuring either an ethical or eco-conscious lifestyle—has also recently been affirmed by the Anuvrat Global Organization (ANUVIBHA) as part of its participation within the UN Sustainable Development Platform:

> In order to ensure the eco-sustainability of the future and equitable distribution of the natural resources among all sections of people on the earth, the ANUVRAT Code of Conduct has been laid down by the founder of the Movement . . . Our organization believes that every human being irrespective of his caste, creed, nationality instinctively fulfils his pledges and keeps vows. Once a person takes a vow voluntarily he keeps it.[53]

Also significant to note here, moreover, is how such a strategy of behavioral containment has a meaningful basis within the word '*anuvrat*' itself. The term '*anu*' means 'small' while '*vrata*' means 'vow,' with the latter term being derived from the multivalent Sanskritic root '*vri*'. Among the vast nexus of meanings that exist for '*vri*,' some primary connotations include: to 'check', 'ward off', 'surround', 'obstruct,'[54] and, according to Jain scholar Padmanabh Jaini, 'to fence in' as well.[55] By what I would suggest is no great coincidence, these etymological connotations are quite helpful and clarifying towards elucidating the core strategy of the ethical-ascetic vow, wherein the transformation of either self or society can be radically accomplished through the 'checking' or 'fencing in' of a specific set of behavioral parameters. Concerning the philosophy of Anuvrat, for instance, Tulsi happened to express such a rationale of 'checking and 'fencing in' in the following manner: "It is through this self-imposed form of restraint that true resistance to temptation develops and self-control grows. Activity becomes pure to the extent to which impure elements are thus kept out. The main aim of the Anuvrat movement is thus to help develop in each individual the power of self-protection against the infection of impure conduct."[56] Thus, through either fully abstaining from (or otherwise watchfully moderating) such 'impure' thought-habits or behaviors—'impure' here simply referring to thoughts and behaviors deemed to be either unethical or spiritually damaging—these negative tendencies may in essence be effectively 'warded off,' while ethically or spiritually "pure" thoughts and behaviors are, in the meantime, simultaneously preserved (or 'fenced in'). As Jainism scholar Christopher Chapple notes about this kind of ethical-ascetic potential (in his 2008 article on "Asceticism and the Environment"):

> Ethical behavior serves as a corrective to address past wrongs and as a way of forging new pathways in the present to guarantee future states of auspiciousness. By sloughing off old impure behaviors and taking on new pure activities, both the individual and the society benefit. By skillfully applying precepts such as nonviolence and minimizing one's possessions in the context of one's ecological footprint, asceticism helps improve not only oneself but also the world.[57]

Thus, getting back to Rasmussen's notion of "earth-honoring asceticisms," as Chapple here notes, there is arguably a great deal that ascetic-ethical modalities can offer the world; and, as with Anuvrat, this is true on both the personal as well as the collective levels of existence. And though far from

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[53] Anuvrat Global Organization (Anuvibha). *UN Sustainable Development Goals Knowledge Platform*. https://sustainabledevelopment.un.org/index.php?page=view&type=20036&menu=1561&nr=55363 (accessed on 15 March 2019).
[54] (Williams, Monier n.d.).
[55] (Jaini 1979, p. 169).
[56] (Gandhi 1987, p. 4).
[57] (Chapple 2008, p. 524).

being the only system—in India, or elsewhere—to utilize such a strategy, Tulsi's vision for Anuvrat nevertheless provides a compelling blueprint for such a transformative method of practice.[58]

Although concrete examples that illustrate the value of a vow-based strategy of eco-conscious 'fencing in' could be listed out almost endlessly, a single potent example comes from Portland, Oregon, in the form of a married couple who are noteworthy for their radically committing to an impressively eco-conscious lifestyle. Setting a powerful example for us all, what this particular couple—for the sake of anonymity, let us refer to them as the Taylor's—elected to do was to drastically limit their own production of personal waste, managing to restrict an entire year's worth to fit within a single 35-gallon standard garbage can.[59] Now, perhaps this achievement may not sound all that heroic or game-changing at first, but if we are to assume that the average American couple fills the equivalent of one such garbage can each and every week (which in the U.S., at least, is not at all unreasonable to assume), this would mean that the Taylor's have, in effect, essentially reduced their annual trash output by a rather staggering factor of 1/50th the standard amount. In a very concrete manner, they elected to 'draw a line in the sand' relative to their own ethical and eco-conscious habits and behaviors, and in this endeavor they ended up being wildly successful. Thus, while not self-professing *anuvratis* (followers of Anuvrat) themselves, the Taylor's admirable level of eco-conscious commitment nevertheless vividly illustrates the highly effective and transformative potency of the '*vrata*' principle—as one works to, along the same lines of the Anuvrat strategy, 'fence in,' 'ward off,' and 'draw a line in the sand' relative to one's own core ethical habits and behaviors.

5. Conclusions

In sum, as a potent vision for spiritual and ethical vow-taking, Anuvrat has much to offer the urgent contemporary task for eco-conscious living. Within Anuvrat's overall code of conduct, this aim is most directly and explicitly spelled out via its eleventh vow in particular, although with this being said several of Anuvrat's other vows contain some significant ecological potential as well. Upon reading this article one point that should stand out for the reader is how Anuvrat's strong eco-conscious potential can be largely credited to its incorporation of the potent modality of ethical vow-taking itself—a strategy that offers potentially decisive advantages in terms of overcoming natural psychological obstacles, life's adversities, and various engrained forms of resistance in the world. Finally, as a case study of Jain ecological practice, Anuvrat presents a compelling example of what Jain religious teachings can beneficially offer to broader contexts of ecological discourse and practice—and indeed at a time when such outside insight and inspiration is urgently needed. With this being said, I close this article with a quote from Tulsi which I believe greatly reverberates relative to our current ecological circumstances in the world: "there is after all a limit to everything. This situation has now touched the extremity. It should be propitious to be alert now. The age is awaiting [those] of courage capable of changing the tide once and for all."[60]

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[58] Naturally, the utilization of vow-taking for societal transformation within India did not originate with Tulsi, a point that Tulsi is himself quick to openly acknowledge and celebrate: "The tradition of taking vows is an old and time-honoured one in this land. I do not therefore claim to have brought a new institution into being. All that I can claim is to have put new life into the moral heritage that we possess and to have adapted it to the needs of our times." (Gandhi 1987, p. 7).
[59] (Cagle 2017a, p. 51).
[60] (Tulsi 2013, p. 131).

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References

Anuvrat Global Organisation (Anuvibha). n.d. Anuvrat Code of Conduct. Available online: http://www.anuvibha.in/Code-of-Conduct.htm (accessed on 15 October 2017).

Bhaskar, Bhagchandra Jain. 2002. Ecology and Spirituality in the Jain Tradition. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Bhatnagar, R. P., ed. and Transl. 1993. *Acharya Tulsi on Contemporary Problems*. Ladnun: Jain Vishva Bharati.

Bothra, Shivani. 2013. The Anuvrat Movement: Theory and Practice. Master's thesis, Florida International University, Miami, FL, USA; p. 82.

Cagle, Lacy. 2017a. A Different Way. Northwest Earth Institute. In *A Different Way: Living Simply in a Complex World*. Portland: NWEI.

Cagle, Lacy. 2017b. The World is Not Enough. Northwest Earth Institute. In *A Different Way: Living Simply in a Complex World*. Portland: NWEI.

Chapple, Christopher Key, ed. 2002a. The Living Earth of Jainism and the New Story: Rediscovering and Reclaiming a Functional Cosmology. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Chapple, Christopher Key. 2002b. *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Chapple, Christopher Key. 2008. Asceticism and the Environment. *Cross Currents* 57: 514–25.

Cort, John E. 2002. Green Jainism? Notes and Queries toward a Possible Jain Environmental Ethic. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Dundas, Paul. 2002. The Limits of a Jain Environmental Ethic. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Gandhi, Sohan Lal. 1987. *Anuvrat Movement: A Constructive Endeavor Towards a Nonviolent Multicultural Society*. Jaipur: Jaipur Printers Pvt.

Jacobi, Hermann. 1884. *The Sacred Books of the East: Vol XXII*. Oxford: The Clarendon Press.

Jaini, Padmanabh S. 1979. *Jaina Path of Purification*. Delhi: Motilal Banarsidass.

Kanner, Allen D., and Mary E. Gomes. 2005. The All Consuming Self. In *Ecopsychology: Restoring the Earth, Healing the Mind*. Edited by Theodore Roszak, Mary E. Gomes and Allen D. Kanner. Berkeley: Big Fish Books.

Leopold, Aldo. 2008. Ecocentrism: The Land Ethic. In *Environmental Ethics: Readings in Theory and Application*, 5th ed. Edited by Louis P. Pojman and Paul Pojman. Belmont: Thomson Wadsworth.

Long, Jeffery D. 2009. *Jainism: An Introduction*. London: I.B. Tauris.

Mahapragya, Yuvacharya. 2017. *Acharya Tulsi: A Peacemaker Par Excellence*. Berlin: Geerdes Media.

Mahaprajna, Acharya. 1994. *Steering the Wheel of Dhamma (A Biography of Acharya Sri Tulsi)*. Ladnun: Jain Vishva Bharati.

McFague, Sallie. 1993. *The Body of God: An Ecological Theology*. Minneapolis: Fortress Press.

Mihm, Alex. 2017. Swimming Upstream. Northwest Earth Institute. In *A Different Way: Living Simply in a Complex World*. Portland: NWEI.

Naess, Arne. 2008. The Shallow and the Deep, Long-Range Ecological Movement. In *Environmental Ethics: Readings in Theory and Application*, 5th ed. Edited by Louis P. Pojman and Paul Pojman. Belmont: Thomson Wadsworth.

Paniker, Agustin. 2010. *Jainism: History, Society, Philosophy and Practice*. Delhi: Motilal Banarsidass.

Pojman, Louis P., and Paul Pojman. 2008. "The Earth Charter." As reprinted in Pojman and Pojman. In *Environmental Ethics: Readings in Theory and Application*, 5th ed. Edited by Louis P. Pojman and Paul Pojman. Belmont: Thomson Wadsworth.

Rasmussen, Larry. 2013. *Earth-Honoring Faith: Religious Ethics in a New Key*. New York: Oxford University Press.

Singhvi, L. M. 2002. Appendix: The Jain Declaration on Nature. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Tulsi, Acharya. 1998. *Anuvrat: A Pathway to Nonviolent Social Order*. Translated by R. P. Bhatangar. Ladnun: Jain Vishva Bharati.

Tulsi, Acharya. 2013. *Religion, Anuvrata, and Human Wellness*. Translated by N. Sahal. New Delhi: Adarsh Sahitya Sangh.

Up-Pravartak, Shri Amar Muni. n.d. *Illustrated Dashavaikalik Sutra*. New Delhi: Padma Prakashan.

Vallely, Anne. 2002. From Liberation to Ecology: Ethical Discourses among Orthodox and Diaspora Jains. In *Jainism and Ecology: Nonviolence in the Web of Life*. Cambridge: Harvard Center for the Study of World Religions.

Williams, Monier. n.d. Online Sanskrit-English Dictionary. Definitional Entry of "Vr". Available online: www.monierwilliams.com (accessed on 28 July 2017).

Global Capital, Local Conservation, and Ecological Civilization: The Tiejia Ecology Temple and the Chinese Daoist Association's Green Agenda

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Abstract: Since 1995, the Chinese Daoist Association (CDA) has pursued a green agenda through the publication of declarations, statements and an eight year plan. This agenda has been aided in part by its engagement with global environmental discourse as mediated in particular by the Alliance for Religions and Conservation (ARC). Through its collaboration with ARC and a Dutch businessman, Allerd Stikker, the CDA built its first "ecology temple" in Shaanxi Province and convened its first ecological conference there. Analysis of these declarations and activities reveals an increasing globalization and juridification of environmental discourse in Chinese Daoist temples. In this way the issue of ecology presents further opportunities for the CDA, and by extension the Communist Party of China (CPC), to enhance their supervision of local religious activities.

Keywords: Daoism; ecology; conservation; ecological civilization

1. Introduction

Deep in the heart of the Heihe National Forest Park in Shaanxi province lies something of a curiosity. The Tiejia Ecology Temple is a Daoist temple and Ecology Center nestled at the foot of Mt. Taibai in a small forest clearing. The Heihe National Forest Park is about 80 kilometers to the southwest of Xi'an on the north side of the Qinling mountains and is home to a diverse range of species, most notably the giant panda. The drive to Tiejia Ecology Temple is about an hour from the main entrance of the park, down a narrow, winding dirt road that hugs the edge of the river, often in the shadow of looming mountains. The forest scenery only occasionally gives way to buildings and small villages. The Tiejia Ecology Temple shares its grounds with the World Wildlife Fund's Panda Lodges, an eco-resort constructed, according to Stikker (2014, p. 64), to promote sustainable tourism in the park and provide financial support for the nearby panda reserve. In the summer months, visitors flock to the area to hike the mountain trails and catch a glimpse of the pandas in their natural habitat. The area has long been considered sacred, due in large part to the Tiejiashu, an ancient sacred tree that managed to escape the ravages of the Cultural Revolution. The temple that accompanied it, however, was not so fortunate and was almost completely destroyed. The temple was rebuilt by the local people but an even newer temple, the Ecology temple, was built several years after that. That there should be a temple in this place is not all that surprising. That it should be a temple sponsored by the CDA and dedicated to teaching ecological values requires further analysis.

The Ecology Temple differs substantially from other Daoist temples, particularly those found in more urban areas. The temple itself is quite modest and houses three gods, the main gods of Taibaishan, themselves quite modestly adorned and flanked by several smaller figures. Other than the small piece of cloth hung directly above each of their heads, the wood beams of the roof are exposed along with the concrete walls. Two murals on the side walls tell the story of the Taibaishan gods. The temple

houses a single incense burner, which, when examined more closely, serves to deepen the mystery of this unique temple. The inscription, both in English and Chinese, dedicates the burner to a woman named Anneke Dorina Stikker, who passed away in 2004. Anneke Stikker was the daughter of Dutch businessman Allerd Stikker, the head of the Valley Foundation, a private charitable organization that was instrumental in supporting and funding the construction of the ecology temple.

2. The Chinese Daoist Association's Green Agenda

Since its first official statement on ecology in 1995, the Chinese Daoist Association (CDA) has issued a variety of statements and declarations regarding their interpretation of the ecological crisis as well as measures they are taking to combat it. Initially, the statements broadly outlined a concern with the current worldview and the ecological crisis through the lens of Daoism's unique interpretation of the role of humanity in the natural world. After a few years, the statements matured into more concrete proposals, outlining detailed plans to create sustainable temples and curb the impact of religious tourism. One of the main tenets of their environmental plan was to bring about widespread education in sustainable practices to people all over China. The main statements are as follows:

1. The Declaration of the Chinese Daoist Association on Global Ecology (1995)
2. The Daoist Faith Statement, (2003)
3. The Qinling Declaration, (2006)
4. The Maoshan Declaration (2008)
5. The Eight Year Plan (2008)

The CDA attributes the current ecological crisis to the flawed worldview of the modern era. The 2003 Daoist Faith Statement summarizes the problem as follows: The problem of the environment not only is brought about by modern industry and technology, but also has a deep connection with people's world outlook, with their sense of value, and with the way they structure knowledge. Some people's ways of thinking have, in certain ways, unbalanced the harmonious relationship between human beings and nature, and overstressed the power and influence of the human will. People think that nature can be rapaciously exploited (see http://www.arcworld.org/faiths.asp?pageID=70; accessed December 1, 2018).

The 2003 Daoist Faith Statement builds on the earlier 1995 statement, reprinted with commentary from Zhang Jiyu 张继禹, sixty-fifth generation descendant of the first Celestial Master Zhang Daoling and former vice president of the CDA in *Daoism and Ecology: Ways Within a Cosmic Landscape* in 2001 (Zhang 2001) under the title "A Declaration of the Chinese Daoist Association on Global Ecology." This statement finds fault with the modern understanding of humanity as a separate and distinct category from the non-human world. This vision of the world has led to an abuse of the natural world and an expectation that the world's resources are limitless and for the sole benefit of human progress. Humanity views itself as the dominant species on the planet and has used this power to systematically destroy the ecological balance that allows life to thrive (Zhang 2001, p. 364). Zhang (2001, p. 365) further noted that "the ancient doctrines of Daoism are eminently able to remedy the deficiencies caused by the contemporary ethical theories." The 1995 statement continued by making the following assertions (Zhang 2001, p. 370):

> We shall spread the ecological teachings of Daoism, lead all Daoist followers to abide in the teachings of self-so or non-action, observe the injunction against killing for amusement purposes, preserve and protect the harmonious relationship of all things with Nature, establish paradises of immortals on Earth, and pursue the practice of our beliefs ...

> We will raise the awareness regarding ecology among various soial groups, resist the human exploitation of Nature and the abuse of natural environments, protect the earth upon which human survival depends, and generally make the world a better place for humans to inhabit.

This initial statement showed the CDA's commitment to leading an environmental movement based on traditional Daoist beliefs. It likewise indicated an intention for all Daoists to follow the environmental agenda but also strikes a more evangelizing tone that aims to educate people outside of the Daoist community. Zhang (2001, p. 370) noted that since the release of the statement, the CDA has been contacted by several international organizations indicating an interest in cooperating with them and promoting their message abroad. He further commented that "present-day Daoists in China have diligently worked toward disseminating Daoist teachings and in maintaining the famous Daoist mountains and hermitages, planting trees and cultivating forests, and protecting the natural environment" (p. 371). The discourse presented in Zhang's commentary and the subsequent statements and declarations suggested a widespread ecological movement sweeping across the Daoist community and, even extending beyond it both to the larger Chinese society and the international community.

In 2003, the CDA produced the Daoist Faith Statement, a longer document than the 1995 declaration that outlined what they considered to be the core ecological teachings of Daoism and specifically highlighted four main principles: *Dao fa ziran* (Dao follows its natural spontaneity); the harmony of yin and yang; the limits of nature's sustaining power; and species diversity as a measure of affluence and environmental health (ARC 2003). In writing about the motivations of the CDA in designing and implementing a green agenda, Zhang (2001, p. 362) noted that "Daoism, like other great religions of the world, has a religious ideology that reflects its worldview, moral precepts, and ultimate concerns. Due to its close association with Chinese culture, Daoism has characteristics different from other religious traditions." He identified these defining characteristics as "Respecting Dao and Greatly Valuing De" and "The Way of Immortality Gives High Value to Life" (p. 365). These two key elements are not surprisingly also highlighted in the Daoist Faith Statement. The Faith Statement similarly asserted the Dao as the origin of everything and the importance of pursing immortality in valuing all life. Zhang (p. 362) understands "Respecting Dao and Greatly Valuing De" in the following way: "A Daoist believes in Dao, relies upon Dao, cultivates Dao, and practices Dao. De refers to the particular conduct of the believer as she practices Dao. One may say that de is the practice of Dao in the believer's life." Intimately bound up in this idea are the concepts of *ziran* and *wuwei*. *Ziran* in this context is understood as the natural state of each being and allowing all things to develop according to their own nature. *Wuwei* is precisely non-interference in this development. These two concepts form the principle of the Dao, which as Zhang (p. 362) noted "implies purity, tranquility, and simplicity, as well as softness and noncombativeness—the spirit of humility or vacuity as expressed by the image of the valley."

Zhang's second identifying factor, also noted in the Daoist Faith Statement, is the pursuit of immortality, a rather unique Daoist concept. Zhang noted that the Daoists' "ultimate goal is to let their lives and spirits become one with the Dao—the way of immortality—(*xiandao*). This is the reason why Daoists treasure life and value it as the most worthy thing on Earth." Similarly, the Daoist Faith Statement also extols the virtues of the pursuit of immortality, asserting its role in keeping individuals in good health and providing a certain level of youthfulness. The Faith Statement stresses, however, that there is one key component, "one point that cannot be neglected: a peaceful and harmonious natural environment is a very important external condition."

These two concepts form the underlying framework for the CDA's understanding of the universe and the larger role that humanity plays in the cosmological order. More importantly, the emphasis on these two concepts in the CDA's green agenda projects a very specific image of Daoism. Both concepts stress the natural world and lack strong supernatural elements. The elevation of the importance of life and the natural order is most clearly visible in the discussion of immortality, which rather than discussing the supernatural realm, stresses the benefits for the health of the body. Daoism, represented in this light, becomes a life affirming tradition that prioritizes the natural environment. The CDA, in constructing their green agenda, chose to emphasize the components of the tradition that speak directly to an ecological ethic.

The Daoist Faith Statement highlights four main principles that elucidate Daoism's inherent ecological characteristics. The first, which derives from chapter 25 of the *Daode jing*, states: "Humanity

follows the Earth, the Earth follows Heaven, Heaven follows the Dao, and the Dao follows what is natural." This rather esoteric statement is explained in the Daoist Faith Statement which notes that "[w]e should cultivate in people's minds the way of no action in relation to nature, and let nature be itself." The former president of the CDA, Ren Farong, expressed similar sentiments while speaking about Daoism at world conferences: "just imagine all local wars, regional conflicts and environmental degradation in the world are caused by human errors. Therefore, Taoism advocates governing by doing nothing that goes against nature" (qtd. in Xie 2008). Ren's sentiments suggest that the underlying natural processes of the world already possess a wisdom that should command respect from human beings. Both Ren and the Daoist Faith Statement offer up an image of Daoism that is largely couched in humanist, almost secular terminology, a tactic that pervades the Faith Statement and the CDA's green agenda in general.

The second component that stresses the inherent ecological qualities of Daoism is found in the concept of yin and yang. As noted in the above discussion of yin and yang, the cosmos and everything in it, are comprised of two complementary forces, known as Yin and Yang. Yin evokes the cold, soft, dark qualities while yang evokes the hot, hard and bright. The Faith Statement highlights the importance of these two forces in noting that they "are in constant struggle within everything. When they reach harmony, the energy of life is created. From this we can see how important harmony is to nature." The Faith Statement extrapolates this understanding of the universe to create the basis of an environmental ethic in averring "Those who have only a superficial understanding of the relationship between humanity and nature will recklessly exploit nature. Those who have a deep understanding of the relationship will treat nature well and learn from it." While there is an emphasis on the role of human beings within the natural world the statement also expands this cosmological worldview into a secular mandate for environmentalism that speaks to a conservation of resources and a general respect of the balance of natural environments.

The third component stresses the importance of balance in nature. The Faith Statement notes "If anything runs counter to the harmony and balance of nature, even if it is of great immediate interest and profit, people should restrain themselves from doing it, so as to prevent nature's punishment."

Finally, the fourth component, and perhaps the aspect most in line with current environmental paradigms, stresses the importance of biodiversity. The Faith Statement notes that Daoism "judges affluence by the number of different species" present in the world and encourages governments and people to take good care of nature." This particular understanding of biodiversity comes from a lesser known classical Daoist text, the *Taiping jing*, which refers to three notable periods in the historical trajectory of life on earth. The first, the Higher August Period, sees 12,000 species flourish on earth. The Middle August Period witnesses a decline in the diversity of species living on earth and the Lower August Period, known also as the Era of Great Poverty, sees a drastic decline in the level of species diversity and signals the arrival of an era known as Extreme Poverty. Zhang (2001, p. 368) noted that "because the Lower August Period the earth is not given proper nourishment and is greatly injured by its inhabitants, it produces fewer living things."

Following the 2003 declarations, the CDA with the support of Alliance for Religions and Conservation (ARC) and Stikker's Valley Management Fund constructed the ecology temple in Shaanxi province. According to the (now defunct) ARC website, the temple and adjacent ecology center were built using all local materials by a construction crew sourced from the local towns and who were, according to ARC (2007), held to a "higher ethical standard." The Ecology Temple hosted the first two Daoist ecology conferences in 2006 and 2007, co-sponsored by the CDA, ARC and the Valley Foundation. The first ecology conference in 2006 was attended by fourteen Daoist monks and nuns from ten different monasteries from Shaanxi and Gansu provinces and introduced them to sustainable practices. The 2006 conference gave rise to the Qinling Declaration and in 2007, the Ecology Temple was officially consecrated.

The Qinling Declaration outlined the following sustainability goals:

1. reduce pollution caused by incense burners
2. use farm land sustainably
3. protect species and forests
4. save energy
5. protect water resources

The Qinling Declaration represents the first step by the Daoist to move towards more practical goals rather than simply outlining tenets of the faith that lend themselves to an ecological sensibility. Also in attendance at the 2006 conference were: Martin Palmer, director of ARC; Allerd Stikker, head of the Valley Foundation; and Professor Fan Guangchun, Director of the Daoist Studies Institute at Shaanxi Academy of Social Sciences.

The following year, in 2007, the second ecology conference took place alongside the consecration ceremony for the ecology temple and its adjoining ecology center. This second conference saw a dramatic increase in interested participants. ARC (2007) reported that eighteen monks and nuns participated but many more were turned away due to lack of space. These attendees created the Daoist Temple Alliance during the conference which aimed to create an ecology program that teaches and promotes an ecological agenda. Members of the Alliance agreed to display a copy of the Qinling Declaration in their temples to help educate visitors in sustainability and to progress towards transforming all Daoist temples into ecology temples (He 2007). In order to do so, they determined that all temples should conduct a survey of their environmental impact. These environmental impacts studies were designed to show where temples could improve on their ecological footprint. Each temple was provided with a checklist, which was measured against the official definition of an ecology temple that was also decided upon at the 2007 conference:

1. A temple that has been planned and constructed according to Daoist teaching with the basic religious function of promoting the Daoist faith and which promotes the sage Laozi as the God of Ecological Protection;
2. A temple that uses the resources of land, forest, water, and earth, to green and beautify its surrounding landscape;
3. A temple with facilities to protect water sources and sewage treatment with regulations on sanitation and fire protection;
4. A temple that is using alternative energy technology and materials to use energy wisely;
5. A temple that has a harmonious relationship with the surrounding environment and communities
6. A temple that in itself is a base for education about the environment and ecology He (2007)

Along with audits of the sustainability of their respective temples, attendees discussed the impact of certain projects that had already been put in place to "green" temples and their grounds. Some of the measures being considered were: installing solar panels on temple roofs, recycling water, installing clean toilets, joining together to buy eco-friendly incense, reducing the impact of nationwide shipping and bringing land use and management of the temple into the ecological protection planning of the surrounding area (He 2007). While the 2007 conference did not produce a statement on the environment as the 2006 and 2008 conferences did, it did produce the standard by which, theoretically, all Daoist temples were meant to measure themselves against. Not only did it create a very specific definition of an ecological temple, it also instituted temple surveys on sustainability and an alliance on ecological education, thereby extending the role of the CDA in the individual temples and promoting more environmentally sound practices.

Maoshan, the famous Daoist peak and location of the Shangqing revelations, hosted the third ecology conference in 2008. This conference was a notable departure from the previous two for two important reasons. First, it was not held at the ecology center, a remote location tucked away in the mountains of Shaanxi province but rather at a large, famous temple complex on a mountain in

Jurong, Jiangsu province that also housed a military monument and was designated as a AAAA tourist destination. Second, the attendance grew from 18 monks and nuns to 69 and more importantly, one hundred and twenty government officials and high ranking UNDP representatives were also present (ARC 2008c). These figures are significant in showing that while the initial conferences appeared to be more of a small-scale grassroots movement, largely concerning a handful of Daoist temples in Shaanxi and Gansu, the CDA's green agenda had caught the attention of the government and appeared to have a certain degree of support and legitimacy on a national scale.

The Maoshan conference produced the Maoshan Declaration and Eight Year Plan. The language of these two newer documents showed even more focus on practical solutions to environmental challenges. Those signing the Maoshan Declaration made the following commitments (ARC 2008b):

1. Putting great effort into ecological education and training. expanding materials and education about the natural environment, that will be open to pilgrims and ordinary temples and mountains.
2. Advocating simpler lifestyles that will reduce energy and energy costs.
3. Participating in social environmental activities with the community.
4. To enhance cooperation with the media to spread the word about ecology.
5. To build ecological temples as our duty.
6. Maximizing the ecological benefit we can achieve from our assets.
7. Building and maintaining a Daoist Ecological Protection Network

This document showed a clear departure from the earlier documents, which focused solely on the elements of the Daoist faith that lent themselves to an ecological sensibility. The Maoshan Declaration showed a deeper engagement with concepts of sustainability, with society, and with the international community. The Eight Year Plan demonstrated even more of a commitment to sustainable practices and outlined very detailed plans for Daoist temples to become not only models of sustainability but also places synonymous with sustainable education.

The Eight Year Plan represented a significant departure from the previous statements and declarations by presenting a detailed approach to sustainable engagement and a serious commitment to an ecological agenda for all Daoist temples (ARC 2008a). It further suggested a sustained and long-term effort on the part of the CDA to urge the Daoist faith in the direction of environmental activism and sustainability. One of the ways the CDA managed to impose a more uniform practice on what had traditionally been a disparate religious tradition was to create sweeping regulations that transcended the role of individual temples. The first step was to ban the use of endangered animals in Traditional Chinese Medicine (TCM) and make any violation an excommunicable offense (China Dialogue 2006). Part E of the second section of the Eight Year Plan, "Public Welfare and Charity" explicitly states that endangered animals and plants are prohibited for use in practices related to healthcare, cooking, or medicinal remedies.

A second step concerned resource management. In Part C, Pilgrims and Travel, temples are called on to provide a "healthier and more environmentally friendly style of pilgrimage and travel," stressing the practice of "three stick incense burning." Three sticks are enough is another signature campaign of ARC in Asia that aims to reduce the amount of incense being burned at temples. Visitors to temples are encouraged to burn only three sticks of incense and ideally to use the eco-friendly incense provided. The Eight Year Plan endorsed the three sticks program to curb excessive burning of incense traditionally a part of Daoist temple ritual with the stated aim being to "reduce pollution caused by burning incense, candles, papers and fireworks on Daoist premises." As an alternative, the Eight Year Plan suggested offerings of flowers and fruit, with the added caveat that they be sustainably sourced (see (Jackson 2010) for an interesting discussion on the impact of food offerings on local economies in Taiwan).

The Eight Year Plan, along with the other statements and declarations mentioned above, highlight specific elements of the CDA's environmental agenda including resource management, conservation,

and energy saving. Additionally, they showcase the aspects of the Daoist tradition that provide the basis for Daoism being understood as an ecological religion.

3. Ecology and Globalization

Two key themes stand out in this history of the Chinese Daoist Association's pursuit of a green agenda. The first is the role of international agencies such as ARC and the Valley Management Foundation in helping to work with and promote the CDA's efforts in producing a green agenda. The second is the increasing important of ecological juridifcation, the creation of environmental laws as a means to assert central authority over local practice.

3.1. The Role of International Agencies

The Alliance for Religion and Conservation (ARC) led by Martin Palmer, was founded by Prince Philip in 1995 when he convened a meeting of leading conservation groups and nine world religions at Windsor Castle in England, the aim of which was "to link the secular worlds of conservation and ecology with the faith worlds of the major religions." (ARC n.d.). Ten years prior to this, Prince Philip, as head of the World Wild Life Fund for Nature (WWF) had organized a meeting between leaders of the world's largest religions and several environmental organizations to discuss the role that faith could play in address growing ecological problems. The organizers of the Assisi conference stressed the value of cultural diversity with a special invitation to all participants to "Come, proud of your own tradition but humble enough to learn from others" (ARC n.d.). With funding largely from the World Bank, ARC sought to bring a global environmental agenda to the world's major faith traditions, including the Chinese Daoist Association, a particular interest of Palmer. The development of a green agenda by the CDA can be seen as the fruitful engagement between a local religious tradition, one not widely known or understood even in China, let alone abroad, with a global environmental NGO. Indeed, the ARC website, though now defunct, was a major regular source of English-language information about the ongoing activities of the Chinese Daoist Association, and of course served to highlight the CDA's ecological activities.

The CDA's green agenda, however, would have been unlikely to achieve concrete results without the inspiration and financing of Allerd Stikker and the Valley Management Foundation, who played an instrumental role in the concrete realization of the goal of producing a model "ecology temple" within the Heihe National Park. The ecology temple stands as the first practical example of what the CDA's green agenda might actually look like and gave a real impetus to the production of laws, guidelines and statements over the next decade. That the first Daoist ecology temple in China was realized principally through a Chinese-UK-Dutch partnership stands as testament to the role played by global actors and global capital in the practical development of the Chinese Daoist Association's environmental agenda.

The CDA's green agenda thus relied in part on the expertise and financing of global instructions and actors. At the same time, analysis of the CDA's documents reveals a gradual shift away from the formulation of unique Daoist values and concepts regarding environmental and ecological issues, towards a focus on more practical and more globally recognizable concerns such as environmental education, energy conservation, and biodiversity preservation. A question that arises from this is whether this shift is partly the result of the CDA's engagement with global environmental actors, or whether this reflects changes within the domestic environmental policy situation in China. That is to say, is the CDA's focus on more generic and less uniquely Daoist formulations of environmental policy the result of its engagement with ARC (or other global agencies)?

As Miller (2017) has noted, environmental communication in China has tended to adopt a global scientific discourse of environmental concepts and principles, rather than favoring their reworking or reformulation in traditional Chinese terms. Indeed, as Yeh (2013) has amply demonstrated, the disjunction of global environmental goals and local traditions has produced miscommunication and even failure of environmental projects.

3.2. Environment and Juridification

The second point to be made about the involvement of ARC and the CDA thus draws on the issue of juridification. The environmental agenda pursued by the CDA took the form of a top-down initiative designed to be applied more or less uniformly across temples in China. The ecological declarations and statements of the CDA make repeated references to overarching policies such as restrictions on incense burning, banning endangered species from being used in Traditional Chinese Medicine practices and injunctions to make all temples ecological temples. Together, we can theorize that the environmental agenda developed in partnership with ARC contributed to the development of a religious policy discourse focused principally on the good governance and management of temples.

Through the evolution of the CDA's environmental discourse we can observe a shift from a focus on aspects of the Daoist tradition that suggested an underlying environmental ethic to adopting a program more akin to international standards on sustainability, such as renewable resources, recycling, and eco-friendly incense, among others. This shift can be understood as a shift from conceptual and ethical priorities to ones of implementation and governance. They align, however, with the broader agenda of the CDA in establishing its national authority over local forms of worship and practice, thus contributing to the CPC's overarching goal of establishing a unified national system for the guidance and management of religious activities by the Party.

4. Towards an Ecological Civilization

One of China's key national development goals, the term ecological civilization (*shengtai wenming*) denotes in China a post-industrial stage of economic development, one that through the use of advanced technology, centralized planning, and government incentive reduces the negative environmental impact of traditional capitalist economic development. Goron (2018, p. 41) identifies ecological civilization firstly as a "political response to the state's failure to protect the environment," but the term did not achieve full prominence until 2012 when it was enshrined in the report of the 18th Party congress. In discussing why China did not adopt the more widely-known term "sustainable development" Goron (p. 42) notes that the term ecological civilization was born in part from an internal Chinese eco-marxist critique of neoliberal economic development models, and a desire to reject "binding environmental norms as disguised western imperialsm." That is to say, the development of the concept of ecological civilization grew out of China's internal efforts to develop its own strategy for environmental issues, one that was rooted in traditional Chinese cultural values, and one that would later play a key role in President Xi Jinping's ideology of national rejuvenation. In Goron's analysis, therefore, the adoption of a language of ecological civilization can be understood as part of the China's transformation from the early 2000s Hu Jintao era of "scientific development" towards one in which cultural values, and the promotion of Chinese national identity, would come to dominate the ideological sphere.

In such a climate, therefore, it is no wonder that Chinese Daoist Association has sought to play a key role in the cultural architecture of ecological civilization. As China's only indigenous religion, it has seen for itself the possibility of a rebirth under the ideological aegis of Xi Jinping thought. Thus the movement towards an ecological civilization is occurring at the same time as renewed interest in China's traditional cultures and religions in China. Paradoxically perhaps, in the Xi Jinping era, the push towards economic and technological innovation functions in close relation to a resurgence of cultural tradition. This has usually been theorized in terms of the development of a form of economic nationalism. China's technological innovation is presented as a way to disentangle itself from the specter of Western values, and to promote the resurgence of a renewed, national character. At the same time, however, notion of an ecological civilization implies at the very least a questioning of the values and logics of modernity, including the social imagination of nature as inert matter subject only to economic exploitation. Here at least the attempt of the CDA to promote Daoism as a kind of "green religion" is enabled not only by aligning with the calls for a more nationalist economic policy, but also by a deeper questioning of the values of modernity, especially a Euro-American modernity, that, through the combination of capitalist profit-seeking and colonial domination, has abetted the

despoliation of nature across the world. In such a climate it is no wonder that the long-cherished Daoist values of naturalness and simplicity should rise to the fore.

The possibility for Daoism's rebirth as a green religion, however, occurs precisely at the same time as the increased juridical control of China's religions. One arena in which this process of juridification in China is taking place is that of ecology and environment. Top-down environmental initiatives promoted by the Chinese Daoist Association may reasonably be seen as a further stage in the transformation in the relationship between the central state and local religions, one that continues China's long process of attempting to normalize, regularize and manage all forms of religious activity within its borders. In this sense the development of an ecological civilization holds nothing new in terms of the history of religion in modern China: it presents just another opportunity for the state to exercise authority over local traditions.

How then to understand the legacy of Allerd Stikker, the Alliance for Religions and Conservation, and the first Ecology Temple in Shaanxi? Firstly, this legacy demonstrates that the arena of ecology and environment is one that has enabled the engagement of Daoism and the West. Reaching back to the New Age era, and through the projection of Orientalist fantasies, Daoism has always stood in the Western social imagination an antidote to Western modernity. Favoring nature rather than technology, and the local over the global, Daoism has long been imagined as the radical hope that Chinese culture possesses a wisdom that goes beyond the limits of Western thinking. As LaChapelle (1988, p. 90) famously claimed in her "extended rhapsody," *Sacred Land, Sacred Sex—Rapture of the Deep*: "Now after all these years of gradual, deepening understanding of the Taoist way, I can state categorically that all these frantic last-minute efforts of our Western world to latch on to some 'new idea' for saving the earth are unnecessary. It's been done for us already-thousands of years ago-by the Taoists." There is no doubt that the global promotion of Daoism as a green religion has been aided and abetted by this social imagination.

While the CDA's green agenda was undoubtedly aided by Western imagination about Daoist religion, this has not resulted in the wholesale globalization of Daoism as a religious tradition, or ecology as a global agenda. As Palmer and Siegler (2017) have wryly observed, the entanglement of Western imaginings about Daoism with indigenous Chinese realities is one that does not solely produce misunderstanding, but even unexpected affinities and positive engagements. In this case, the development of Daoism's green agenda is one that has been redirected along the lines of an indigenously Chinese ecological civilization under the clear leadership of the Party and with the goal of national rejuvenation. At a recent visit to a Daoist temple near Chongqing, Miller observed three banners decorating the entrance: the first promoted the ecocentric notion of an inter-related community of humans and nature (*ren yu daziran shi yizhong gongsheng guanxi*); the second promoted a month devoted to studying the religious policies and regulations; the third offered the local Daoist association's congratulations on the seventieth anniversary of the founding of the People's Republic of China. While global capital and international NGOs may have helped bring about the birth of Daoism's green agenda, Daoism's key public messages today are ecology, religious regulation and national rejuvenation. All three themes are woven into the fabric of the ideology of ecological civilization in the Xi Jinping era.

References

ARC. 2003. Daoist Faith Statement. Available online: http://www.arcworld.org/faiths.asp?pageID=70 (accessed on 1 December 2018).

ARC. 2007. Daoist Ecology Workshops Hugely Oversubscribed. Available online: http://www.arcworld.org/news.asp?pageID=171 (accessed on 1 December 2018).

ARC. 2008a. China Daoist Ecology Protection Eight Year Plan. Available online: http://www.arcworld.org/downloads/Daoist%20Eight%20Year%20Plan%2008-10-31.pdf (accessed on 1 June 2019).

ARC. 2008b. The Mao Shan Declaration. October. Available online: http://www.arcworld.org/projects.asp?projectID=371 (accessed on 1 December 2018).

ARC. 2008c. Third Daoist Ecology Forum Opens in Jurong, Jiangsu—And This One is Country-Wide. Available online: http://www.arcworld.org/news.asp?pageID=273 (accessed on 1 December 2018).

ARC. n.d. About ARC. Available online: http://www.arcworld.org/about_ARC.asp (accessed on 1 December 2018).

China Dialogue. 2006. Religion and the Environment in China. Available online: http://www.chinadialogue.net/article/show/single/en/485-Religion-and-the-environment-in-China (accessed on 31 August 2019).

Goron, Coraline. 2018. Ecological Civilisation and the Limits of a Chinese Politics of Sustainability. *China Perspectives* 4: 39–52.

He, Xiaoxin. 2007. Taking Care of Nature: Building Up the Daoist Ecology Temple by Our Own Hands. Available online: http://www.arcworld.org/downloads/07%20June%20workshop%20report.pdf (accessed on 31 August 2019).

Jackson, Paul. 2010. Don't Trample the Grass: Popular Daoism and Ecology in Taiwan. Paper presented at the 2010 Annual Conference on Daoist Studies, Los Angeles, CA, USA, June 2–6.

LaChapelle, Doris. 1988. *Sacred Land, Sacred Sex—Rapture of the Deep: Concerning Deep Ecology and Celebrating Life*. Silverton: Fine Hill Arts.

Miller, James. 2017. *China's Green Religion: Daoism and the Quest for a Sustainable Future*. New York: Columbia University Press.

Palmer, David A., and Elijah Siegler. 2017. *Dream Trippers: Global Daoism and the Predicament of Modern Spirituality*. Chicago: University of Chicago Press.

Stikker, Allerd. 2014. *Sacred Mountains: How the Revival of Daoism Is Turning China's Ecological Recovery Around*. London: Bene Factum Publishing.

Xie, Chuanjiao. 2008. Religious Leaders Call for Peace, Harmony. *China Daily*. October 28. Available online: http://www.chinadaily.com.cn/world/2008-10/28/content_7151569.htm (accessed on 31 August 2019).

Yeh, Emily. 2013. *Taming Tibet: Landscape Transformation and the Gift of Chinese Development*. Ithaca: Cornell University Press.

Zhang, Jiyu. 2001. A Declaration of the Chinese Daoist Association on Global Ecology. In *Daoism and Ecology: Ways within a Cosmic Landscape*. Edited by N. J. Girardot, James Miller and Xiaogan Liu. Cambridge: Harvard University Center for the Study of World Religions.

Daoism and the Project of an Ecological Civilization or *Shengtai Wenming* 生态文明

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Abstract: For China today, environmentalism is central. The socialist doctrine of "Xi Jinping Thought" prioritizes transitioning to sustainability in the goal of building an "Ecological Civilization". This creates unprecedented opportunities for Daoist practitioners to engage in state-coordinated activism (part 1). We show how the science of the planetary crisis (part 2) resonates with Daoist values (part 3), how these values integrate in national policy goals (part 4), and how this religious environmental activism plays out in case studies (part 5).

Keywords: religious environmental activism; China; Taoism; sustainability

1. Introduction

Daoism is often described in Philosophy as the greenest of all schools of wisdom, and in Religious Studies as the faith that puts nature's Way, the Dao 道, at the center of reverence.[1] This understanding, while essentially correct, needs to be reconsidered for three reasons. One is that the crossing of planetary thresholds has altered the meaning of 'nature' and 'green'. Another is that China has gone through profound changes since the Cultural Revolution, which affect Daoism and environmentalism alike. A third is that, in the 21st century, Daoist practitioners are working with the Communist Party to turn the People's Republic of China into a sustainable and post-carbon society.

During the Cultural Revolution, religions were suppressed and their practitioners persecuted. Environmentalism was condemned as a reactionary attitude according to Stalinist doctrine. After Mao's death in 1976, repression eased and Daoism was rehabilitated. Mao's successor Deng Xiaoping 邓小平 initiated a course correction in the 1980s that realigned Chinese socialism with Leninist doctrine, not only with Lenin's New Economic Policy, but also with Lenin's advocacy of environmental activism (Foster 1999; Vogel 2011).[2] Deng's successor Jiang Zemin 江泽民 implemented this realignment in the 1990s and called for a balance of economic growth and environmental protection. In 2007, Jiang's successor Hu Jintao 胡锦涛 expanded this call into the vision of an Ecological Civilization (*shengtai wenming* 生态文明).

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[2] For the difference in Soviet thought between Lenin and Stalin over ecological issues, cf. (Foster 1999, pp. 392, 394). Foster points out that Lenin promoted conservationism, established nature preserves, and implemented environmental policies during the New Economic Policy period (NEP, 1921–1928), whereas Stalin's "disconnection of Soviet thought from ecological issues, from the 1930s on, was severe" (p. 394). China's course change follows these lines—while Mao Zedong embraced Stalinist doctrine, Deng Xiaoping returned to Leninist ideas by appropriating the NEP doctrine as China's post-Maoist 'state capitalism' and by initiating a government reversal over environmental policy. For Deng Xiaoping's embrace of Leninist environmental policy and his promotion of reforestation, cf. (Vogel 2011, pp. 712–13).

For China's 21st century iteration of Marxism–Leninism, environmentalism is central. In 2017, Xi Jinping 习近平, president since 2013, elevated Hu's vision to a policy and decreed the construction of an Ecological Civilization as a priority. In contrast to Maoism, today's socialist doctrine, "Socialism with Chinese Characteristics for the New Era" (*xin shidai zhongguo tese shehui zhuyi* 新时代中国特色社会主义), also known as "Xi-Jinping Thought" (*xi jinping sixiang* 习近平思想), is a future-oriented outlook that grounds policy in science and draws from China's legacy of philosophical and religious traditions. This ideological sea change has created unprecedented opportunities for Daoist practitioners to engage in environmental activism, coordinated by the Communist Party towards the construction of an ecological civilization.

China's environmental course-correction is neither sheer idealism nor a propaganda ploy. Instead, it is a pragmatic response to deteriorating environmental conditions and consequent public protests. "Growing societal pressure has vaulted environmental protection to the top of the Chinese leadership's agenda" (Economy 2018).[3] Tolerance for religions such as Daoism under these conditions is also born out of necessity. The shift from a Stalinist command economy under Mao to Leninist state capitalism under Deng implied a partial retreat of the government from the society. This was not only a retreat from the market but also from other roles formerly performed exclusively by the state, such as providing social welfare and health care. Nonstate actors have filled the void. Xi has reversed this trend and once more extends the reach of the state. But his politburo also accommodates itself to the post-Maoist reality of nonstate actors in China. Recruiting these actors for the efforts of stabilizing the environment and mitigating climate change is an efficient strategy for the Communist Party to delegate work that needs to get done, and it constitutes an opportunity for nonstate actors such as the Chinese Daoist Association, est. 1957 (CDA, *zhongguo daojiaoxiehui* 中国道教协会), to practice what they preach.

The consequence of the Party's accommodation to organized religion is a de-facto alliance of Daoism and Communism.[4] The Party coordinates the activism of practitioners into regional projects, and the greening of socialism empowers the CDA to be an agent in the sustainability transition. Xi's pursuit of an ecological socialism has effectively enlisted Daoism in China's fight against climate change. Ironically, this turns the Daoist tenet of following nature's Way into an implicit aspiration of Xi Jinping Thought.

We will examine Daoist environmental activism in light of China's project of an Ecological Civilization with several case studies. Because of the shifting meanings of environmentalism, and its political ascendancy in China, we will put Daoist environmental activism both in scientific perspective and in a political context. The subject of Section 1 is the contemporary transformation of the environment, mirrored in a more complex meaning of environmentalism. Section 2 consists of an examination of the green elements in Daoist spirituality vis-à-vis this transformation, and how the transformation lends these elements explanatory and predictive power. The subject of Section 3 is China's aspiration to an Ecological Civilization, and its implications for a new model of development. Section 4 consists of case studies in several Chinese provinces that illustrate what environmental activism by Daoist practitioners means in the planetary emergency.

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[3] (Economy 2018, p. 14).
[4] This alliance is historically a step beyond the integration of the Chinese Daoist Association in the socialist state. The CDA was founded in 1957 as a "national patriotic religious group" (*aiguo zhongjiao tuanti*) (爱国宗教团体). Its founding document calls on all Daoists "to protect . . . and support the socialist construction of the motherland . . . under the leadership of the people's government" (*aihuo zuguo . . . bing zai renmin zhengfu lingdao xia, . . . qiwei zhichi zuguo de shehui zhuyi jianshe* 爱护祖国 . . . 并在人民政府领导下 . . . 起为支持祖国的社会主义建设). The CDA was suppressed during the Cultural Revolution 1966–1976. Under the Deng administration, the CDA was rehabilitated to its former status in 1978. The Jiang administration reaffirmed the party's policy of religious freedom while also seeking to guide religion to adapt to the socialist society in 1993. While Deng regarded religions as neutral, Jiang declared them to be "positive forces" (*jiji liliang* 积极力量) for building socialism with Chinese characteristics.

2. The Shifting Conception of Environmental Activism

The new global reality can be summed up in civilization being on a collision course with the boundaries of the Earth System (Wackernagel et al. 2002).[5] Several planetary boundaries have been overshot, and two of them are of particular significance: the capacity of the carbon cycle in the climate system, and the speciation-extinction balance in the biosphere. Breaking through the carbon boundary has caused climate change, and overshooting the biodiversity boundary has unleashed a global extinction event.

In the climate system, the collision course of human growth with the carbon boundary has accelerated global warming. The acceleration is amplified in the Arctic. Climate change in the north polar region is forty years ahead of predicted scenarios, and the Greenland melt-off is now four times as fast as had been modeled (Bevis et al. 2019; Box 2019; Fettweis et al. 2013; Fettweis 2019; Hayhoe et al. 2017).[6] Human emissions of CO_2 and CH_4 (methane) are overwhelming the assimilative capacity of the carbon cycle, resulting in rising greenhouse gas concentrations and mean surface temperatures. The results are visible in the acidification of the oceans, the increase in extreme weather events, and the intensification of heatwaves.

In the biosphere, the human collision course with the speciation boundary has led to what is now recognized as the sixth mass extinction in the history of life. The scale of this event comes into view when considering the extent of contemporary land conversion. In 2019, humanity exploits 72% of the planetary surface (Intergovernmental Panel on Climate Change IPCC).[7] Today, 96% of all mammals are humans and livestock, and 70% of all birds are chicken and poultry (Fletcher 2019; Bar-On et al. 2018).[8] In the 20th century, before the extinction unfolded in earnest, conservationism involved saving endangered species and protecting biological diversity. But now, biodiversity loss is joined by *defaunation*: a thinning of common species (Dirzo et al. 2014).[9] (Biodiversity loss is counted in species; defaunation is counted in populations.) The combination of biodiversity loss and defaunation reveals the size of the extinction: since 1970, vertebrates (i.e., mammals, birds, reptiles, amphibia, and fish) have declined by 60% worldwide and by 90% in the tropics (Díaz et al. 2019; Grooten and Almond 2018).[10] As the earlier collapse of bee colonies shows, invertebrates have not been spared either (Engelsdorp et al. 2007, 2008; Neilson 2019).[11] Since 1990, flying insects have declined by 75%–80% in some northern countries,

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[5] The Earth System is the biophysical whole constituted by the interactions of biosphere, hydrosphere, cryosphere, lithosphere, and atmosphere. It is a complex system of the critical biophysical processes, cycles, and services that sustain life on Earth. In (Wackernagel et al. 2002), M. Wackernagel et al. write (p. 9266), "Sustainability requires living within the regenerative capacity of the biosphere . . . [but] human demand may well have exceeded he biosphere's regenerative capacity since the 1980s . . . humanity's load corresponded to 70% of the capacity of the global biosphere in 1961 and grew to 120% in 1999".

[6] The situation in the Arctic has outpaced worst-case models. Here are details for the interested reader. For a 2019 update, cf. (Bevis et al. 2019). For a mid-2019 update from Arctic measuring stations, cf. (Box 2019). For the mid-2019 ablation rate [= *net mass of ice lost from land as meltwater pouring into the ocean*], cf. (Fettweis 2019). The acronyms in (Fettweis 2019) are as follows: MAR = mean annual runoff; SMB = surface mass balance; GT/Day = gigatons per day. Fettweis (ibid.) states that he is 'using SSP585.' This refers to the *SSP 5–8.5*, which is the coupled climate model that links the *shared socio-economic pathway* (SSP) 5, the worst-case model for civilization, of continued "fossil-fueled development," with the *representative concentration pathway* (RCP) 8.5, the worst-case model for global climate, in which radiative forcing reaches greater than 8.5 watt per m^2 by 2100, corresponding "to a future where carbon dioxide and methane emissions continue to rise as a result of fossil fuel use;" cf. (Hayhoe et al. 2017). For an earlier model of Greenland's melt-off, which underscores how the 2019 situation has escalated, cf. (Fettweis et al. 2013). For a non-technical summary, cf. (Holthaus 2019). For an editorial based on the mid-2019 Greenland weather station tweets, cf. (Linden 2019).

[7] For data on land conversion, cf. (Intergovernmental Panel on Climate Change IPCC). For a non-technical summary, cf. (McKie 2019).

[8] For data on mammals and birds, measured in biomass, cf. (Bar-On et al. 2018); See also (Fletcher 2019, chp. 8, p. 316).

[9] (Dirzo et al. 2014).

[10] (Díaz et al. 2019), Background A.6, p. 13; cf. also (Grooten and Almond 2018), pp. 7–10 and chp. 3, pp. 88–107.

[11] For early signs of the collapse of bee colonies, cf. (Engelsdorp et al. 2007, 2008). For the situation in 2019, cf. (Neilson 2019; Milman 2019).

and by 90%–95% in some tropical territories (Hallmann et al. 2017; Vogel 2017; Jarvis 2018).[12] Such declines in biota are termed 'biological annihilation' (Ceballos et al. 2017).[13]

Global warming and biological annihilation are linked, because climate and biosphere affect one another. Both are complex systems, and their dynamics are entangled (Ayres 2000).[14] This means that destabilizing the one destabilizes the other. Global warming worsens the extinction, and the extinction worsens global warming. The link from climate to the biosphere is clear enough: plant and animal species try to adapt to rising temperatures by moving to higher latitudes or altitudes, but physical obstacles and human barriers interfere with such migrations, with the result of biota falling by the wayside.

The reverse link—from biosphere to climate—is not so obvious. At the same time, it highlights the shifting meanings of environmental concepts. The reverse link is that the extinction weakens the structural integrity of the biosphere, and that climate responds to this weakened integrity with greater sensitivity to external forcings such as carbon emissions (Steffen et al. 2015).[15] The more we replace flora with crops and fauna by livestock, the less stable this dynamic becomes. The climate system is reacting more strongly than before to emissions; biodiversity loss and defaunation are making climate become 'tippy'.

To avoid pushing the climate beyond tipping points, the 2015 Paris Accord sought to limit global warming to 2 °C above the preindustrial baseline (the two-degree guardrail). Scientific findings in 2018 moved the goal posts to 1.5 °C of warming (Steffen et al. 2018).[16] Since temperatures today are 1.0 °C higher than before the Industrial Revolution, additional global warming must be limited to 0.5 °C to stay in the safe operating space of humankind. We have already broken through the planetary boundary of the carbon cycle, but if we also break through the 1.5 °C guardrail, the climate will be put on a trajectory towards "Hothouse Earth" (Steffen et al. 2018).[17] Positive feedback loops will kick in to fuel runaway global warming (e.g., by CH_4 outgassing from melting permafrost). If that happened, matters would be out of our hands. Temperatures would then keep rising higher even if all human emissions were to cease completely.

In response to this finding, in fall 2018, the Intergovernmental Panel of Climate Change (IPCC) released a report, *Global Warming at 1.5 °C* (*SR15*). Avoiding the hothouse fate requires a reduction of carbon emissions to 50% by 2030 and to zero by 2050 (Intergovernmental Panel on Climate Change IPCC).[18] In short, humanity has ten years left to embark on worldwide decarbonization and step back from the cliff. Since civilization is meeting 85% of its energy needs with fossil fuels, with carbon emissions rising by 2% annually as recently as 2018 (British Petroleum 2019), avoiding the hothouse fate will require a revolutionary effort.[19]

In the past, environmental activism was motivated by aesthetic and moral considerations, about the wellbeing of planetary life, the integrity of ecosystems, and the beauty of the natural environment. Today, motivations and concerns are more complex. The hothouse fate adds an existential worry, since it would trigger civilization collapse if not averted. This complexity is reflected in new goals, such as sustainability, and new names of activist organizations, such as Extinction Rebellion. Put differently, in the past, there was a gulf between nature and culture—the natural environment and human civilization were separate phenomena in our lifeworld. Today, nature and culture have merged.

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[12] For the vanishing of flying insects, cf. the so-called Krefeld study that triggered the alarm: (Hallmann et al. 2017); cf. also (Vogel 2017). For a non-technical review, cf. (Jarvis 2018).
[13] (Ceballos et al. 2017).
[14] For a classic description of entanglement, cf. (Ayres 2000).
[15] (Steffen et al. 2015), esp. pp. 6–7.
[16] (Steffen et al. 2018).
[17] (Steffen et al. 2018), fig. 2 "Stability Landscape".
[18] (Intergovernmental Panel on Climate Change IPCC), Summary for Policymakers, section C "Emission Pathways and System Transitions consistent with 1.5 °C Global Warming," paragraph C1, p. 15.
[19] (British Petroleum 2019). For global energy demand, cf. "Shares of global energy consumption by fuel," p. 11; for growth in carbon emissions, cf. "2018 at a glance", p. 2.

Nature merges into culture because the fate of human civilization is now tied to biosphere integrity and climate stability. Culture merges into nature because human activity is now affecting the functioning of the Earth System. This changes the meaning of being green. Before, being green was a matter of protecting beauty and doing the right thing. Now, being green has become a matter of existence, adaptation, and evolution.

3. Daoist Environmentalism

The ecological outlook of Daoism is well-known, and there exists considerable scholarship on the topic (Chen and Schönfeld 2013).[20] The injection of existential worries into ecological concerns presents a paradigm shift for environmentalism. We argue that Daoism is well-equipped to handle this sea change. Daoism has conceptual resources for responding to the collision course with planetary boundaries, and for supplying the shifting conceptions of environmentalism with a coherent narrative. These resources allow practitioners to make sense of the new realities without having to revise their traditional doctrines.

Misconceptions of Daoism tend to arise, paradoxically, when one approaches it by seeking differentiations. Daoist concepts tend to involve continua and polarities instead of contrasts and distinctions (Moeller 2006).[21] This affects even general concepts, such as 'philosophy' and 'religion,' and basic relations, such as those between facts and values in philosophy, and that of nature and God in religion. The term for 'religion,' *zongjiao* 宗教, was coined by foreign scholars in their study of Chinese culture; that for 'philosophy,' *zhexue* 哲學, was invented by Japanese scholars in their introduction of western philosophy to Japan, and Chinese scholars appropriated it for their own ends. These neologisms, while scholarly projections, reflect the distinctly Chinese approaches to wisdom and the divine. Rather than a Socratic love of wisdom, Chinese philosophy is a 'learning' (*xue* 學) of 'wisdom' (*zhe* 哲). The idea of 'wisdom-learning' reveals a focus on answers and insights. This differs from the Socratic focus on questions and problems.

Chinese variants of religious creeds, encapsulated in the term *zongjiao*, denote not so much a covenant with God, but rather 'teachings' (*jiao* 教) of schools hailing from 'ancestors' (*zong* 宗).[22] The words for 'God,' *shangdi* 上帝 (lit. "Lord on High") and *tian* 天 (which doubles as 'heaven'), attracted considerable interest among early modern missionaries but fall short of the Abrahamitic concept. One reason is the equivalence of 'heaven' and 'God'—instead of the former serving as the seat for the latter, the terms are coextensive, as if divinity were a field. Another is that *tian* denotes both 'heaven' and 'sky,' suggesting that God is in nature. To the extent *shangdi* means 'God,' it does so by denoting a supreme deity such as Zeus, who lords on high, but lacks the power of creation (Chan 1963; Perkins 2004).[23]

One implication of these conceptual continua is the absence of a demarcation between philosophy and religion. To be sure, there is a reflective, theoretical side of Daoist wisdom (*daojia* 道家) taught in philosophy departments, and a reverential, lived side of Daoist faith (*daojiao* 道教) practiced in temples. But their boundary is blurry. The ancient Daoist thinkers Laozi 老子 and Zhuangzi 子 are read and debated as one does philosophers, but they are also worshiped as deities (Kohn 2014; Miller 2017).[24]

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[20] For a select bilingual bibliography of scholarship on Daoism, cf. (Chen and Schönfeld 2013), note 1, p. 74, and references, p. 75.

[21] (Moeller 2006, pp. 16–20).

[22] In (Miller 2017, p. 2), J. Miller comments, "This does not mean that there was no religion in China before [the 19th century invention of *zongjiao*], but rather that Chinese people conceptualized the kinds of traditions and cultural complexes that we call religion differently enough to warrant the invention of a new term." For the terms *daojia* and *daojiao*—Daoist 'religion' and Daoist 'philosophy'—cf. (ibid., p. 136).

[23] (Chan 1963, p. 4; Perkins 2004, p. 17).

[24] For Zhuangzi's elevation to semi-immortality and assumption of a position in the celestial office of the Great Ultimate according to the revelations of the Highest Clarity school of Daoism, cf. (Kohn 2014, pp. 114–15). For Laozi's enshrinement as the 'God of Ecology' by the Chinese Daoist Association, cf. (Miller 2017, p. 5).

Another implication is the lack of a distinction between nature and the divine. In Daoism, the transcendent is immanent; it is not relegated to a supernatural heaven but suffuses nature instead. In the School of Orthodox Unity (*zhengyi dao* 正一道), the prevalent form of Daoist spirituality in Taiwan, the apex of the pantheon is occupied by the Three Pure Ones (*sanqing* 三清). They are the manifestations of Dao: the 'non-pole' or primordial universe (*wuji* 無極), the 'great pole' or infinite potential (*taiji* 太極), and yin-yang or complementary dialectics (*liangji* 兩儀). These manifestations are heavens in the sense of transcendent realms—but they are also gods in the sense of personified deities. In the latter sense, *wuji* is the Lord of Primordial Beginning (*yuanshi tianzun* 元始天尊); *taiji* is the Lord of the Numinous Treasure (*lingbao tianzun* 靈寶天尊), and *liangji* is the Lord of Way and Virtue (*daode tianzun* 道德天尊). In Orthodox Unity Daoism, the Lord of Way and Virtue is the philosopher Laozi. So, instead of a distinction between heaven and Earth, there is a continuous universe both sacred and secular; instead of a distinction between heavens and gods, heavenly realms and divine spirits are coextensive properties of the Three Pure Ones; and, instead of a distinction between gods and humans, the Third Pure One, Laozi, happens to be both.

The characteristic lack of distinctions brings Daoist environmentalism into view. Nature—a peak, a creek, a seashore, a grove—is inhabited by deities, who deserve reverence, and whose dwelling-places are owed protection. The spiritual ontology of Daoism is akin to that of Buddhism and animist folk religion. This commonality allows for syncretism, such as the Chinese fusion of Daoism with animist folk religion. Practitioners are not conflicted when paying their respects to the Three Pure Ones as well as to the local Earth God (*tudigong* 土地公). But beyond this commonality are motifs specific to Daoism, which make its naturalistic outlook uniquely well suited to the contemporary environmental crisis. These motifs are a continuum of culture and nature, the normative character of natural facts, a soft anthropocentrism, and, as a consequence, an evolutionary conception of natural and human existence.

The first motif, the culture–nature continuum, expresses itself in the cliché of nature-worship—while the Confucian scholar applies himself in the city, the Daoist sage seeks solitude in the wilderness. Nature is the ultimate framework, integrating everything, including culture. The relevance of this Daoist continuum for environmentalism is easy to see. Overshooting the carbon balance expresses itself in rising greenhouse gas concentrations everywhere in the atmosphere. Overshooting the biodiversity balance expresses itself in the decline of wildlife everywhere on the planet. The human footprint steps on nature entire: soot from combustion is found on Antarctica; nitrogen from agricultural runoff creates dead zones in the oceans; plastic from consumer products litters remote islands. Not a single nook of wilderness remains pristine today; humanity has left its chemical, physical, and biological marks everywhere. This is an uncanny phenomenon, and some governments in the West, as those of USA, Australia, and Brazil, remain in denial of the threats implied by this new reality. Yet dissolving the distinction of culture and nature is precisely the hallmark of the Anthropocene. Since the lack of this distinction is fundamental to the teachings of Daoism, the new reality does not pose any cognitive challenges to its practitioners.

The second motif that makes it easier for Daoist practitioners to recognize the threats implied by this new reality and to act accordingly is the central precept of Daoism—to follow the Dao, which follows its own nature (*dao fa ziran* 道法自然):

> Humans follow Earth,
> Earth follows heaven,
> heaven follows Dao,
> and Dao follows (its own) nature.[25]

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[25] *Daodejing* c. 25: 人法地，地法天，天法道，道法自然。The rendition 'to follow,' as by G.-F. Feng/J. English (New York: Vintage, 1997) or by S. Addiss/S. Lombardo (Indianapolis: Hackett, 1993), is a translation of the term *fa* 法, lit. "law", as in "earth is the law of humans". R. T. Ames and D. L. Hall (New York: Ballantine, 2003) suggest "to emulate" instead: "Human beings emulate the earth. The earth emulates the heavens, the heavens emulate way-making, and way-making emulates

There is a pattern of energy-flows, a way of how nature proceeds. The Daoist sage (*shengren* 聖人) knows how to abide by this pattern and 'go with the flow'. In the *Daodejing* 道德經, this idea is expressed in the demand "to be the stream of the universe" (c. 28), for "the universe is sacred; you cannot improve it" (c. 29).[26] The reason is a pragmatic concern, motivated by self-interest: "what goes against the Dao comes to an early end" (c. 30).[27]

Seen in this way, the climate emergency is the outcome of not following the Dao. Instead of going with nature's flow, humanity went against it and now risks coming to an early end in the hothouse fate. The sixth mass extinction is yet another consequence of going against the Dao, and it is also symptomatic of humanity dismissing Daoist values. Central to Daoist values is the rejection of destructiveness, domination, and competition. The *Daodejing* counsels, "Achieve results, but not through violence" (c. 30).[28] The Daoist cherishes three core values or 'treasures' (*san bao* 三寶); they are mercy (*ci* 慈), frugality (*jian* 儉), and humility (*hou* 後; c. 67). The environmental crisis is the effect of disregarding these treasures: instead of mercy, civilization proceeds with a lack of empathy; instead of frugality, civilization embraces capitalism; and instead of humility, civilization indulges in hubris. Doing violence to nature shows a lack of wisdom. The *Daodejing* warns: "When humans lack a sense of awe, there will be disaster" (c. 72).[29]

Unlike religions whose practitioners indulge in climate skepticism, as the powerful Evangelical Protestant pluralities in USA, Australia, and Brazil, there is no place in Daoism for such indulgencies. Its teachings already contain explicit warnings of the new realities. Furthermore, its holy scriptures need no interpretive retrofit. Without need for exegetical modification, they can serve as spiritual framework for the challenges of the Anthropocene. Unlike Evangelicals, Daoists can simply say, we told you so.

Next to the subordination of culture to nature and the precept of following the Dao, there is a third motif, which could be called 'soft anthropocentrism'. As we have seen, the proper place of humanity is its harmonious integration in nature. Instead of dominating nature, civilization ought to aspire to a cultural paradigm of mercy, frugality, and humility. And yet, humans occupy a special place in the universe. The *Classic of the Great Peace* or *Taipingjing* 太平经, a collection of Daoist scriptures from the Han dynasty, has this to say about humans:

> Humans are at the center of yin and yang, and the teachers of all things
> Humans are the children of heaven and earth and the leaders of all things.[30]

The opening pages of the *Classic of the Three Days of Interpretation* or *Santian Neijie Jing* 三天内解经 make the same point just as forcefully:

> Heaven, Earth, and humans are the three powers, and they are the ancestors of all things.[31]

The issue of anthropocentrism has been confounding to environmental outlooks. Major theories in environmental ethics, such as the Land Ethic and Deep Ecology, reject anthropocentrism for the sake of eco- and biocentric alternatives, and do so for a plausible reason, because environmental concerns seem to require a pivot away from human-centered interests. Current approaches in climate ethics, however, proceed from explicitly anthropocentric premises, and do so for an equally plausible reason, because climate change directly impacts human communities. Daoism avoids this conundrum and

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what is spontaneously so"; cf. (ibid., p. 115). Unless indicated otherwise, my citations follow the Feng/English translation. For an analysis of verse 25, cf. (Moeller 2015).

[26] *Daodejing* c. 28: 為天下谿. Ames and Hall, loc. cit., p. 120, suggest, "be a river gorge to the world". *Daodejing* c. 29: 天下神器，不可為也. Ames and Hall, p. 122, suggest, "the world is a sacred vessel, and is not something that can be ruled".

[27] *Daodejing* c. 30: 不道早已.

[28] *Daodejing* c. 30: 果而勿强.

[29] *Daodejing* c. 72: 民不畏威，則大威至.

[30] *Taipingjing* sec 644: 人者，在阴阳之中央，为万物之师长 … 人乃天地之子，万物之长也. cf. Wang Ming 王明, ed., *Taiping Jing Hexiao* 太平经合校 (Beijing: Chinese Press 中华书局, 1960). My translation.

[31] *San Tian Neiji Jing* part 1, c. 2: 故天、地、人三才成德，为万物之宗. My translation.

sidesteps this dichotomy of anthropocentrism and non-anthropocentrism by choosing to sustain their contradiction. Nature's flow is the center of all things, and yet humans occupy a special place. They are equal and yet superior to their nonhuman kin—equal, in that they share needs and vulnerabilities with all living beings, and yet superior, in that they are the "leaders," (*zhang* 長), "teachers" (*shi* 師), and "ancestors" (*zong* 宗).

To mitigate climate change and to staunch the sixth mass extinction needs precisely the kind of ambiguity that Daoism suggests. A crisis-response requires empathy with nonhuman others, an empathy grounded in humility and in the kinship of all life. But for the response to succeed, humanity must show leadership. That is to say, the quietist approach of 20th century environmental activism, to exhort people to step aside so as to give nature space, is obsolete. We have struck the planet with a fever that requires medical attention. Climate change can be reined in only by interventions ranging from sequestration to reforestation to decarbonization. The sixth mass extinction can be stopped only by biosphere management. The leadership required from humanity is to serve as healers of the Earth System. As healers, humans would put nature's flow front and center while playing a leading-yet-serving role.

Sustaining the contradiction between equality and superiority, between humility and leadership, is a daunting task. Avoiding the hothouse fate forces humanity to assume the mantle of planetary stewardship. This has never been done before. Getting to sustainability requires an evolutionary leap for civilization. But once again, Daoism supplies the requisite spiritual narrative. The requisite narrative is both a corollary of the previous three motifs—the culture–nature continuum, following the Dao, and soft anthropocentrism—and arguably also a motif of its own: co-evolution.

The evolution of nature is part of the cosmogony and ontology of Daoism. The *Daodejing* speaks to nature's self-organization: Dao radiates (c. 4); it is the mother and the root of heaven and Earth (c. 6); it creates being, being yields dialectics, and dialectics spawns complexity (c. 42).[32] The *Zhuangzi* contains an account of the evolution of life, from "seeds of things" (*zhong* 種) to simple beings such as "membranes" (*ji* 蟨) and "lichens" (*wa bin zhi yi* 蛙蠙之衣; lit. "the clothes of frogs and oysters"), to complex organisms such as panthers, horses, and men.[33]

Since nature evolves, following nature's way means humans evolve, too. The self-organization of nature suggests a progression of human development to higher stages of civilization. The *Zhuangzi* offers several concepts for these evolved stages—the wise human (*shengren* 聖人), the ultimate human (*zhiren* 至人), and the divine human (*shen ren* 神人).[34] The *Daodejing* contains an evocative description of a co-evolved society in the penultimate chapter (c. 80): it is a society with low population density, where humans take death seriously, store their weapons, do not use tools, and return to the old ways. In this future, humans live simple and well, and they leave each other in peace (Schönfeld 2013, 2014).[35]

To summarize, Daoist environmentalism proceeds from the absence of distinctions. It involves a conceptual and a spiritual side, and it merges the secular with the sacred. There are no boundaries between nature and the divine, and between humans and nature. This informs Daoist environmentalism. Nature is in a continuum with culture. Environmental facts entail norms. Humans are equal and yet superior to life on Earth. And finally, just as nature evolves, so should civilization. These motifs, in their combination, provide Daoist practitioners with a spiritual narrative that grounds environmental activism in the contemporary realities of the Anthropocene—the sphere of humans is coextensive with that of nature; planetary boundaries dictate the parameters of practice; the planetary crisis imposes the task on humans to rejoin the community of life as its stewards. Rising to the occasion is an evolutionary

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[32] *Daodejing* c. 4: 道; c. 6: 玄牝之门，是谓天地根; c. 42: 道生一，一生二，二生三，三生万物. My translation.

[33] *Zhuangzi*, c. 18, sec. 7. cf. also (Zhuangzi 1994, pp. 172–73).

[34] *Zhuangzi*, c. 1, sec. 3. Mair translates *sheng ren* as "the sage," *zhi ren* as "the ultimate man," and *shen ren* as "the spiritual person," cf. (Zhuangzi 1994, pp. 5–6).

[35] *Daodejing* c. 80: 小国寡民。… 民重死而不远徙。虽有舟舆，无所乘之，虽有甲兵，无所陈之。使民复结绳而用之，甘其食，美其服，安其居，乐其俗。邻国相望，鸡犬之声相闻，民至老死，不相往来。cf. also (Feng and English 1997), c. 80. For an evolutionary reading, cf. (Schönfeld 2013, 2014).

leap, but this leap is also natural, since Daoism merely suggests that the time has come for humans to grow up.

4. Aspiring to an Ecological Civilization

Politics matters for environmental activism because civil liberties, such as freedom of expression and freedom of assembly, cannot be taken for granted. China's political system puts collective welfare first. At the same time, the destabilization of the Earth System, the prospect of the hothouse trajectory, and the U.N. warning that civilization has only ten years left to step back from the cliff, raises the question of whether civilization can continue afford prioritizing civil liberties over collective welfare. Governance in liberal democracies, as in USA, Australia, and Brazil, has fallen prey to regulatory capture by fossil fuel companies. Western legal systems give protection to climate deniers, science skeptics, and market libertarians, who disseminate misinformation and lobby elected officials with impunity. As a result, the West is in disarray over the crisis, with the U.S., Australia, and Brazil on one side, and the EU-27 and Norway on another. Overlooked by the Western critique of China's suppression of free speech is that internet regulations such as the "Seven Baselines" (*qitiao dixian* 七条底线) include the requirement of information accuracy. Compelling its citizens and its officials to stick to environmental facts—and punish them when they do not—has given China a strategic edge over the market-driven and post-truth dissolution that hamstrings Western aspirations to save the planet. While U.S. officials are free to dismiss global warming as a "niche interest" (as at the 2019 G-7 meeting), the People's Republic of China has taken the lead to try saving at least its own citizens from the perils of the climate emergency.

A key difference to the post-truth politics in liberal democracies emerged during the 16th Central Committee of the CP China 2002–2007. Then General Secretary and President Hu proposed the concept of the "Scientific Outlook on Development" (科学发展观, *kexue fazhan guan*). It was ratified in China's constitution in 2007 and has become one of the pillars of Xi Jinping Thought. The Scientific Outlook concept means various things, but its core idea is that socialist policy, unlike liberal policy, is based on a fundamental respect for science. The consensus on planetary boundary crossings accordingly means that the Scientific Outlook is to be implemented in reality-based, low-carbon, and sustainable development.

Combining Scientific Development with Ecological Civilization evokes the prospect of civil evolution outlined by Daoism. Liberal democracies entered the climate crisis with highly developed infrastructure and strong environmental regulations but then punted. Green leaders of the Western world, such as the Merkel administration of Germany, have made so many concessions to private interests that its pioneering solar- and wind-industries have been faltering, and that its national carbon emissions are at risk of missing reduction targets for 2020.[36] China, by contrast, entered the crisis with a poor infrastructure, little in terms of environmental regulations, and with a natural environment in far worse shape than that of any Western nation. Compared to liberal democracies, China had a lot farther to go. And yet, the speed of its transition to sustainability outpaces what the West has to show for itself (Wang et al. 2019).[37] It is therefore no exaggeration to state that, "Environmental protection has become a global consensus, but the Communist Party of China is the first to take on ecological construction as an action platform of a political party, especially a ruling party" (Hsiung et al. 2015).[38]

The speed is born of necessity. After the fall of Communism outside China, Deng Xiaoping concluded that "only rapid economic growth would maintain the public support necessary to avoid

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[36] (Uken 2019; Schultz 2019; Haffert 2019).

[37] At the Paris Climate Accord 2015, the Xi government had pledged to reduce its CO_2 emissions output starting in 2030. Calculations released in 2019 indicate the China's emissions will decline ten years sooner, peaking in 2019 and start declining in 2020. cf. (Wang et al. 2019).

[38] (Hsiung et al. 2015, p. 287).

the fate of Eastern Europe and the Soviet Union" (Vogel 2011).[39] Deng doubted that Mao's vision of cityscapes dominated by "chimneys everywhere" would be the way to go (Chang and Halliday 2005).[40] He set the course for his successors on his 'southern journey,' the 1992 visit to the Shenzhen Special Economic Zone (SEZ) established in 1980, where he suggested a different type of development—urban instead of rural, high-tech instead of industrial, and clean instead of toxic. Deng's final political gesture was to exhort Shenzhen-style development as blueprint for China's future.[41] Jiang Zemin implemented Deng's strategy: maintaining the government's legitimacy will require boosting development, but not at the expense of the environment. Jiang inherited Deng's problem of how to restore popular support for Communist rule. As a step towards a solution, he decreed the doctrine of the 'Three Represents' (*sange daibiao* 三个代表): The Party must represent economic progress, political consensus, and cultural development (Jiang 2013).[42] 'Economic progress' means clean development. 'Political consensus' means the admission that political power does not grow out of the barrel of a gun, as Mao said in 1927, but comes from popular support. 'Cultural development' means to ground national identity in China's history and to reconcile political ideology with traditions, including Daoism.

Xi Jinping took the helm as General Secretary when high-tech development was still more of a promise than reality, and when the economic boom of the previous decades had led to severe degradation of soil and water. Urban air pollution had become so bad that health concerns fomented a new surge of public discontent. Party officials acknowledged that "the environment had surpassed illegal land expropriation as the largest source of social unrest in the country" (Economy 2018).[43] By seeking to balance development with the environment, Xi is facing the "most severe test of his time—to alleviate the economy's pressure on China's resources," a test that he approaches by harnessing China's traditions, so as to ground sustainable development in "eastern wisdom" (Hsiung et al. 2015).[44]

In practice, the government addresses these concerns on the technological level, by installing a nationwide network of environmental monitoring stations; on the legal level, by broadening existing environmental regulations; and on the political level, by conducting anti-corruption campaigns. It is one thing to have good data and strong laws, but quite another to convince party officials to enforce the laws instead of being lobbied by a donor class of polluters. On the ideological level, Xi took up Hu's 2007 call for constructing an Ecological Civilization (*shengtai wenming*). In 2012, at the 18th National Congress, the Party amended its constitution by adding the construction of an Ecological Civilization as a major goal, and part of the "five in one" endeavor (*wuwei yiti* 五位一体).[45]

Upon assuming power in 2013, Xi declared that strengthening environmental protection is an indispensable part of realizing the "Chinese Dream of National Rejuvenation" (*zhongguo meng* 中国梦).[46] Xi introduced the concept of "Ecological Red Lines" (*shengtai hong xian* 生態紅线) and sharpened Jiang's idea of balancing economic growth and environmental protection into a double equation: "protecting the environment equals to protecting productivity, and improving the environment also equates to developing productivity" (Xi 2014).[47] In the same year, he gave unprecedented political weight to the concept of "future generations" (*hou dai* 後代) by decreeing that China will "leave to our future generations a working and living environment of blue skies, green fields and clean water." In the same letter, Xi identified "addressing climate change" as a "common challenge for the whole

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[39] (Vogel 2011, p. 659).
[40] On the subject of modernization, Mao Zedong once said, "Looking out from Tiananmen, I should see chimneys everywhere"; cf. (Quan 2017); see also (Chang and Halliday 2005, p. 510).
[41] (Vogel 2011, pp. 673–75).
[42] Z.-M. Jiang, "Better effectuate the Three Represents under the new historical conditions (February 2000)" in (Jiang 2013, vol. 3, pp. 1–2).
[43] (Economy 2018, p. 160).
[44] (Hsiung et al. 2015, p. 251).
[45] Prior to the 18th Nat'l Congress, the Party Constitution consisted of sections on four realms ("four in one"): economic, political, cultural and social construction. Ecological Civilization adds a fifth realm.
[46] "A better environment for a beautiful China," speech given Apr 2, 2013, in (Xi 2014, p. 229).
[47] "Usher in a new era of ecological progress," speech given May 24, 2013, in (Xi 2014, p. 231).

world" and promised that China will work with other countries to "make the earth an environmentally sound homeland" (Xi 2014).[48] In 2015, the concept of "green development" (*lüse fazhan* 绿色发展) was put forward at the 5th Plenary Session of the 18th Central Committee of the CP China as part of the 13th Five Year Plan for 2016–2020.

Parallel to his push of Chinese socialism towards environmentalism, General Secretary Xi Jinping acknowledges the importance of philosophical and spiritual traditions for the development of Chinese socialism for the new era. At a talk in 2014, Xi characterized Daoism as "natural" (*ziran* 自然), stated that Daoism deeply affects the lives of Chinese people, and appealed to Laozi. At another talk, in 2015, in the context of protecting water as a resource, he quoted verbatim from the *Daodejing*.[49] Attending the 2016 National Workshop on Religion, Xi said that religious activities need to be adapted to the socialist society and added that these activities will help to bring about the desired "Sinification of religion" (*zongjiao de zhongguo hua fangxiang* 宗教的中国化方向). Accordingly adapted to ideological goals and adopted by policy makers, Daoism is a resource for constructing an Ecological Civilization as the next stage of socialism.

Reflecting the urgency of the planetary crisis, Xi has struck a sharper tone in recent years. In 2016, he warned that "it is high time we intensified eco-environmental protection" because ecological destruction affects sustainable development (Xi 2017).[50] Later that year, he urged to "speed up China's development in a green, circular [closed-loop], and low-carbon fashion" and stated that "emphasis will be put on the supervision of environmental crimes and violations of Party discipline".[51] In 2017, he decreed that the "model based on an increase in material resource consumption, extensive development, high energy consumption, and high emissions" must be abandoned; "comprehensive control of environmental pollution" must be intensified; environmental restoration must happen quicker, and the wish for a happy life for the people must be balanced against the needs of future generations. For constructing an Ecological Civilization, "it is imperative to have the strictest possible institutions and legislation in place" (Xi 2017).[52]

5. Environmental Activism and Case Studies

The Chinese Daoist Association (CDA) advocates a frugal, anti-consumerist, and health-oriented lifestyle cognizant of environmental and climate needs. Daoist practitioners promote environmental protection, energy conservation, waste separation and recycling, and low-carbon technologies. At the turn of the millennium, and in collaboration with the World Wildlife Fund, the Shaanxi Daoist community launched a project called "Creating Environmental Temples" (*huanjing youhaoxing daojiao gongguan* 环境友好型道教宫观), which led to the building of the Tiejia Ecology Temple at Mt. Taibai in the Qinling mountains in Shaanxi province in northwest China (Lemche and Miller 2019).[53] This was a pilot project of sustainable design for religious buildings. The initiative subsequently spread from Shaanxi through China. A follow-up declaration by the CDA, in 2014, expands the Environmental-Temple initiative from architecture to worship, and from building design to temple activities. The burning of incense-sticks, for instance, is a ritual of prayer, but the CDA now recommends, while not doing away with incense burning altogether, to keep it at a minimum. In 2015, the Xi Jinping administration endorsed the Environmental-Temple initiative through the National Bureau for Religious Affairs, which issued a statement that houses of worship henceforth need to be constructed according to the sustainable standards set at Shaanxi.

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[48] "Leave to our future generations blue skies, green fields and clean water," open letter, 18 Jul 2013, in (Xi 2014, pp. 233–34).
[49] In a speech in November 2014, Xi quoted "the highest good is like water" (上善若水) from *Daodejing* c. 8.
[50] "Eco-environmental protection is an integral component of development," speech, 24 Aug 2016, in (Xi 2017, p. 425).
[51] "Clear waters and green mountains are invaluable assets," comments, 28 Nov 2016, in (Xi 2017, p. 426).
[52] "Green development model and green way of life," speech, 26 May 2017, in (Xi 2017, pp. 428–31). Note that the official translation of Xi's phrase *jianshe shengtai wenming* is not the literal "construction of an ecological civilization" but a more circumspect phrase, "ushering in ecological progress." Cf. also (Xi 2018, p. 205), and compare (Xi 2018, p. 205).
[53] For a description of the Tiejia Ecology Temple, cf. (Lemche and Miller 2019).

The Shaanxi project also serves as a symbolic gesture to put the ancient environmental values of Daoism front and center for the new millennium. Starting in 2006, the CDA convened national symposia on Ecological Education (*zhongguo daojiao shengtai jiaoyu zuotan hui* 中国道教生态教育座谈会). These symposia led to proclamations such as the 2006 Qinling Declaration (秦岭宣言), the 2008 Maoshan Declaration (茅山宣言), and the 2014 Ziyang Declaration (紫阳宣言). Together, they define Daoist environmentalism by way of their suggestions: a Daoist ought to maintain a small carbon footprint, use mass transit, oppose consumerism, cherish resources, and care for the environment. "Caring for the environment" (*aihu huanjing* 爱护环境) means to protect rare plants and wild animals—Daoists are not supposed to pick wildflowers, and neither are they to connect to nature by sports hunting. In line with the described lack of distinctions (a lack that yields to a conceptual continuum of nature and humans, specifically to a continuum from the environment to the body), Daoist environmentalism is also practiced by clean living, body cultivation, and health care methods such as Traditional Chinese Medicine (TCM).[54]

Similar to the Chinese government, which bundles its policies in development initiatives known as Five Year Plans, the CDA bundles its initiatives in Seven (or Eight) Year Plans.[55] The 2019–2025 CDA Seven Year Plan for Environmental Protection (*zhongguo daojiao jiehui huanjing baohu qinian guihua* 中国道教界会环境保护七年规划) features ecological education, conservationism, and wildlife protection. Some of the items are specific to Chinese culture. For example, the rubric "wildlife protection" (*yeshengdong wubaohu* 野生动物保护) of the Seven Year Plan prohibits physicians and clinics specialized in Traditional Chinese Medicine (TCM) from using plants and animals that are on China's endangered species list. Other items are cross-cultural if not universal demands. In the rubric "ecological education" (*shengtai jiaoyu* 生态教育), the CDA asks practitioners to reduce and recycle waste, and to save water and energy. Yet other recommendations in the Seven Year Plan reflect the planetary transformation. Thus, practitioners are asked to adopt low-carbon temple management, lifestyle, and travel; avoid fossil fuels whenever possible, and promote the use of renewable energy in their households and communities. Topping the list in the rubric "conservationism" (*shengai baohu hehuan jingbaohu* 生态保护和环境保护) is the demand for active participation in the mitigation of climate change, in the individual reduction of carbon emissions, and in tree-planting initiatives. The language also reflects the changing times, for the CDA's demand is not merely for "planting trees" but explicitly also for "expanding forest carbon sinks".[56]

These demands in the 2019–2025 CDA Plan are grounded in a series of regional projects of environmental activism from 2003 to the present. The recommendation of planting trees is implemented in a Daoist-run project in the remote northwest of China. In 2003, the CDA established an "Ecological Reforestation Base" (*shengtai linjian shejidi* 生态林建设基地) in Minqin county in Gansu province. Gansu is the beginning of the Silk Road; it is bounded by mountains in the west and the Gobi in the east. The Gobi Desert is expanding, and airborne sand impairs agriculture to the east, and it has led to a so-called fifth season, a dust season between spring and summer, in faraway Beijing. Climate change is predicted to make the Gobi Desert even larger. Minqin is at the frontline in the fight against desertification. The desert can be hemmed in by planting hardy shrub- and tree species at its edges. The Ecological Reforestation Base is part of this regional endeavor. The Daoist afforestation project is sustained by grassroot support, volunteer work, and private donations to purchase seedlings. The project has garnered sufficient private donations from practitioners to halt the march of the desert at least in this corner of the province.

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[54] For an account of the 'greening' of the CDA from 1995 to 2008, with further information on the Qinling and Maoshan declarations; cf. (Lemche and Miller 2019), sect. 2.

[55] The "plans" (*guihua*, 規劃/规划) of the CDA are an emerging structure. The 2019–2025 CDA Seven Year Plan for Environmental Protection is the first of its kind and was preceded by a proposed draft (*gangyao yijian* 纲要意见) of the 2010–2017 CDA Eight Year Plan for Environmental Protection (*zhongguo daojiaojie baohu huanjing de banian guihua* 中国道教界保护环境的八年规划).

[56] The choice of words reflects the planetary transformation. The traditional precept, to plant trees (*zhi shu* 植树), is supplemented in the 2019–2025 Plan by the demand of "increase forest carbon sinks" (*zengjia senlin tanhui* 增加森林碳汇).

In 2009, in Jiangxi province in southeastern China, the State Council approved a development project that the provincial government had applied for and whose design is based on Daoist ideas. This is the Lake Poyang eco-economic planning zone at Poyang Lake, which is the largest freshwater lake in China. It is the first regional development plan in the province that has risen to a national strategic level. The plan implements the Daoist ideas of the human–nature continuum and of the treasure of frugality. The human–nature continuum, in this context, is the aspiration to align development with the ideal of "unity of heaven and humanity and coexistence of all things" (*tianren he yi*; *wanwu gongcun* 天人合一; 万物共存). Frugality or *jian*, one of the three treasures or core values, translates here into the development principle of "knowing contentment" (*zhi zhi, zhi zu* 知止知足). Poyang Lake is connected to the Yangtze river downstream from the Three Gorges Dam. Because of the dam regulating river flow, lake levels have fluctuated dramatically, which has degraded the ecosystem and led to a loss of wildlife. The lake is home to an endangered porpoise, which is at risk of following the Yangtze river dolphin into extinction. Daoist activists at Poyang Lake organized to fight for conservationist measures to allow the freshwater ecosystem to regenerate and the last Chinese dolphin species to survive.

The Jiangxi provincial government aids the activists by channeling industrial development in the lake region into a more sustainable direction: in the manufacturing sector, from low-tech to high-tech and service industries, and in the energy sector, from coal-burning plants to an energy basket of nuclear power, hydroelectric power, and wind turbines. The Daoist-inspired development project was approved as a measure to stabilize Lake Poyang, to protect the provincial environment, and to do Jiangxi's part in fighting climate change. Provincial Governor Wu Xinxiong 吴新雄 puts the Lake Poyang project in the context of climate mitigation with four stated goals: afforestation, water resource management, sewage/garbage treatment, and wilderness protection.

Next to the afforestation project in Gansu and the conservationist project in Jiangxi, the CDA seeks to combine activism with education. It does so by creating green zones that are a mixture of educational theme parks, environmental sanctuaries, and eco-tourist destinations. One such example is in Shaanxi province. This is the "Six Rivers and Six Belts" (*liu he liu dai* 六河六带) zone in Zhouzhi county, which was in the planning stage in 2018 and is now under construction. Zhouzhi is a large and sparsely populated county, consisting of mountainous bamboo forests that are home to the Giant Panda. Daoist activists persuaded the Shaanxi provincial government to combine existing wilderness preserves (the Zhouzhi nature reserve and the Cuifeng mountain forest park) with rewilding corridors into a large sanctuary that would protect two-thirds of the county's area. Again, in line with Daoist aesthetics and ethics, the design of the rewilding corridors seeks to reconcile existing infrastructure with ecological hotspots that would protect the forest belts and river valleys, allow biodiversity to flourish, and afford educational opportunities to visitors. The "Six Rivers and Six Belts" project is a joint venture of the Shaanxi provincial government and the Louguantai 楼观台 Daoist temple.

The combination of wilderness protection and environmental education reflects a larger goal of Daoism, the reconciliation of nature and culture, or of environmental and societal needs, through the creation of healthy landscapes. This can take the form of ecotourist destinations, as in the Panda habitats of Shaanxi, but it also assumes more mundane forms, such as the development of ecofriendly residential zones, and the creation of organic farms. Examples of green residential developments are in Sichuan province in southwest China, and in Hunan province in central China. In Sichuan, the CDA has been developing in 2018 and 2019 a green residential zone in the capital, Chengdu, the "Daoyuan Shengcheng Environmental Health villa" (*daoyuan shengcheng zhuti shengtai yangsheng bieshuxiangmu*) (道源圣城主题生态养生别墅项目). It surrounds a cultural landmark, Mt. Heming, which is the historical birthplace of Daoism. It is aimed at upscale residents who want to escape city life to a sustainable exurban community. Another of such ongoing projects, in Hunan province, is a green residential zone in Hunan's capital Changsha. This is the "Canlong Binhu International Area" (*canlong binhu guoji shequ* 藏珑滨湖国际社区). The design of this green development zone reflects the Daoist ideal of living naturally, or being close to nature, by combining ecosanctuaries with high-density urban living. An example of an organic farming project is in Zhejiang, a coastal province

south of Shanghai. This is the "Natural Agricultural Eco-Village" (*ziran nongfa shengtai cun* 自然农法生态村) at the "Lake of Thousand Islands" or Lake Qiandao, which is an artificial lake covering several hundred square kilometers in a large forest. The Daoist practitioners who run it say that this farming community "uses the wisdom of the *Daodejing* to practice natural farming as harmony of nature and humans". The Eco-Village is being promoted by Zhejiang entrepreneurs and run by Daoist practitioners. It serves as a showcase for sustainable farming according to Daoist principles and has received nationwide recognition.

In sum, Daoism, certainly among the greenest of all religions, is rising to the challenges of the planetary transformation. Its spiritual narrative, which concerns a continuum between nature and humans, can seamlessly integrate the sea change of the early Anthropocene, which is marked by planetary boundary crossings and which ties to fate of human wellbeing to Earth System integrity. Environmental activism in the Daoist community benefits from the ideological transformation of post-Maoist China, which makes the construction of an Ecological Civilization a priority for Socialism with Chinese Characteristics in the New Era. General Secretary Xi Jinping recognizes the gravity of the planetary crisis and the urgency of sustainable development. His administration utilizes the structural realities created by his predecessors, specifically the rise of non-state actors, by harnessing the activities of Daoist practitioners towards shared ecological goals. This alignment of Daoism and Communism is facilitated by science. Daoism anticipates in its ancient ontology core elements of the Scientific Standard Model, especially over ecology and evolution. Daoist practitioners are comfortable with scientific findings and integrate them in their teachings. Marxism-Leninism received a key update through Xi's predecessor Hu Jintao with his concept of the Scientific Outlook on Development. This ideological update commits the Communist Party to pursue policies oriented on sustainable development and on scientific findings. The fruit of this Daoist-Communist alignment is a roster of environmental projects across China, ranging from afforestation to rewilding to conservation to green development to sustainable agriculture. Common to all of them is that they started as grassroots initiatives by environmental activists and were encouraged and supported by the government on local, provincial, and national levels. This lets us end our examination of Daoist environmentalism vis-à-vis the project of an Ecological Civilization on a hopeful note. Spirituality, socialism, and science constitute a future-oriented combination of cultural resources in China, which gives us a very real chance of avoiding the hothouse fate.

References

Ayres, E. 2000. The four spikes. *Futures* 32: 539–54. [CrossRef]

Bar-On, Y. M., R. Phillips, and R. Milo. 2018. The biomass distribution on Earth. *Proc. Natl. Acad. Sci. USA* 115: 6506–11. [CrossRef] [PubMed]

Bevis, M., C. Harig, A. K. Shfaqat, A. Brown, S. J. Frederik, M. Willis, X. Fettweis, M. van den Broeke, F. B. Madsen, E. Kendrick, and et al. 2019. Accelerating changes in ice mass within Greenland, and the ice sheet's sensitivity to atmospheric forcing. *Proc. Natl. Acad. Sci. USA* 116: 1924–39. [CrossRef] [PubMed]

Box, J. 2019. Tweet (31 July): On the NW Greenland Ice Sheet, 2019 Melt to-Date is 1.2x That of the Previous Record Melt in 2012. Available online: https://twitter.com/climate_ice/status/1156568949129170944 (accessed on 15 August 2019).

British Petroleum. 2019. *BP Statistical Review of World Energy 2019*, 68th ed. London: Pureprint, 64p.

Ceballos, G., P. Ehrlich, and R. Dirzo. 2017. Biological annihilation via the ongoing Sixth Mass Extinction signaled by vertebrate population losses and declines. *Proc. Natl. Acad. Sci. USA* 114: E6089–E6096. [CrossRef] [PubMed]

Chan, W.-T. 1963. *A Sourcebook in Chinese Philosophy*. Princeton: Princeton University Press.

Chang, J., and J. Halliday. 2005. *Mao: The Unknown Story*. New York: Anchor, p. 510.

Chen, X., and M. Schönfeld. 2013. A Daoist response to climate change. In *Global Ethics on Climate Change: The Planetary Crisis and Philosophical Alternatives*. Edited by M. Schönfeld. London: Routledge, pp. 67–75.

Díaz, S., J. Settele, E. Brondizio, H. T. Ngo, M. Gueze, J. Agard, A. Arneth, P. Balvanera, K. Bauman, S. Butchart, and et al. 2019. Summary for Policymakers. In *Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Global Assessment Report on Biodiversity and Ecosystem Services*. Geneva: UNEP/UNESCO/UNFAO and UNDP.

Dirzo, R., H. Young, M. Galetti, G. Ceballos, N. Isaac, and B. Collen. 2014. Defaunation in the Anthropocene. *Science* 345: 401–6. [CrossRef] [PubMed]

Economy, E. C. 2018. *The Third Revolution: Xi Jinping and the New Chinese State*. New York and Oxford: Oxford University Press.

Engelsdorp, D., R. van Underwood, D. Caron, and J. Hayes. 2007. An estimate of managed colony losses in the winter of 2006–2007. *American Bee Journal* 14: 599–603.

Engelsdorp, D., J. van Hayes Jr., R. Underwood, and J. Pettis. 2008. A survey of honey bee colony losses in the U.S., fall 2007 to spring 2008. *PLoS ONE* 3: e4071. [CrossRef]

Translated and Edited by G.-F. Feng, and J. English. 1997, *Lao Tzu Tao Te Ching*. New York: Vintage.

Fettweis, X. 2019. Tweet (31 July): The Last MAR Forecast Suggests That the Ablation Rate of 1 Aug (SMB ~ -12.5 GT/Day) Could Be the Higest in the Greenland History . . . Such Daily SMB Rate Corresponds to What MAR Projects for 2070 Using SSP585. Available online: https://twitter.com/xavierfettweis/status/1156487868950482945 (accessed on 15 August 2019).

Fettweis, X., B. Franco, M. Tedesco, J. van Angelen, J. Lenaerts, M. van den Broeke, and H. Gallee. 2013. Estimating the Greenland ice sheet surface mass balance contribution to future sea level rise using the regional atmospheric climate model MAR. *The Cryosphere* 7: 469–89. [CrossRef]

Fletcher, C. 2019. *Climate Change: What the Science Tells Us*. Hoboken: Wiley.

Foster, J. 1999. Marx's theory of metabolic rift: classical foundations for environmental sociology. *American Journal of Sociology* 102: 366–405. [CrossRef]

Grooten, M., and R. Almond, eds. 2018. *Living Planet Report 2018: Aiming Higher*. Gland: WWF.

Haffert, C. 2019. Zweite Chance für Solarzellen 'made in Germany'. *Der Spiegel*, August 13.

Hallmann, C., M. Sorg, E. Jongejans, H. Siepel, N. Hofland, H. Schwan, W. Stenmans, A. Mueller, H. Sumser, T. Hoerren, and et al. 2017. More than 75 percent decline over 27 years in total flying insect biomass in protected areas. *PLoS ONE* 12: e0185809. [CrossRef] [PubMed]

Hayhoe, K., J. Edmonds, R. Kopp, A. LeGrande, B. Sanderson, M. Wehner, and D. Wuebbles. 2017. Climate models, scenarios, and projections. In *Climate Science Special Report: Fourth National Climate Assessment*. Edited by D. Wuebbles, D. Fahey, K. Hibbard, D. Dokken, B. Steard and T. Maycock. Washington, DC: US Global Change Res. Program, vol. 1, pp. 133–60. [CrossRef]

Holthaus, E. 2019. Greenland is melting away before our eyes. *Rolling Stone*, July 31.

Hsiung, J., H. Liu, Y. Chen, X.-W. Zhou, and H.-S. Tan. 2015. *The Xi Jinping Era: Comprehensive Strategy toward the China Dream*. Beijing and New York: CN Times Books, p. 287.

Intergovernmental Panel on Climate Change (IPCC). 2018. *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Geneva: WMO/UNEP.

Intergovernmental Panel on Climate Change (IPCC). 2019. *Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems*. Geneva: UNEP/WMO. Available online: https://www.ipcc.ch/report/srccl/ (accessed on 15 August 2019).

Jarvis, B. 2018. The insect apocalypse is here—What does it mean for the rest of life on Earth? *New York Times*, November 27, 16p.

Jiang, Z.-M. 2013. *Selected Works of Jiang Zemin*. 3 vols. Beijing: Foreign Language Press.

Kohn, L. 2014. *Zhuangzi: Text and Context*. St. Petersburg: Three Pines Press.

Lemche, J., and J. Miller. 2019. Global capital, local conservation, and ecological civilization: The Tiejia Ecology Temple and the Chinese Daoist Association's green agenda. *Religions* 10: 580. [CrossRef]

Linden, E. 2019. How scientists got climate change so wrong: few thought it would arrive so quickly. Now we're facing consequences once viewed as fringe scenarios. *New York Times*, November 11.

McKie, R. 2019. We must change food production to save the world, says leaked report. *The Guardian*, August 4.

Miller, J. 2017. *China's Green Religion: Daoism and the Quest for a Sustainable Future*. New York: Columbia University Press.

Moeller, H. G. 2006. *The Philosophy of the Daodejing*. New York: Columbia University Press.

Moeller, H.G. 2015. Basic aspects of Daoist philosophy. *International Communication of Chinese Culture* 2: 99–107. [CrossRef]

Neilson, S. 2019. More Bad Buzz for Bees: Record Number of Honeybee Colonies Died Last Winter. *NPR [National Public Radio, USA]*, June 19.

Milman, O. 2019. U.S. Beekeepers Lost 40% of Honeybee Colonies over Past Year. *The Guardian*. June 19 U.S. Data at the Bee Informed Partnership (U Maryland). Available online: https://beeinformed.org/ (accessed on 15 August 2019).

Perkins, F. 2004. *Leibniz and China: A Commerce in Light*. Cambridge: Cambridge University Press.

Quan, Y. 2017. Controversial chimney stokes industrial heritage debate. *China Daily*, August 30.

Schönfeld, M. 2013. The endpoint of civil evolution. *Daodejing* c. 80 and climate philosophy. *Journal of Religious Philosophy [宗教哲學期刊]* 63: 39–53. (In Chinese).

Schönfeld, M. 2014. The Dao of geo-engineering: *wuwei* of environmental intervention. *Journal of Religious Philosophy [宗教哲學期刊]* 64: 97–112. (In Chinese).

Schultz, S. 2019. Die grosse Windkraftkrise. *Der Spiege*, August 1.

Steffen, W., K. Richardson, J. Rockström, S. Cornell, I. Fetzer, E. Bennett, R. Biggs, S. Carpenter, W. de Vries, C. de Wit, and et al. 2015. Planetary Boundaries: Guiding human development on a changing planet. *Science* 347. [CrossRef] [PubMed]

Steffen, W., J. Rockström, K. Richardson, T. Lenton, C. Folke, D. Liverman, C. Summerhayes, A. Barnosky, S. Cornell, M. Crucifix, and et al. 2018. Trajectories of the Earth System in the Anthropocene. *Proc. Natl. Acad. Sci. USA* 115: 8252–59. [CrossRef] [PubMed]

Uken, M. 2019. Der Totalausfall. *Die Zeit*, August 30.

Vogel, E. 2011. *Deng Xiaoping and the Transformation of China*. Cambridge and London: Harvard University Press.

Vogel, G. 2017. Where have all the insects gone? Surveys point to a dramatic decline in insect biomass. Key members of the ecosystem may be slipping away. *Science* 356: 576–79. [CrossRef]

Wackernagel, M., N. Schulz, D. Deumling, Callejas A. Linares, M. Jenkins, V. Kapos, C. Monfreda, J. Loh, N. Myers, R. Norgaard, and et al. 2002. Tracking the ecological overshoot of the human economy. *Proc. Natl. Acad. Sci. USA* 99: 9266–71. [CrossRef]

Wang, H.-K., X. Lu, Y. Deng, Y.-G. Sun, C. Nielsen, Y.-F. Liu, G. Zhu, M.-L. Bu, J. Bi, and M. McElroy. 2019. China's CO_2 peak before 2030 implied from characteristics and growth of cities. *Nature Sustainability* 2: 748–54. [CrossRef]

Xi, Jinping. 2014. *On Governance*. Beijing: Foreign Language Press, vol. 1.

Xi, Jinping. 2017. *On Governance*. Beijing: Foreign Language Press, vol. 2.

Xi, Jinping. 2018. *Tan Zhi Guoli Zheng*. Beijing: Waiwen Chuban.

Zhuangzi. 1994. *Wandering on the Way: Early Taoist Tales and Parables of Chuang Tzu*. Translated by V. H. Mair. Honolulu: University of Hawaii Press.

Dai Identity in the Chinese Ecological Civilization: Negotiating Culture, Environment, and Development in Xishuangbanna, Southwest China

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Abstract: The Ecological Civilization (Eco-Civilization) is a Chinese political framework to advance a renewed human–nature relationship that engenders a sustainable form of economic development, and its narratives provide political impetus to conserve ethnic minority cultures whose traditional practices are aligned with state-sanctioned efforts for environmental protection. This official rhetoric is important in Xishuangbanna, a prefecture in Yunnan province renowned for its lush tropical rainforests and Dai ethnic minority. This article explores the relationship between Dai cultural identity and the Chinese state in the context of environmental concerns and development goals. Historical analyses of ethnic policies and transformations of landscapes and livelihoods are presented alongside descriptions of contemporary efforts by Dai community members and the Chinese state to enact Eco-Civilization directives, and they illustrate paradoxical circumstances in which political rhetoric and practice are seemingly at odds with one another, yet often contradict in such ways so as to further the Chinese state agenda. Moreover, case studies demonstrate how new policies and sustainable development efforts have often perpetuated structures and ideologies of the Maoist era to reinforce inequalities between central state powers and already marginalized ethnic minorities. These dynamics warrant further consideration as the Chinese government continues to champion its leadership in environmental governance.

Keywords: political ecology; spiritual ecology; Ecological Civilization; civilizing projects; sustainable development; ethnic minorities; indigenous; Xishuangbanna; China

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1. Introduction

Since its reform and opening-up in the late 1970s, China has successfully transitioned from a low-income to a high-middle-income country with significant economic achievements. At the same time, after an extended period of extensive and high-speed economic growth, China has paid a heavy environmental price with the emergence of problems such as air, water, and soil pollution, deforestation, biodiversity loss, tainted food, and other public health concerns (e.g., Shapiro 2001; Harris and Lang 2015; UNEP 2016). Tensions between economic development and environmental protection have been at the forefront of not only national discussions, but also international discussions since the mid-20th century. However, many historians can trace the alignment of these ostensibly antithetical concerns in 1992 at the Rio Earth Summit (Bernstein 2001), where Agenda 21 emphasized "sustainable development" as an organizing principle to offer a "win–win" outcome for "people with hitherto irreconcilable positions in the environment-development debate to search for common ground without appearing to compromise their positions" (Lélé 1991, p. 607).

This article examines "win–win" efforts to align economic development and environmental protection in China through initiatives involving ethnic minority Dai in Xishuangbanna Dai Autonomous Prefecture in Yunnan province. Among laypeople, Xishuangbanna is renowned for

its exceptional natural beauty, which boasts China's richest concentration of biodiversity and the world's northernmost tropical rainforest (Kou and Zhang 1987; Wang and Jin 1987; Yang et al. 1987; Zhang and Cao 1995; Myers et al. 2000). Tourists are equally attracted to the cultural diversity that Xishuangbanna offers, in which Dai culture—often packaged in safe and appealing ways for Han or foreign consumers—is a highlight (Davis 2005; McCarthy 2009). However, rapid economic development from rubber cultivation has resulted in important social changes for Dai communities (Wu et al. 2001; Reuse 2010; Sturgeon 2010), as well as numerous environmental problems (Li et al. 2007; Hu et al. 2008; Qiu 2009; Chen et al. 2016; Zhang et al. 2019). Scholars have noted a history of intertwined economic and environmental concerns in Xishuangbanna, often coupled with political ideologies concerning the role of the Chinese state and the social rank of ethnic minorities (e.g., Sturgeon and Menzies 2006; Xu 2006; Sturgeon 2010; Hathaway 2013; Sturgeon et al. 2014; Zeng et al. 2017), and more recently, these connections have resurfaced in official state rhetoric for Ecological Civilization (often referred to as "Eco-Civilization"), a political framework from the Community Party of China (CPC) aimed at harmonizing economic development and environmental protection.

This article explores the application of Eco-Civilization ideology in Xishuangbanna through contemporary dynamics with Dai communities surrounding economic development, environmental protection, ethnic identity, and the role of the state, with an eye to how these relate to historical patterns since the 1950s. A section on political and theoretical considerations provides context for how under Eco-Civilization, ethnic minority Dai have become the objects of yet another state-initiated civilizing project, while simultaneously held up as virtuous examples of China's rich history, ethnic unity, and indigenous conservation. This is followed by a brief history on Dai as an ethnic group and a description of research methods. After these background sections, this paper traces how Dai ethnicity and culture have become sites of contest and negotiation for nation-building identity processes, environmental ideology, and development efforts by examining (1) ethnic rank and its relationship to landscapes and livelihoods, (2) the pursuit of development via community-based eco-tourism, and (3) Eco-Civilization in public signage that emphasizes parental authority from the Chinese state.

2. Political and Theoretical Considerations

Similar to the ethos of sustainable development, Eco-Civilization functions as a socio-technical imaginary that interweaves technological, political, social, and cultural values for the vision of a future society in which environmentally conscious citizens can enjoy comfortable lives supported by ecologically sustainable modes of resource extraction, production, and trade (Hansen et al. 2018). Importantly, the "state-initiated imaginary of Ecological Civilization is a promise to the population that with the right technologies and policies, and the heightened environmental consciousness of all citizens, a turn towards green need not reduce economic growth" (Hansen and Liu 2018, p. 323)—a promise tightened by what scholars have observed as the state's reliance on economic growth as a main guarantor for social stability and political legitimacy (Wang and Zheng 2000; Thøgersen 2003; Hansen and Liu 2018). First introduced in 2007 by Hu Jintao, this was endorsed as a major framework for the country's environmental laws and policies under President Xi Jinping's leadership in 2013. Since then, Eco-Civilization has continued to gain traction in Chinese society, and in 2018, it was elevated to a more prominent position in the constitution. In practice, Eco-Civilization has already become the ideological framework guiding new environmental policies and sustainable development efforts in China (e.g., Shen 2013; Yeh and Coggins 2014; Kostka and Nahm 2017; Ahlers and Shen 2018; Delman 2018), as well as instances of grassroots activism (e.g., Hansen and Liu 2018) and discussions surrounding research, journalism, and education (e.g., Duara 2014; Sawyer 2015).

Eco-Civilization【生文明】(*shēngtài wénmíng*) is the fourth in the official series of China's civilization slogans, coming after Deng Xiaoping's Material Civilization and Spiritual Civilization 【物文明; 精神文明】(*wùzhí wénmíng; jīngshén wénmíng*) and Jiang Zemin's Political Civilization 【政治文明】(*zhèngzhì wénmíng*) (Dynon 2008), in addition to other civilizing efforts from the Republican era (e.g., Harrell 1995b; Duara 2001; Thøgersen 2009). In these contexts, the term

civilization, or "wenming" 【文明】 in Mandarin Chinese, describes a "historical process; and a kind of civility in terms of social etiquette and relations" (Dynon 2008, p. 83) for "a model life to which people must aspire" (Oswald 2014)[1]. This concept of civilization was introduced to China in the late 1800s through Japanese translations of European scholarship on history and society (Wang 1984; Duara 2001)[2]. European anthropologists at that time described human societies as progressing through stages of savagery and barbarism toward civilization (Fabian 1983). The CPC adopted this framework in the 1950s and 1960s to invest substantial effort and resources in a top-down mission of categorizing ethnic minorities according to socialist ideas of ethnic differences, inspired by its then ideological mentor, the USSR, and ranking them on a universal progression of history (Harrell 1995a; Davis 2005; Sturgeon and Menzies 2006; Xu 2006; Mullaney 2010). According to this ranking, the majority Han had reached a high level of social development, and less developed ethnic minorities were a historical glimpse into what Han society looked like centuries or even millennia ago (Sturgeon and Menzies 2006).

In China, discourse on civilization is often paralleled by discussions of sushi 【素】, or social quality. Discourse on suzhi originates in 1980s state documents investigating rural poverty that attributed China's failure to modernize to the "low quality" 【素低】 (*sùzhì dī*) of its rural population (Anagnost 2004). Since then, the idea of suzhi has been extended from discourse on the social quality of the masses, usually in the context of backwardness and development, to encompass what moral and material characteristics define an individual of social quality (Anagnost 2004). Importantly, both wenming and suzhi discourse produce "hierarchies of value … [that] effectively rank the worth of anyone or anything against criteria that are open to reinterpretation and change depending on the ideological policy emphasis at a given place and time" (Dynon 2008, pp. 97–98). These hierarchies of value have been deployed throughout various "civilizing projects" in China, "in which one group, the civilizing center, interacts with other groups (the peripheral peoples) in terms of a particular kind of inequality … [that] has its ideological basis in the center's claim to a superior degree of civilization, along with a commitment to raise the peripheral peoples' civilization" (Harrell 1995a, p. 4). Eco-Civilization—with the Chinese state as the civilizing center and rural ethnic minorities as peripheral peoples—follows this description.

The imaginary of Eco-Civilization draws on previous civilization discourse and selective interpretations of China's history to construct a sense of cultural continuity and invoke a vision for the future rooted in a united national identity, particularly as a contrast to what is often portrayed in official Chinese discourse as the destructive industrial civilization of the West (Dynon 2008; Hansen et al. 2018). Alongside economic growth, observers have noted that defending China's national unity is a key source of political legitimacy for the CPC (Wang and Zheng 2000; Thøgersen 2003). However, national unity and identity, particularly when entwined with heterogenous ethnicities and cultural positionings, are complex issues in China, on which there is a plethora of scholarship (e.g., Harrell 1995b; Hansen 1999; Litzinger 2000; Gladney 2004; Crossley et al. 2006; McCarthy 2009; Mullaney 2010). In theory, the Han ethnic majority and 55 ethnic minorities comprise the multinational Chinese nation 【中民族】 (*zhōnghuá mínzú*), in which "Chinese identity is supposedly not tied to any one racial or ethnic heritage" (McCarthy 2009, p. 4). In practice, it is frequently the case that "[t]o be ethnic is to be marginal, not part of the canon, not part of the established culture central to legitimacy of the state, not mainstream, not authoritative" (Crossley et al. 2006, p. 5).

These intra-nation-state complexities are often amplified in conversation with international discussions of environmental protection and indigeneity. With its emphasis on Eco-Civilization, the CPC has also adopted the position that conserving ethnic minority culture is important because "environmental protection is naturally maintained by local indigenous cultures" (Wen et al. 2012,

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[1]   Wenming is an ancient word from the *I Ching*, but its meaning there differs from contemporary use; for an account of pre-modern Chinese conceptions of wenming, see Wang (1984)Wang

[2]   This was a complex historical process; see Duara (2001) for a detailed analysis of transformations in the discourse of civilization in the twentieth century and its multifaceted relationship with nationalism in East Asia.

p. 32). Ethnic minorities in China are often conflated with indigenous groups by researchers and laypeople, but the political contexts of each term are nuanced in different ways. The CPC has supported indigenous rights movements in other countries settled by Europeans, but it resisted the notion that indigenous groups existed in China, particularly in relation to issues such as legal treaties or historical precedence (Gladney 2004). Instead, the concept of indigeneity was introduced to China on the heels of environmentalism, largely thanks to the efforts of a small group of scholars, most notably, the Chinese ethnobotanist Pei Shengji (Hathaway 2013). Pei significantly influenced the discourse in China surrounding human–nature relationships by connecting with international interest in biological diversity and its intersection with cultural diversity through his writings on sacred forests, which he henceforth christened "Holy Hills" for English readers (Pei 1985; Pei 1993), protected by ethnic minority Dai in Xishuangbanna. Pei presented Holy Hills as scientific examples of "indigenous conservation" by Dai communities, contradicting standard Han depictions of minorities as primitive peoples in need of state guidance for social development, and instead framing the knowledge and practices of ethnic minorities as models for conservation and sustainability (Hathaway 2013). His rebranding has successfully cast Holy Hills as sites of interest to conservation scientists (e.g., Liu et al. 2002; Zhu et al. 2004, 2010; Zeng 2018b) and Xishuangbanna National Nature Reserve (e.g., Ramachandran 2005), such that Holy Hills and their Dai guardians have become intimately connected to environmental concerns, as this article will discuss in more detail.

3. Research among Ethnic Minority Dai in Xishuangbanna

Soon after the founding of the People's Republic of China in 1949, the CPC began organizing the myriad diversity of people and lifestyles existing within its borders into tidy ethnic labels that continue to present day. The product of these efforts was "the invention of ethnic groups, not their discovery" (Keyes 1995, p. 148). In China, Dai as an ethnic categorization is the Mandarin Chinese version of Tai[3], a term which refers to "people in mainland Southeast Asia, Southern China, and Northeastern India who are presumed to share not only related languages but also some essential 'ethnic' characteristics" (Keyes 1995, p. 136)[4]. Though the official category Dai includes multiple Tai peoples who live in other regions of Yunnan province and other Southeast Asian countries[5], this article focuses on Dai people in Xishuangbanna, who are part of the Tai Lue people (Hsieh 1995; Davis 2005).

Xishuangbanna Dai Autonomous Prefecture【西版傣族自治州】(*Xīshuāngbǎnnà dǎizú zìzhìzhōu*) (21°08′–22°36′ N, 99°56′–101°50′ E) covers 19,150 km^2 of Yunnan province, Southwest China. This region is part of an area historically known as Sipsongpanna, which refers to the loose confederation of small political entities that formed an independent Tai kingdom founded during the late 1200s on the peripheries of the Chinese empire and various Southeast Asian principalities (Giersch 2006)[6]. Since the 1950s, Sipsongpanna has been under the direct rule of the CPC, and the region became formally known as Xishuangbanna, a Mandarin transliteration of Sipsongpanna (Reuse 2010). Much

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[3] Shih-chung Hsieh describes the 1951 meeting in which Dai group representatives met in Beijing to discuss the Mandarin Chinese name for their people: "The representatives of Dehong suggested using Tai 泰 (as their name for themselves still is pronounced), but the Xishuangbanna members wanted to adopt a word with the sound dai. Finally, to settle the quarrel, Prime Minister Zhou Enlai synthesized the character 泰 and the radical 人 (which means "people") to create Dai 傣" (Hsieh 1995, p. 319).

[4] "Tai" is not to be confused with "Thai," which usually refers to Tai-speaking peoples in Thailand or citizens of Thailand.

[5] In particular, Dai includes Tai Lue, who span Xishuangbanna and other Southeast Asian countries, and Tai Neua, from the Dehong region of western Yunnan province. These groups did not share the same premodern genealogies or writing systems, and their spoken languages and writing systems, though linguistically related, are not mutually comprehensible (Keyes 1992; Hsieh 1995; Davis 2005).

[6] This territory was divided into twelve (*sipsong* in Dai language) political entities called panna (*pan* means thousand and *na* means rice paddy in Dai language; the *panna* political territory is based on the idea of "one thousand rice paddies")—hence the name "Sipsongpanna" (Reuse 2010). However, Dai interlocuters have often remarked to me that only eight of the original twelve panna territories are part of China's Xishuangbanna—the remainder of which comprise parts of Laos, Myanmar, and Thailand—which has led to a joke among some Dai people that Xishuangbanna ought to be named "Baetbanna" (*baet* meaning eight in Dai language).

of Xishuangbanna's landscape has been shaped by Dai land management practices, which have historically included farming wet rice paddies, swidden agriculture and different types of agroforestry, collecting non-timber forest products, maintaining Holy Hills as community-protected areas, managing home gardens and temple gardens, and increasingly since the 1980s, cultivating rubber (Pei 1993; Cao et al. 2000; Wu et al. 2001; Guo et al. 2002; Xu et al. 2005; Gao 2010; Sturgeon 2010; Zeng and Reuse 2016). In addition to the aforementioned livelihoods and activities in the countryside, there are also many Dai individuals in larger townships or cities who work in tourism or are employed as white-collar workers in banks or local government, among other pursuits (Hansen 1999; Evans 2000; Davis 2005; McCarthy 2009).

Across these different lifestyles and livelihoods, religion has been repeatedly raised by Dai interlocuters and scholars as a marker of Dai identity (Hasegawa 2000; Davis 2005; Xu et al. 2005; McCarthy 2009; Gao 2010). The ancestors of the Dai people practiced polytheism before Theravada Buddhism was introduced in the middle of the Tang dynasty, about 700 A.D. (Xu et al. 2005; Gao 2010). As a remnant of their polytheistic cosmologies, the majority of Dai people in Xishuangbanna practice a syncretic form of Buddhism and polytheistic animism for a vibrant religious life that includes numerous activities at Buddhist temples, as well as rituals to honor ancestors and other spirits in Holy Hill forests that have since become objects of conservation interest (Liu et al. 2002; Zhu et al. 2004; Ramachandran 2005; Zhu et al. 2010; Zeng and Reuse 2016). Though Buddhism is the dominant religion among Dai people, there are certain Dai communities that, for various historical reasons, belong to other religions, including Christianity and Islam (Gao 2010).

I have been fortunate over the course of my research to spend approximately 18 months between 2011 and 2017 (with the bulk of this time from 2014–2015) in Xishuangbanna. Though my research interests began with conservation biology questions and conducting biodiversity surveys in Holy Hills, I found myself increasingly drawn into the surrounding Dai communities to begin asking research questions inspired by scholars of political ecology. My ethnographic field data collection largely took the form of semi-structured interviews and participation observation. My conversations with interlocuters were primarily in Mandarin Chinese, but often with Dai words and phrases interspersed, especially in reference to aspects of Dai spirituality or worldviews for which there were no easy Mandarin equivalents. Occasionally, I enlisted the help of a Dai-Mandarin interpreter when Dai conversations progressed beyond my limited Dai language abilities. In addition to my time with Dai villagers, I was also fortunate to gain insight and perspectives on the topics in this article from academic researchers, tourism operators, local government workers, and laypeople from various nationalities.

4. Ethnic Rankings and Ideological Landscapes

Many visitors who have come to marvel at Xishuangbanna—"the kingdom of plants and animals" in Chinese media and tourism advertisements—have noticed a curious sight: instead of lush wild jungles carpeting sweeping mountains, the slopes are often covered with row upon row of rubber trees. As of 2018, rubber occupies approximately 21% of the prefecture's land, over 400,000 ha (Qiu 2009; Zhang et al. 2019). The reality of rubber in Xishuangbanna today is the product of a complex history. Soon after the Chinese Revolution, China was confronted with a series of external threats to its territory, and China's war effort was facing a shortage of important raw materials—including rubber. In August 1951, the CPC approved a plan to establish over 533,000 ha of rubber, of which over 133,000 ha would be in Xishuangbanna (Sturgeon and Menzies 2006)[7]. The USSR, China's ideological mentor, sent two agronomists in the early 1950s to help Chinese scientists in identifying the most productive areas for cultivating rubber, and they completed their initial botanical studies at Dong Palai, the Holy Hill protected by the Dai village of Manyangguang (Sturgeon and Menzies 2006; Zhu et al. 2010). Shortly afterwards, Xishuangbanna Tropical Botanical Garden (XTBG), now a flagship research institution and

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[7] The rest would be on Hainan Island, the only other location with tropical climate in China.

tourist attraction under the Chinese Academy of Sciences, was first established beside Manyangguang to study plants in Dong Palai (though it has since relocated).

By 1953, the planning began for the plantations that would shortly become state farms, the embodiment of a new type of industrialized production and social structure (Sturgeon and Menzies 2006; Xu 2006). Although the decision to be self-sufficient rubber producers was a practical response to a strategic need, the decisions guiding production instructions were ideological (Sturgeon and Menzies 2006; Xu 2006; Sturgeon 2010). The CPC divided the population into "advanced Han and backward minorities, with each group linked to particular land uses ... state farms produced rubber, while minority farmers, especially shifting cultivators, produced other crops in what was thought to be an unproductive manner'" (Sturgeon 2010, p. 323), subscribing to the belief that economic value was produced by people with high social value. This same logic could also apply to some extent in reverse, in which producing economic value can imbue social value. During fieldwork in summer 2011, I met a Dai rubber farmer from Manyangguang who proudly told me the happy news of his daughter's marriage to a Han farm worker and how she had moved to join her husband on a nearby state rubber plantation. It appeared that though his daughter was still performing the same agronomic tasks of cultivating rubber, this Dai farmer saw a marked distinction between tapping rubber on family land and working in a state rubber plantation among Han employees. It seemed that in his eyes, employment on a state farm elevated his daughter from peasant to state worker, and in a certain way through the equalizing process of marriage, from minority Dai to majority Han.[8]

In the state ethos of the Maoist era and beyond, not only were ethnic minorities were thought to be of low social quality, many of their land management practices were also painted as environmentally harmful (Zeng et al. 2017). This is not unique to China, as exemplified by the case of "slash-and-burn" (a pejorative term for swidden agriculture), a practice that has been targeted by international environmental campaigns for the past few decades to perpetuate the "myth ... that swidden cultivation of forested land is destructive and wasteful, and in the worst cases results in barren, useless grassland successions" (Dove 1983). Though many environmental NGOs remain staunchly opposed to swidden even today (e.g., Conservation International, World Wildlife Fund, EcoLogic, Rainforest Saver), scholarship since Harold Conklin's pioneering work on swidden (Conklin 1954; Conklin 1957) began a global shift towards seeing that swidden cultivation can in fact be "a productive use of the forests, indeed more productive than commercial logging in terms of the size of the population supported" (Dove 1983). For instance, many researchers have begun describing swidden in Xishuangbanna as a sustainable practice with benefits for the maintenance of tropical biodiversity (e.g., Guo and Padoch 1995; Pei and Xu 1997; Xu et al. 1997; Xu et al. 1999; Yin 2001; Wang and Young 2003; Mo et al. 2011)—a switch that was also supported by Pei Shengji's paradigm-shifting work in the 1980s and 1990s connecting Dai Holy Hills with international discussions of indigeneity and environmental protection (Hathaway 2013).

The relationship between ethnic minorities and rubber production also changed in the 1980s. The influx of Han youth between the late 1960s and 1979 greatly increased the state farm labor force; in 1980, the departure of the disillusioned "rusticated youth" 【知青】 (*zhīqīng*) resulted in a severe labor shortage that nearly collapsed many state farms (Xu 2006)[9]. With no other options, the state farms finally began considering the surrounding ethnic minority population as potential participants in the social and economic transformations represented by industrialized state farms. Although in hindsight the decision to include minorities on state farms was an extremely successful economic maneuver, nine of the eleven state farms in Xishuangbanna initially rejected the proposal to include ethnic minorities

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[8] These sentiments are not ubiquitous and continue to change among Dai rubber producers, particularly as Dai smallholder farms become more economically successful and state rubber farms stagnate (see Sturgeon 2010).

[9] Of course, Han migrants to Xishuangbanna are not a homogenous group. Hansen (2005) describes distinctions between state-organized Han migrants who arrived to Xishuangbanna during the Maoist era and independent Han migrant who came in the reform era in search of economic opportunities, as well as class differences within these groups.

by "arguing that minority people 'lacked culture' and 'couldn't work'" (Sturgeon and Menzies 2006, p. 28)—in other words, claiming that the uncivilized and primitive nature of ethnic minorities rendered them categorically unworthy of contributing to the modernity that rubber represented.

By the early 1980s, there was a new understanding that local state governments should coach minority farmers in economic development, which prompted a series of policy changes and smallholder rubber campaigns to help state rubber farms meet the rising national demand for rubber while simultaneously providing a civilizing influence to ethnic minorities (Xu 2006; Sturgeon 2010). These efforts were also often coupled with environmental protection initiatives. For instance, during the 1990s, the MacArthur Foundation funded a conservation-as-development project, implemented by state-funded researchers, to eradicate the "backward" practice of swidden agriculture and replace it with rubber (Wang and Duan 1996). Strongly influenced by Western environmentalist ideals of "wilderness" in which nature is valued for being ostensibly untouched by humans (Cronon 1995), this foreign-funded and state-implemented project tried to separate people and nature. Ethnic minorities were discouraged from swidden activities in "pristine forests," which were curated as nature parks for tourists[10]. Moreover, Xishuangbanna's ethnic minorities farmers were encouraged to replace swidden practices with "modern" rubber cultivation, an act which the official narrative characterized as replacing rural farmers' ignorance with the state's superior knowledge (Zeng et al. 2017).

Ironically, rubber is now blamed by the scientific community as the major cause of deforestation and biodiversity loss in Xishuangbanna (Li et al. 2007; Hu et al. 2008; Qiu 2009; Chen et al. 2016; Zhang et al. 2019), as well as elsewhere in Southeast Asia (Ziegler et al. 2009). Swidden, meanwhile, is being praised as sustainable in the socioecological contexts in which it is or was practiced—in Menglun county, swidden land cover dropped from 27.57% to 0.46% from 1988 to 2006 (Hu et al. 2008)—and scientists are finding that swidden is beneficial for the maintenance of biodiversity (e.g., Guo and Padoch 1995; Pei and Xu 1997; Xu et al. 1997, 1999; Yin 2001; Wang and Young 2003; Mo et al. 2011). Swidden's change in reputation from negative to positive has been marked by a shift in descriptors in state, academic, and popular vernacular from "backward" to "traditional." Moreover, in 2015 Xishuangbanna's prefectural government started considering the development of an Ethnoecology Park to convert low-productivity rubber fields into a living museum showcasing traditional swidden practices, exemplifying how "a shift away from state rejection of swidden knowledge and practice takes place when the potential for state-approved swiddens arises in the form of a state-sanctioned park for tourists seeking to see the Dai 'tradition'" (Zeng et al. 2017, p. 170).

In the context of Eco-Civilization, land use practices such as swidden agriculture have arisen in portrayals such as the following:

> Over thousands of years, traditional multifunctional agriculture, originally maintained by village and small household farming, was able to develop and apply what are essentially systems of eco-environmental sustainability. This has been gradually recognized as important, not because of modern education or mainstream institutions, but because of the challenges of global warming in adversely affecting yields and incidents of low food safety and quality. Most developing countries and regions in Asia, like rural China, have regional agriculture that can be congruent with the characteristics of nature of heterogeneity and diversity that will be essential for an ecological civilization. (Wen et al. 2012, pp. 33–34).

Thus, whereas ethnic minorities and their land use practices were previously denigrated as uncivilized and environmentally harmful, their contemporary branding is much more positive. At the same time, the ethnic minorities remain the objects of civilizing campaigns in the form of well-intentioned conservation initiatives. Throughout my fieldwork, I met passionate researchers

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[10] This process was reminiscent of the creation of national parks in the USA in the late-1800s, beginning with the forcible removal of Native Americans from Yellowstone National Park to allow tourists and preservationists an unmarred experience of wilderness (Cronon 1995; Spence 1999).

and officials committed to working with local communities and teaching villagers how to protect the environment. State-funded research projects and conservation initiatives in China and Southeast Asia have been meticulously conducted to explore intercropping and other agroforestry techniques in monoculture rubber plantations as a means of reducing environmental and economic risks (e.g., Commercon 2016; Min et al. 2017; Penot et al. 2017; Dove 2018), but in Xishuangbanna, ethnicity has been identified as one of the "[m]ajor factors of adoption" (Min et al. 2017, p. 223) for these improved cultivation practices among smallholder rubber farmers. Agroforestry, meanwhile, has long been practiced by ethnic minority farmers in Xishuangbanna before and throughout the advent of rubber (Saint-Pierre 1991). Thus, although the content of the Eco-Civilization dogma has ostensibly altered narratives surrounding ethnic minorities, the embedded power dynamics between the central state as the civilizing center and rural ethnic minorities as peripheral peoples remain unchanged. Furthermore, as the following sections will also illustrate, initiatives and institutions inspired by Eco-Civilization often neglect to treat ethnic minorities as the experts of their own cultures, nor do they trust ethnic minority traditions in the hands of ethnic minorities themselves.

5. Holy Hill Eco-Tourism and the Development Catch-22

The Dai village Manyangguang protects Dong Palai, a Holy Hill that houses a sacred colorful rock (in Dai, *dong* is Holy Hill, *pa* is rock, and *lai* is multicolored). Based on available Landsat satellite images, Dong Palai was part of a large natural forest in 1950, but it became isolated and was reduced to 30.04 ha in 1988, and 18.37 ha in 1999 (Zhu et al. 2010). The remaining Holy Hill is 17.46 ha in size (Zeng 2012), and it is currently one of the largest in the region. Dong Palai was first surveyed by Soviet and Chinese botanists in the 1950s, and it has since been the site of numerous ecological studies (e.g., Liu et al. 2002; Zhu et al. 2004; Zhu et al. 2010; Zeng 2018b). Because of the early botanical studies in Dong Palai (Sturgeon and Menzies 2006; Zhu et al. 2010), Manyangguang was the original site of XTBG before it was moved in 1959 to its present location on the Luosuo River (Reuse 2010).

XTBG's historical presence has muddied the land tenure of Dong Palai: Holy Hill ownership was transferred to XTBG when it was there, and it is not clear that ownership ever transferred back, since village elders in the 1980s—when land was decollectivized and reallocated to communities and households after Maoist campaigns in the 1960s and 1970s (Shapiro 2001; Sturgeon 2004)—did not sign the land allocation paperwork because they were distrustful of the government at that time. This became an issue when tourism companies began approaching Manyangguang's leadership to lease Dong Palai for eco-tourism development, and it was unclear from a legal standpoint whether the community of Manyangguang had the right to lease their Holy Hill. The village head from Manyangguang insisted that "Dong Palai was protected and passed down from our ancestors, so we should be able to do what we want with it." However, local township officials and government officials from the state-owned nature reserve remained firm that "Manyangguang's Holy Hill is state-owned forest 【有林】 (*guóyǒulín*)."

Regardless of any tenuous legal standings, the village leadership of Manyangguang signed a contract to lease Dong Palai for 50 years to a tourism company on 20 October 2015 (Zeng and Reuse 2016). The lease extended from 1 January 2016 to 1 January 2066, during which the tourism company would pay an annual fee of 70,000 RMB (approximately $9900 USD) to the village council. Dong Palai was to become a nature park as a stop along a tourist route being developed with attractions strung along the highway between Jinghong and Da Menglong. Signing this lease was a democratic decision, and at a village forum, a near unanimous village vote supported leasing Dong Palai for tourism. In signing the lease, some expressed hopes for economic opportunities. For instance, the adult daughter of a village council member told me, "It will be really good for the village to have lots of tourists coming through. I can sell things at home and run a little business." However, other community members said, "I don't think I'll see much of the benefits, like selling things to tourists. Stuff like that probably won't rotate to me. People connected to the village council will have an advantage." Despite this potentially variable access to economic opportunities, the village council arranged for the rent

money from the Holy Hill lease to be divided equally among households, to which some community members complained, "It is not much money after it is spread across the whole village." In answer to this sentiment, one village council member responded that "Even though this is not much money, it is better than nothing, since we're keeping the Holy Hill for nothing right now" 【在就是白】 (*xiànzài jiùshì báiyǎng*). Moreover, in addition to these monetary concerns, several villagers believed that "Dong Palai will be better protected, since the tourism company plans to build a wall around the Holy Hill and hire a security guard."

People outside Manyangguang, however, did not share this perspective on eco-tourism and environmental protection. Prior to the Manyangguang leadership signing the Holy Hill lease, the vice-mayor of Manyangguang's township refused to support Manyangguang's village council in pursuing tourism development of the Holy Hill, claiming that it would harm the forest ecosystem. Despite the fact that the government and NGOs have previously supported similar projects, such as in the examples provided in the previous section of this article, several government employees and conservation researchers I spoke to were also immediately critical of Manyangguang's decision to lease their Holy Hill, claiming, "The locals do not know to protect the environment because they just want money. Their culture and religion are fading." Despite this disapprobation from official authority figures, it is worth noting that leasing Dong Palai for eco-tourism is very much in line with the official Eco-Civilization ethos of supporting cultural traditions and coupling environmental protection with economic development. Moreover, in addition to providing income from the lease and potential economic opportunities from tourism development, establishing a monetary relationship may have been a way for Manyangguang villagers to reconnect to their Holy Hill and reassert their control after decades of land tenure uncertainty and alienation due to XTBG's historical presence.

Ultimately, although Manyangguang villagers were successful in leasing their Holy Hill, interlocuters from Manyangguang and the leasing tourism company told me this project was halted in early 2017 by local government because of concerns about tourism development causing ecological degradation in the Holy Hill forest ecosystem. In other words, despite the fact that this Holy Hill had been protected by Manyangguang's community members for many generations, the government co-opted the role of environmental caretaker and removed it from Manyangguang villagers, much to the dismay of local community members. Thus, though the Chinese state is supportive of ethnic minority traditions in the Eco-Civilization rhetoric, it does not always trust ethnic minority communities to maintain their own practices in the appropriate manner to suit official narratives.

In such circumstances, it becomes necessary for ethnic minorities to navigate and articulate cultural identities for community benefits within hegemonic narratives of development and environmental protection. This is a difficult task in light of state expectations of "oppressive authenticity" for ethnic minorities, much like with indigenous peoples in various environmental narratives: "Indigenous people are expected to be essentially 'other' and to manifest this otherness in natural and visible ways. To be *naturally* other is to remain part of the landscape, to be intimately linked to the ecology of country like trees and rivers and animals. It is to be primitive, to live simply and close to nature" (Sissons 2005, p. 38; italics in original). Dai communities, therefore, are expected in state and development narratives to be close to nature, and their self-identified interest in expanding their market economy through eco-tourism development is anomalous and no longer culturally authentic, which consequently renders them unattractive to state and development agents. A similar dynamic has been noted in the body of conservation literature that characterizes indigenous peoples as "noble savages" living in harmony in nature, in which deviations from the "tribal slot" often lead environmentalists to portray indigenous people as enemies of nature who have lost their traditional ways (Cronon 1995; Holt 2005; Baker et al. 2013). This results in a "conservation catch-22," in which "[c]onservation awareness arises when people exert use pressure on resources and recognize the potential for overexploitation, conditions concurrent with population growth, adoption of Western technologies, and market production. This is the same transition that ironically renders local people less desirable as conservation allies in the eyes

of biologists" (Holt 2005, p. 201). In this light, Manyangguang's predicament can perhaps be framed as a "development catch-22."

Indeed, Manyangguang's development catch-22 from its self-motivated pursuit of eco-tourism development inspired comments from Chinese state development workers that Manyangguang villagers are too "money-minded," which has resulted in lost opportunities. For example, in November 2015, I joined a scientist from the Chinese Academy of Sciences and an official from Xishuangbanna National Nature Reserve for a Holy Hill restoration planting at the Dai village of Manyuan. While I was chatting with the nature reserve official, he said, "I don't like Manyangguang. The villagers have a bad attitude towards environmental protection 【他的保意不好】 (*tāmen de bǎohù yì bù hǎo*). I like Manyuan village, which is why I suggested that we do this restoration project here. [The scientist] was originally planning to do this project at Manyangguang, but he switched it here at my suggestion." This was an interesting criticism of Manyangguang given that the Holy Hill restoration at Manyuan was also coupled with money-making, for it was sponsored by a Chinese traditional medicine company, and the medicinal herbs planted in the Holy Hill restoration were meant to be sold as traditional medicine to provide additional income to the village. The scientist and official were also hosting executives from doTerra, an American essential oil company, to visit Manyuan because doTerra was interested in financially supporting the project as well.

In analyzing collaborative green development initiatives, Tsing (1999) has described how the worthiness of a "tribe" (her shorthand for subjects of international thinking about exotic and backward rural communities) to access resources for development is often based on how well a tribe captures the balance of primitivism and longing for civilized change to create an "emotionally fraught space that keeps the experts coming back" (Tsing 1999, p. 161). In China, ethnic minorities are often expected to be the passive and grateful recipients of central-state-led development (Harrell 1995b; Sturgeon 2010; Yeh 2013; Yeh and Coggins 2014), and Dai in particular are typically thought of as politically and ethnically passive model minorities (Hsieh 1995; McCarthy 2009). Following this reasoning to understand Manyangguang's lack of appeal to state development agents, Manyangguang's self-directed pursuit of development opportunities, even ones that included forest conservation, failed to evoke official ideas about rural minority communities and erased potential roles for state and development agents in a collaborative arrangement; whereas Manyangguang wanted to be an active subject in *its own* development narrative, outside agents were looking for a passive object to be part of *their* development narrative. Furthermore, when Manyangguang sought agency and self-determination, refusal from outside agents highlighted a mindset in which community members were deemed unable to make responsible decisions for themselves—a power dynamic comparable to a child and parent, as I will explore in the following section.

6. Eco-Civilization in Public Signage and Parent-Child Dynamics

In July 2017, while stopping at my favorite Buddhist restaurant in Kunming's Lotus Pond Park, I noticed that since my last visit in 2015, the park had become densely dotted with signs promoting environmental protection and civilized behaviors, with slogans such as "Our entire society is active in purifying the environment for children to grow up" (Figure 1). As discussed previously, both sustainable development and Eco-Civilization promote balancing environmental protection and economic development, but Eco-Civilization messaging from the CPC has been distinct in its emphasis on harmonious microcosm-macrocosm relationships, which are often expressed through familial relationships. For instance, another sign at Lotus Pond Park instructed citizens to "Care for the growth of children to create a better future for the motherland" (Figure 2). Similar slogans can be found in Dai villages, with signs that proclaim, "Officials should love citizens; older generations should love children and grandchildren" (Figure 3). During my fieldwork, I noticed instances in which this mimetic relationship seemed to have permeated public consciousness. For example, when I asked one Dai villager, "What does Eco-Civilization mean?" She answered, "It means everyone treats each other well, and everyone is peaceful"—a response that describes the national political framework in terms of

localized interpersonal relationships, and which seems to suggest national harmony as a macrocosm of familial and community harmony.

Figure 1. A Civilized Kunming sign at Lotus Pond Park: "Our entire society is active in purifying the environment for children to grow up" 【全社极行，化少儿成境】 (*quán shèhuì jījí xíngdòng, jìnghuà shào'ér chéngzhǎng huánjìng*).

Figure 2. A Civilized Kunming sign at Lotus Pond Park: "Care for the growth of children to create a better future for the motherland" 【未成年人成，共祖美好未】 (*guān'ài wèi chéngnián rén chéngzhǎng, gòng zhù zǔguó měihǎo wèilái*).
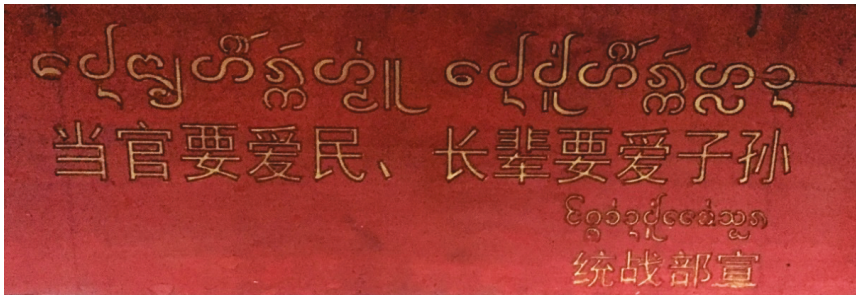
Figure 3. A sign in Manlang village: "Officials should love citizens; older generations should love children and grandchildren" 【官要民，要子】(*dāng guān yào àimín, zhǎngbèi yào ài zǐsūn*).

Drawing familial connections is a familiar approach in Chinese political spheres, and especially with ethnic minorities, scholars have noted a tendency to include childlike elements in popular imagery (Harrell 1995a; Schein 1997; Davis 2005). For instance, Louisa Schein has described a 1984 poster in which "[l]iterally infantilized minority children, again in full festival regalia, some holding toys and some holding musical instruments, along with one or two Han, were shown playing gleefully with, holding the hands of, or even embracing a fatherly Mao Zedong, Zhou Enlai, Liu Shaoqi, and Zhu De" (Schein 1997, p. 90). In Xishuangbanna, Sara Davis has described Jinghong's Nationalities Theme Park as she observed in the late 1990s, which displayed "a series of discrete ethnic groups living happily under the shadow of a towering monument that symbolizes the nation-state . . . The villages are small, bounded clusters of miniature stilt houses. . . . The miniaturization of ethnic homes reduces ethnic peoples to the status of children, enhancing the status of the visitor" (Davis 2005, pp. 32–34). More recently, during the Opening Ceremony of the 2008 Beijing Olympics, China's 55 officially recognized ethnic minorities were represented by actual children wearing traditional ethnic garb and carrying the Chinese flag into the Bird's Nest National Stadium.[11] These images introduce "a generational element to emphasize this paternalistic role of the Party . . . [that] invoke[s] a Confucian vision of authority—the first employing the elder sibling–younger sibling relationship, the second conflating the father-child relation with that of the emperor-subject—to emphasize the ascendancy of the Han state" (Schein 1997, p. 90). Moreover, portraying ethnic minorities as children is a key tactic in civilizing projects:

> it not only demonstrates the inferiority of peripheral peoples, but also certifies their civilizability, and thus legitimates not just domination but the particular kind of domination we call a civilizing project. . . . since children are by definition both inferior and educable, the peripheral peoples represented as childlike are both inferior and civilizable, and it becomes the task of the center to civilize them. (Harrell 1995a, p. 13)

In addition to justifying the civilizing project, this parent–child or elder–younger sibling metaphor has resulted in a political mentality in Xishuangbanna such that "The state has adopted a kind of caretaker relationship toward Dai cultural practice, and the preservation of Dai culture is viewed as an end in itself" (McCarthy 2009, p. 72). This caretaker attitude was apparent in the previous section with the local government's reluctance allow Manyangguang's Holy Hill eco-tourism project to proceed despite its ostensible accordance with popular state rhetoric for Eco-Civilization, or the nature reserve official taking action to divert the Holy Hill restoration project away from Manyangguang to punish this community for what he saw as cultural improprieties in their ambitions for economic development. Children cannot always be trusted to make appropriate decisions without adult supervision; thus, it was

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[11] It was later revealed that these children were not in fact from the various ethnic minority groups; they were Han children wearing costumes representing each ethnic minority (Spencer 2008).

incumbent upon state officials to step in and make responsible choices on behalf of Manyangguang. Moreover, this parent–child dynamic also serves to support the multicultural national unity sought after by the CPC, while maintaining the privileged position of the state: parents and children comprise one family, but the parents know best and make major decisions on behalf of younger (or inferior) family members.

In official political discourse, the state's parent or caretaker role includes responsibilities to curate and improve "excellent and non-excellent elements [of cultural traditions]. Though the former are deemed worth continuing and developing, the latter must be abolished and reformed" (Hasegawa 2000, p. 132). With Dai people in Xishuangbanna, Sara Davis has described government involvement in ethnic folklore by which "[d]ances and oral literature were studied and in some cases 'improved' by state choreographers and authors" (Davis 2005, p. 19), among other similar examples. These same principles were applied in 2017 by the United Front Work Department 【部】 (*tǒngzhàn bù*), a federal agency devoted to promoting national unity, when it provided funding to local government offices to install signs in certain Dai communities that proclaimed its goal to "Strengthen the management of religious affairs according to law, and actively guide the religion to adapt to socialism" (Figure 4).

Figure 4. A sign in Mandan village. The text along the top reads: "Strengthen the management of religious affairs according to law, and actively guide the religion to adapt to socialism" 【依法加宗教事的管理，极引宗教与社主相适】 (*yīfǎ jiāqiáng duì zōngjiào shìwù de guǎnlǐ, jījí yǐndǎo zōngjiào yǔ shèhuì zhǔyì xiāng shìyìng*).

These signs contain government-approved "traditional Dai sayings," such as "Only with forests is there water, only with water are there rice paddies, only with rice paddies is there food, only with food are there people" (Figure 5). This Dai saying has also been widely popularized in academic circles and among environmental practitioners by Pei Shengji (e.g., Pei 2010) in his writing to connect Dai identity with traditional ecological knowledge and indigeneity (Hathaway 2013).

Figure 5. A sign in Manlang village: "Only with forests is there water, only with water are there rice paddies, only with rice paddies is there food, only with food are there people" 【有森林才有水，有水才有田，有田才有，有才有人】 (*yǒu sēnlín cái yǒu shuǐ, yǒu shuǐ cái yǒutián, yǒutián cái yǒu liáng, yǒu liáng cái yǒurén*).

To ground-truth whether these signs actually contain old Dai sayings, I showed them to a former abbot and excellent Dai scholar trained at several educational institutions, including not only temples in Xishuangbanna, but also temples and universities in Southeast Asia, as well as Columbia University in the USA. In reference to the aforementioned quote, he told me this is indeed an old Dai saying, but the government modified it slightly to "sound prettier." The original wording, which he translated to Mandarin Chinese during our conversation, is "Only with water are there fish, only with rice paddies is there food, only with food are there people" 【有水才有，有田才有，有才有人】 (*yǒu shuǐ cái yǒu yú, yǒutián cái yǒu liáng, yǒu liáng cái yǒurén*). Although the ethos of human dependence on the natural environment remains the same, the government-approved version includes an explicit connection between forests and water—much like in the Sloping Land Conversion Program, initiated by the central government in 1999, which was designed to protect waterways and reduce soil erosion by increasing China's forest cover. However, it should be noted that although the forest–water connection was absent in the wording of the original Dai saying, the idea that "big trees protect water"—what many scientists refer to as watershed forestry—was still prevalent among Dai villagers, who often mentioned this fact as they showed me around various forests and nearby waterways.

There are other Dai sayings whose underlying ethos had been modified more overtly to suit government. In the aforementioned sign which reads, "Officials should love citizens; older generations should love children and grandchildren" (Figure 3), the original wording in Dai (*haak moo*) means to love "our group" rather than "citizens," the latter of which is a term with explicit ties to the governance of the Chinese state. Moreover, within this same format of public signage, there is also government messaging with no ties to any traditional Dai sayings. For instance, the slogan "Ethnic groups should cooperate with the power of national unity to create a harmonious civilization in Xishuangbanna" (Figure 6) is clear propaganda for the government agenda. Similarly, with "Advocate civilization, respect science, oppose cults" (Figure 7), the ideas presented here (e.g., science, cults) are anachronistic for Buddhist teachings, and the wording choices (e.g., civilization) are obviously mirroring current CPC messaging.

Figure 6. A sign in Manlang village: "Ethnic groups should cooperate with the power of national unity to create a harmonious civilization in Xishuangbanna" 【聚民族之力 建和文明西版】 [*huìjù mínzú tuánjié zhī lì chuàngjiàn héxié wénmíng xīshuāngbǎnnà*].

Figure 7. A sign in Manlang village: "Advocate civilization, respect science, oppose cults" 【崇尚文明、尊重科、反邪教】 [*chóngshàng wénmíng, zūnzhòng kēxué, fǎnduì xiéjiào*].

Nevertheless, when I spoke to Dai villagers, many of my interlocuters could not discern the difference between an original Dai saying, which they attributed to Buddhist sutras, and government-modified ones—nor, to be honest, did they seem particularly bothered by the distinction. It would be difficult, however, to generalize any "typical" Dai reactions to these altered sayings. Other scholars have described instances in which individuals distinguish sharply between "real" and "fake" Dai cultural representations (e.g., Davis 2005; McCarthy 2009), whereas my own fieldwork experiences often revealed unquestioning acceptance of CPC narratives, a self-admitted lack of knowledge, or differences of opinion among Dai interlocuters as to who or what determines authenticity and why it does or does not matter. One possible reason for this confusion may be the destruction of many temples as institutions of Dai cultural learning during the Maoist era (Davis 2005; Borchert 2008), creating a generational cultural knowledge gap that I heard many Dai elders lament during my fieldwork. Or perhaps many Dai villagers expressed such apathy to the signage because it does not constitute a core part of their culture. Dai people know that the CPC must be appeased, like any parent or guardian figure, in order for them to continue participating in the cultural revival efforts that they find genuinely meaningful, such as transnational exchanges of pop music and monk trainees, as well as restoring religious institutions like temples and Holy Hills (Davis 2005; Borchert 2008; McCarthy 2009; Zeng 2018a).

7. Conclusions

China's rapid economic growth in a few short decades has accelerated staggering environmental problems affecting the everyday lives of many citizens, and in response, the CPC has championed Eco-Civilization as its political framework to align China's economic growth with environmental protection. Alongside its commitment to economic prosperity and environmental well-being, a key priority for the Chinese state is also to manage its multi-ethnic citizens and strengthen national unity. Following the Chinese Revolution, the CPC had categorized its heterogenous population into 56 ethnic groups, and inspired by Soviet ideology and practice, it ranked the majority Han and 55 ethnic minorities according to a linear schema of social value in which the Han were deemed the zenith of civilization, while ethnic minorities were considered backwards and in need of state-led development. These ideas of ethnic difference and intrinsic social value were layered onto past political decisions about economic development and environmental protection, as I have illustrated with the examples of rubber cultivation and swidden agriculture in Xishuangbanna, and they continue to permeate current Eco-Civilization ideology. Though Eco-Civilization has ostensibly portrayed many ethnic minority cultures in a positive way that is compatible with the CPC's vision of China's future, many of the institutions and activities that it inspires retain problematic power dynamics that often reinforce inequalities between the Han civilizing center and peripheral ethnic minorities. This has resulted in instances under the Eco-Civilization framework in which Dai people were not trusted as caretakers of their own culture, as I have explored with the case of Holy Hill eco-tourism pursued by the Dai village of Manyangguang, resulting in a "development catch-22." Moreover, other Eco-Civilizations efforts, such as public signage, have reinforced a parent–child dynamic between Chinese state and ethnic minorities, which is used not only to justify civilizing projects, but also to solidify CPC interests by promoting national unity in conjunction with a strong rationale for state control.

Thus, though its ethos has many attractive elements of simultaneously supporting economic development and environmental protection by embracing cultural traditions and national unity, in practice many efforts feeding into the Eco-Civilization rhetoric have resulted in questionable environmental benefits (such as the case with rubber) and used the guise of supporting ethnic cultural traditions to instead further entrench state ascendency while disenfranchising already marginalized ethnic minorities. Moreover, Eco-Civilization discourse will likely gain in importance as the Chinese political leadership continues its efforts for a more positive global image through strong leadership in environmental governance. Though this paper has primarily focused on Dai people in Xishuangbanna, the issues and dynamics explored here with Eco-Civilization and similar political frameworks are

not limited to this ethnic group, nor to ethnic minorities and rural populations, for as this article has intimated, Han identity in central powers is unquestionably shaped reciprocally by its relationships to those defined by top-down and state-led ideologies of ethnic identity. These topics certainly warrant further inquiry and exploration with other groups and geographic areas in China, especially as both China and environmental concerns gain a larger presence on the international stage.

References

Ahlers, Anna L., and Yongdong Shen. 2018. Breathe Easy? Local Nuances of Authoritarian Environmentalism in China's Battle against Air Pollution. *China Quarterly* 234: 299–319. [CrossRef]

Anagnost, Ann. 2004. The Corporeal Politics of Quality (Suzhi). *Public Culture* 16: 189–208. [CrossRef]

Baker, Lauren, Michael Dove, Dana Graef, Alder Keleman, David Kneas, Sarah Osterhoudt, and Jeffrey Stoike. 2013. Whose Diversity Counts? The Politics and Paradoxes of Modern Diversity. *Sustainability* 5: 2495–518. [CrossRef]

Bernstein, Steven. 2001. *The Compromise of Liberal Environmentalism*. New York: Columbia University Press.

Borchert, Thomas. 2008. Worry for the Dai Nation: Sipsongpannā, Chinese Modernity, and the Problems of Buddhist Modernism. *The Journal of Asian Studies* 67: 107–42. [CrossRef]

Cao, Min, Hu Huabin, Yong Tang, and Xianhui Fu. 2000. Human Dimension of Tropical Forest in Xishuangbanna, SW China. In *2000 Seminar on Ecosystem Research and Sustainable Management*. Seoul: Korea Long-Term Ecological Research Network.

Chen, Huafang, Zhuangfang Yi, Dietrich Schmidt-Vogt, Antje Ahrends, Philip Beckschäfer, Christoph Kleinn, Sailesh Ranjitkar, and Jianchu Xu. 2016. Pushing the Limits: The Pattern and Dynamics of Rubber Monoculture Expansion in Xishuangbanna, SW China. *PLoS ONE* 11: 1–15. [CrossRef] [PubMed]

Commercon, Francis. 2016. Local Knowledge for Restoration in a Rubber-Dominated Landscape in SW China. Available online: http://blog.worldagroforestry.org/index.php/2016/01/26/local-knowledge-for-restoration-in-a-rubber-dominated-landscape-in-china/ (accessed on 8 September 2016).

Conklin, Harold C. 1954. An Ethnoecological Approach to Shifting Agriculture. *Transactions of the New York Academy of Sciences II* 17: 133–42. [CrossRef]

Conklin, Harold C. 1957. *Hanunóo Agriculture: A Report on an Integral System of Shifting Cultivation in the Philippines*. Rome: Food and Agriculture Organization of the United Nations.

Cronon, William. 1995. The Trouble with Wilderness: Or, Getting Back to the Wrong Nature. *Environmental History* 1: 7–28. [CrossRef]

Crossley, Pamela Kyle, Helen F. Siu, and Donald S. Sutton, eds. 2006. *Empire at the Margins: Culture, Ethnicity, and Frontier in Early Modern China*. Oakland: University of California Press.

Davis, Sara L. M. 2005. *Song and Silence: Ethnic Revival on China's Southwest Borders*. New York: Columbia University Press.

Delman, Jørgen. 2018. Ecological Civilization Politics and Governance in Hangzhou: New Pathways to Green Urban Development? *Asia-Pacific Journal: Japan Focus* 16: 1–21.

Dove, Michael R. 1983. Theories of Swidden Agriculture, and the Political Economy of Ignorance. *Agroforestry Systems* 1: 85–99. [CrossRef]

Dove, Michael R. 2018. Rubber versus Forest on Contested Asian Land. *Nature Plants* 4: 321–22. [CrossRef]

Duara, Prasenjit. 2001. The Discourse of Civilization and Pan-Asianism. *Journal of World History* 12: 99–130. [CrossRef]

Duara, Prasenjit. 2014. *The Crisis of Global Modernity: Asian Traditions and a Sustainable Future*. Cambridge: Cambridge University Press.

Dynon, Nicholas. 2008. 'Four Civilizations' and the Evolution of Post-Mao Chinese Socialist Ideology. *China Journal* 60: 83–109. [CrossRef]

Evans, Grant. 2000. Transformation of Jinghong, Xishuangbanna, PRC. In *Where China Meets Southeast Asia: Social and Cultural Change in the Border Regions*. Edited by Grant Evans, Christopher Hutton and Kuah Khun Eng. New York: St. Martin's Press, pp. 162–82.

Fabian, Johannes. 1983. *Time and the Other: How Anthropology Makes Its Object*. New York: Columbia University Press.

Gao, Lishi. 2010. *A Study of the Long Forest Culture of the Dai People*. Kunming: Yunnan Minzu Publisher.

Giersch, C. Patterson. 2006. *Asian Borderland: The Transformation of Qing China's Yunnan Frontier*. Cambridge: Harvard University Press.

Gladney, Dru C. 2004. *Dislocating China: Muslims, Minorities, and Other Subaltern Subjects*. Chicago: University of Chicago Press.

Guo, Huijun, and Christine Padoch. 1995. Patterns and Management of Agroforestry Systems in Yunnan: An Approach to Upland Rural Development. *Global Environmental Change* 5: 273–79. [CrossRef]

Guo, Huijin, Christine Padoch, Kevin Coffey, Chen Aiguo, and Fu Yongneng. 2002. Economic Development, Land Use and Biodiversity Change in the Tropical Mountains of Xishuangbanna, Yunnan, Southwest China. *Environmental Science & Policy* 5: 471–79. [CrossRef]

Hansen, Mette Halskov. 1999. *Lessons in Being Chinese: Minority Education and Ethnic Identity in Southwest China*. Seattle: University of Washington Press.

Hansen, Mette Halskov. 2005. *Frontier People: Han Settlers in Minority Areas of China*. Vancouver: University of British Columbia Press.

Hansen, Mette Halskov, and Zhaohui Liu. 2018. Air Pollution and Grassroots Echoes of 'Ecological Civilization' in Rural China. *China Quarterly* 234: 320–39. [CrossRef]

Hansen, Mette Halskov, Hongtao Li, and Rune Svarverud. 2018. Ecological Civilization: Interpreting the Chinese Past, Projecting the Global Future. *Global Environmental Change* 53: 195–203. [CrossRef]

Harrell, Stevan. 1995a. Civilizing Projects and the Reaction to Them. In *Cultural Encounters on China's Ethnic Frontiers*. Edited by Stevan Harrell. Seattle: University of Washington Press, pp. 3–36.

Harrell, Stevan, ed. 1995b. *Cultural Encounters on China Ethnic Frontiers*. Seattle and London: University of Washington Press.

Harris, Paul G., and Graeme Lang, eds. 2015. *Routledge Handbook of Environment and Society in Asia*. Abingdon: Routledge.

Hasegawa, Kiyoshi. 2000. Cultural Revival and Ethnicity: The Case of the Tai Lüe in the Sipsong Panna, Yunnan Province. In *Dynamics of Ethnic Cultures Across National Boundaries in Southwestern China and Mainland Southeast Asia: Relations, Societies and Languages*. Edited by Yukio Hayashi and Guangyuan Yang. Chiang Mai: Ming Muang Publishing House, pp. 121–37.

Hathaway, Michael J. 2013. *Environmental Winds: Making the Global in Southwest China*. Berkeley: University of California Press.

Holt, Flora Lu. 2005. The Catch-22 of Conservation: Indigenous Peoples, Biologists, and Cultural Change. *Human Ecology* 33: 199–215. [CrossRef]

Hsieh, Shih-Chung. 1995. On the Dynamics of Tai/Dai-Lue Ethnicity: An Ethnohistorical Analysis. In *Cultural Encounters on China's Ethnic Frontier*. Edited by Stevan Harrell. Seattle: University of Washington Press, pp. 301–28.

Hu, Huabin, Wenjun Liu, and Min Cao. 2008. Impact of Land Use and Land Cover Changes on Ecosystem Services in Menglun, Xishuangbanna, Southwest China. *Environmental Monitoring and Assessment* 146: 147–56. [CrossRef]

Keyes, Charles F. 1992. Who Are the Lue? Revisited: Ethnic Identity in Laos, Thailand, and China. In *Working Paper, Massachusetts Institute of Technology, Center for International Studies*. Cambridge: Massachusetts Institute of Technology Center for International Studies.

Keyes, Charles F. 1995. Who Are the Tai? Reflections on the Invention of Identities. In *Ethnic Identity: Creation, Conflict and Accommodation*, 3rd ed. Edited by Lola Romanucci-Ross and George A. De Vos. Walnut Creek: AltaMira Press, pp. 130–60.

Kostka, Genia, and Jonas Nahm. 2017. Central-Local Relations: Recentralization and Environmental Governance in China. *China Quarterly* 231: 567–82. [CrossRef]

Kou, Z. T., and H. Zhang. 1987. A Herpetological Report of Xishuangbanna. In *Proceedings of Synthetical Investigation of Xishuangbanna Nature Reserves*. Kunming: Yunnan Science and Technology Press, pp. 350–68.

Lélé, Sharachchandra M. 1991. Sustainable Development: A Critical Review. *World Development* 19: 607–21. [CrossRef]

Li, Hongmei, T. Mitchell Aide, Youxin Ma, Wenjun Liu, and Min Cao. 2007. Demand for Rubber Is Causing the Loss of High Diversity Rain Forest in SW China. *Biodiversity and Conservation* 16: 1731–45. [CrossRef]

Litzinger, Ralph A. 2000. *Other Chinas: The Yao and the Politics of National Belonging*. Durham: Duke University Press.

Liu, Hongmao, Zaifu Xu, Youkai Xu, and Jinxiu Wang. 2002. Practice of Conserving Plant Diversity through Traditional Beliefs: A Case Study in Xishuangbanna, Southwest China. *Biodiversity and Conservation* 11: 705–13. [CrossRef]

McCarthy, Susan K. 2009. *Communist Multiculturalism: Ethnic Revival in Southwest China*. Seattle: University of Washington Press.

Min, Shi, Jikun Huang, Junfei Bai, and Hermann Waibel. 2017. Adoption of Intercropping among Smallholder Rubber Farmers in Xishuangbanna, China. *International Journal of Agricultural Sustainability* 15: 223–37. [CrossRef]

Mo, Xiao Xue, Hua Zhu, Yong Jiang Zhang, J. W. Ferry Slik, and Jing Xin Liu. 2011. Traditional Forest Management Has Limited Impact on Plant Diversity and Composition in a Tropical Seasonal Rainforest in SW China. *Biological Conservation* 144: 1832–40. [CrossRef]

Mullaney, Thomas S. 2010. *Coming to Terms with the Nation: Ethnic Classification in Modern China*. Berkeley: University of California Press.

Myers, Norman, Russell A. Mittermeier, Cristina G. Mittermeier, Gustavo A. B. da Fonseca, and Jennifer Kent. 2000. Biodiversity Hotspots for Conservation Priorities. *Nature* 403: 853–58. [CrossRef]

Oswald, James P. F. 2014. What Does Eco-Civilisation 生文明 Mean? *The China Story Journal* 4: 2014.

Pei, Shengji. 1985. Preliminary Study of Ethnobotany in Xishuang Banna, People's Republic of China. *Journal of Ethnopharmacology* 13: 121–37. [CrossRef]

Pei, Shengji. 1993. Managing for Biological Diversity in Temple Yards and Holy Hills: The Traditional Practices of the Xishuangbanna Dai Community, Southwestern China. In *Ethics, Religion, and Biodiversity: Relations between Conservation and Cultural Values*. Edited by Lawrence S. Hamilton and Helen F. Takeuchi. Cambridge: White Horse Press, pp. 112–18.

Pei, Shengji. 2010. The Road to the Future? The Biocultural Values of the Holy Hill Forests of Yunnan Province, China. In *Sacred Natural Sites: Conserving Nature and Culture*. Edited by Bas Verschuuren. Abingdon-on-Thames: Routledge, pp. 98–106.

Pei, Shengji, and Jianchu Xu. 1997. Biodiversity and Sustainability in Swidden Agroecosystems: Problems and Opportunities (a Synthesis). In *Collected Research Papers on Biodiversity in Swidden Agroecosystems in Xishuangbanna*. Edited by Shengji Pei. Kunming: Yunnan Education Publishing House, pp. 173–77.

Penot, Eric, Bénédicte Chambon, and Gede Wibawa. 2017. History of Rubber Agroforestry Systems Development in Indonesia and Thailand as Alternatives for Sustainable Agriculture and Income Stability. *International Proceedings of IRC 2017* 1: 497–532. [CrossRef]

Qiu, Jane. 2009. Where the Rubber Meets the Garden. *Nature* 457: 246–47. [CrossRef]

Ramachandran, Pavit. 2005. *Xishuangbanna Biodiversity Conservation Corridors Project*. People's Republic of China: Pilot Site Project Profile, Bangkok: Asian Development Bank.

Reuse, Gaetan. 2010. Secularization of Sacred Space: An Analysis of Dai Farmers Planting Rubber Trees on Holy Hills in Xishuangbanna. Master's thesis, Simon Fraser University, Yunnan, China.

Saint-Pierre, C. 1991. Evolution of Agroforestry in the Xishuangbanna Region of Tropical China. *Agroforestry Systems* 13: 159–76. [CrossRef]

Sawyer, Jon. 2015. *Ecological Civilization: Proceedings, International Conference on Ecological Civilization and Environmental Reporting*. Beijing: Yale Center Beijing.

Schein, Louisa. 1997. Gender and Internal Orientalism in China. *Modern China* 23: 69–98. [CrossRef]

Shapiro, Judith. 2001. *Mao's War against Nature: Politics and the Environment in Revolutionary China*. Cambridge: Cambridge University Press.

Shen, Qingji. 2013. Study on New Urbanization Based on Ecological Civilization. *Urban Planning Forum* 206: 29–36.

Sissons, Jeffrey. 2005. *First Peoples: Indigenous Cultures and Their Futures*. London: Reaktion Books.

Spence, Mark David. 1999. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. Oxford: Oxford University Press.

Spencer, Richard. 2008. Beijing Olympics: 'Ethnic' Children Revealed as Fakes in Opening Ceremony. *The Telegraph*, August 15.

Sturgeon, Janet C. 2004. Post-Socialist Property Rights for Akha in China: What Is at Stake? *Conservation & Society* 2: 137–61.

Sturgeon, Janet C. 2010. Governing Minorities and Development in Xishuangbanna, China: Akha and Dai Rubber Farmers as Entrepreneurs. *Geoforum* 41: 318–28. [CrossRef]

Sturgeon, Janet C., and Nicholas Menzies. 2006. Ideological Landscapes: Rubber in Xishuangbanna, Yunnan, 1950 to 2007. *Asian Geographer* 25: 21–37. [CrossRef]

Sturgeon, Janet C., Nicholas K. Menzies, and Noah Schillo. 2014. Ecological Governance of Rubber in Xishuangbanna, China. *Conservation and Society* 12: 376. [CrossRef]

Thøgersen, Stig. 2003. Parasites or Civilisers: The Legitimacy of the Chinese Communist Party in Rural Areas. *China: An International Journal* 1: 200–23. [CrossRef]

Thøgersen, Stig. 2009. Revisiting a Dramatic Triangle: The State, Villagers, and Social Activists in Chinese Rural Reconstruction Projects. *Journal of Current Chinese Affairs* 38: 9–33. [CrossRef]

Tsing, Anna. 1999. Becoming a Tribal Elder, and Other Green Development Fantasies. In *Transforming the Indonesian Uplands: Marginality, Power, and Production*. Amsterdam: Harwood Academic Publishers, pp. 159–202.

UNEP. 2016. *Green is Gold: The Strategy and Actions of China's Ecological Civilization*. Nairobi: UNEP.

Wang, Gungwu. 1984. The Chinese Urge to Civilize: Reflections on Change. *Journal of Asian History* 18: 1–34.

Wang, Fayun, and Qiwu Duan. 1996. Helping Local People Establish an Ecological Model Village. *Yunnan Daily Report*, March 11. (In Chinese)

Wang, T., and B. Jin. 1987. Mammals in Xishuangbanna Area and a Brief Survey of Its Fauna. In *Proceedings of Synthetical Investigation of Xishuangbanna Nature Reserves*. Edited by Y. Xu, H. Jiang and F. Quan. Kunming: Yunnan Science and Technology Press, pp. 289–304.

Wang, Zhijun, and Stephen S. Young. 2003. Differences in Bird Diversity between Two Swidden Agricultural Sites in Mountainous Terrain, Xishuangbanna, Yunnan, China. *Biological Conservation* 110: 231–43. [CrossRef]

Wang, Gungwu, and Yongnian Zheng. 2000. *Reform, Legitimacy, and Dilemmas: China's Politics and Society*. Singapore: Singapore University Press and World Scientific.

Wen, Tiejun, Kinchi Lau, Cunwang Cheng, Huili He, and Jiansheng Qiu. 2012. Ecological Civilization, Indigenous Culture, and Rural Reconstruction in China. *Monthly Review* 63: 29–35.

Wu, Zhaolu, Hongmao Liu, and Linyun Liu. 2001. Rubber Cultivation and Sustainable Development in Xishuangbanna, China. *International Journal of Sustainable Development & World Ecology* 8: 337–45. [CrossRef]

Xu, Jianchu. 2006. The Political, Social, and Ecological Transformation of a Landscape. *Mountain Research and Development* 26: 254–62. [CrossRef]

Xu, Jianchu, Shengji Pei, and Sanyang Chen. 1997. Indigenous Swidden Agroecosystems in Mengsong Hani Community. In *Collected Research Papers on Biodiversity in Swidden Agroecosystems in Xishuangbanna*. Kunming: Yunnan Education Press, pp. 26–33.

Xu, Jianchu, Jefferson Fox, Lu Xing, Nancy Podger, Stephen Leisz, and Ai Xihui. 1999. Effects of Swidden Cultivation, State Policies, and Customary Institutions on Land Cover in a Hani Village, Yunnan, China. *Mountain Research and Development* 19: 123. [CrossRef]

Xu, Jianchu, Erzi T. Ma, Duojie Tashi, Fu Yongshou, Lu Zhi, and David Melick. 2005. Integrating Sacred Knowledge for Conservation Culture and Land Scape in Southwest China. *Ecology and Society* 10: 7. [CrossRef]

Yang, Y., T. Xie, Y. Duan, W. Xu, and H. Zhu. 1987. On Birds from Xishuangbanna. In *Proceedings of Synthetical Investigation of Xishuangbanna Nature Reserves*. Edited by Y. Xu, H. Jiang and F. Quan. Kunming: Yunnan Science and Technology Press, pp. 326–30.

Yeh, Emily T. 2013. *Taming Tibet: Landscape Transformation and the Gift of Chinese Development*. Ithaca: Cornell University Press.

Yeh, Emily T., and Christopher R. Coggins, eds. 2014. *Mapping Shangrila: Contested Landscapes in the Sino-Tibetan Borderlands*. Seattle: University of Washington Press.

Yin, Shaoting. 2001. *People and Forests: Yunnan Swidden Agriculture in Human-Ecological Perspective*. Kunming: Yunnan Education Publishing House.

Zeng, Lily. 2012. *Dai Holy Hills: Potential Sanctuaries of Botanical Biodiversity in Xishuangbanna, SW China*. New Haven: Yale University.

Zeng, Lily. 2018a. Problematizing Ideas of Purity and Timelessness in the Conservation Narratives of Sacred Groves in Xishuangbanna, China. *Journal for the Study of Religion, Nature and Culture* 12: 172–200. [CrossRef]

Zeng, Lily. 2018b. Transformations of Indigenous Identity and Changing Meanings of Sacred Nature in Xishuangbanna, China. Ph.D. dissertation, Yale University, New Haven.

Zeng, Lily, and Gaetan Reuse. 2016. Holy Hills: Sanctuaries of Biodiversity in Xishuangbanna, Southwest China. In *Asian Sacred Natural Sites: Philosophy and Practice in Protected Areas and Conservation*. Edited by Bas Verschuuren and Naoya Furuta. London: Routledge, pp. 194–205.

Zeng, Lily, Deepti Chatti, Chris Hebdon, and Michael R. Dove. 2017. The Political Ecology of Knowledge and Ignorance. *Brown Journal of World Affairs* 23: 159–76.

Zhang, Jianhou, and Min Cao. 1995. Tropical Forest Vegetation of Xishuangbanna, SW China and Its Secondary Changes, with Special Reference to Some Problems in Local Nature Conservation. *Biological Conservation* 73: 229–38. [CrossRef]

Zhang, Jia-Qi, Richard T. Corlett, and Deli Zhai. 2019. After the Rubber Boom: Good News and Bad News for Biodiversity in Xishuangbanna, Yunnan, China. *Regional Environmental Change* 19: 1713–24. [CrossRef]

Zhu, H., Z. F. Xu, H. Wang, and B. G. Li. 2004. Tropical Rain Forest Fragmentation and Its Ecological and Species Diversity Changes in Southern Yunnan. *Biodiversity and Conservation* 13: 1355–72. [CrossRef]

Zhu, H., H. Wang, and S. S. Zhou. 2010. Species Diversity, Floristic Composition and Physiognomy Changes in a Rainforest Remnant in Southern Yunnan, China after 48 Years. *Journal of Tropical Forest Science* 22: 49–66.

Ziegler, Alan D., Jefferson M. Fox, and Jianchu Xu. 2009. The Rubber Juggernaut. *Science* 324: 1024–25. [CrossRef] [PubMed]

Article

Sacred Watersheds and the Fate of the Village Body Politic in Tibetan and Han Communities Under China's *Ecological Civilization*

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Abstract: The "spirit" in spiritual ecology is an active political force deserving sustained scholarly analysis and public recognition. This article reports on 15 years of field research on "animate landscapes," associated with gods and spirits in Tibetan communities, and "vital landscapes" associated with *fengshui* in Han Villages. Despite a century of dramatic sociopolitical change across rural areas in the People's Republic of China, many villages maintain significant geo-phenomenological connections between body, mind, and land, comprising a body politic maintained through ritual cycles and dwelling practices that uphold the sanctity and integrity of vital watersheds. Comparative analysis of Han and Tibetan spiritual ecologies reveals that cosmological landscapes comprise the armature of relational ontologies grounding and informing everyday life, livelihood, and power relations. As dynamic, emergent, and flexible systems of socio-ecological adaptation that both shape and are shaped by regional and transnational media, they play significant roles in policy initiatives associated with *Ecological Civilization* and hold potential for broadening the horizons of Anthropocene scholarship, socio-ecological activism, and meaningful settlement in a profoundly unsettled world.

Keywords: Ecological Civilization; anthropocene; animate landscapes; vital landscapes; watersheds; geopiety/geopolity; common property regimes

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Power corresponds to the human ability not just to act but to act in concert. Power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps together. When we say of somebody that he is "in power" we actually refer to his being empowered by a certain number of people to act in their name. The moment the group, from which the power originated to begin with... disappears, 'his power' also vanishes.

Hannah Arendt, *On Violence*

1. Introduction

Recent discourse on spiritual ecology empowers scholars, activists, conservationists, indigenous peoples, and others to act in concert toward the realization of transformative ecological, cosmological, economic, and political reconfigurations of life systems worldwide (Taylor 2010; Verschuuren et al. 2010; Sponsel 2012; Miller et al. 2014; Duara 2015; Verschuuren and Furuta 2016; Verschuuren and Brown 2019). Following Hannah Arendt's (1970, p. 50) definition of power as the property of a group when it "acts in concert," we see that the potency of spiritual ecologies lies in their capacity to convene a multiplicity of beings and forces in the production and reproduction of space, place, community, and ecology. I pause intentionally, momentarily, to focus on a modernist definition of power here, because of its anthropocentric definition of "a group," to emphasize how recent scholarship on animist and vitalist ontologies (Viveiros de Castro 1998; Bird-David 1999; Bennett 2010; Taylor 2010; Descola 2013; Kohn 2013) sheds light on far more socio-ecologically complex conceptions

of *Mitsein* ("Being-with") than those espoused even by some of the most prominent philosophers of the twentieth century (Heidegger [1929] 2019; De Beauvoir 1971; Levinas 1987). The "ontological turn" in philosophy and social thought (Deleuze and Guattari 1987; Latour 1993; Haraway 2016), anthropology (Viveiros de Castro 1998; Descola 2013; Holbraad and Pedersen 2017), geography (Massey 2005; Braun 2006; Sullivan 2010; Castree 2012; Lorimer 2012), and other fields, drawing heavily from ethnographic work on indigenous cosmology, has altered some basic existential tenets. "Facticity"—our "thrownness" into an absurd (and anthropocentric) world neither of our choosing nor fully under our control—is now recognized as a rhizomatic, non-hierarchial, multi-species, spatially foliated condition in which we have not only "never been modern" (Latour 1993), but we have also "never been human" (Haraway 2008). Eduardo Viveiros de Castro (1998) and Philippe Descola (2013) delineate significant structural symmetries that differentiate modern, Western, *naturalist* ontology from "Amerindian" (indigenous Amazonian) *animist* (perspectivist) ontology. In the former, humans share biological continuity with other species but possess culture as their own exclusive property. In the latter, humans share cultural continuity with other species but are separated from them by biological embodiment (the covering or "clothing" of the body is "the nature" that separates beings and endows each with a species-specific cosmological "perspective"). In the mythological past all species could communicate freely, but under normal, current conditions, only shamans can safely cross the communicative boundaries. Thus, while the anthropocentric cosmology of modern naturalism interpellates its subjects into the existential peril of solipsism, indigenous animist ontologies common to venatic (hunting) cultures engender subjects who face the imminent peril of cannibalism and must perform rituals ensuring the mollification or desubjectivization of their prey (Viveiros de Castro 1998). Other field researchers who seek to establish ontological groundings for "animist" phenomena warn against excessively structural assumptions, and I would add that this may be especially important in regard to societies that have undergone violent, sustained, or rapid structural change (Da Col 2007; Quijada 2018).[1] In China, the reconfiguration, recovery, or reinvention of spiritual ecologies with roots in pre-industrial times, traditions that were more or less effectively banned between 1949–1979, offer particularly challenging scenarios.

In this article, I recognize the analytical clarity and potency of "cosmological" models of animism and vitalism, while arguing that the degree of intricacy and structural regularity in such systems may be a function of the intensity of socio-ecological disturbance (Weller and Wu 2017). The objective of my field research has been to analyze the manifestation of spiritual beliefs within and by way of specific landscapes, particularly those that constitute essential foundations for the lifeworlds of communities. For this reason, I have focused on socio-ecological features produced by both humans and non-humans in cultural contexts in which both "animism" and "vitalism" figure prominently in the worldviews held by many community members, although certainly not by all or in the same ways. I follow Sponsel in noting that animist cosmology and practice assume that every "thing" that humans encounter could potentially be a person or the manifestation of more-than-human forces of social concern. Sponsel (2012, p. 12) states that "Animism merits far more recognition and appreciation than it has received in the past as *the* world religion and also for its very substantial ecological relevance [italics mine]. It generates a relationship with other persons, using the term *persons* in the broadest sense, which is genuinely respectful, reverential, and responsible." Animist ecological conduct is, thus, fundamentally structured around reciprocity and mutual regard between living humans

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[1] In a special edition of *Anthropological Forum* focusing on contemporary indigenous spiritual phenomena in western China, Da Col (2007, p. 308) states that the contributors refuse " . . . to engage with the concept of animism or subscrib[e] to totalising 'cosmologies' . . . prefer[ring] to extract the eventfulness of haphazard and uncertain interaction with spirits. The articles suggest that rather than relying on an ideal typification of ontologies of nature in Philippe Descola's sense, or developing an alternative mode of identification encompassing China's cosmologies . . . through the notion of 'homologism'—one should ethnographically accept that borderland societies discussed in this issue do not appear to present a unitary conception or 'cosmology' of what nature is." Similarly, Quijada, a scholar-researcher of current Mongolian shamanic practice, views animism as a flexible "strategy or tactic" rather than a cosmology.

and non-human organisms (both plants and animals), the spirits of the dead (who may occupy a variety of spaces), and the spirits and deities who animate various landforms, places, and even spaces more abstractly defined. Through rituals, stories, and informal everyday actions, indigenous and other profoundly place-based people maintain a world of existence-with a plethora of other beings who play critical roles in prevailing structures of power and the fortunes that emanate therefrom (Allerton 2009). Bron Taylor (2010) extends the purview of animism far beyond the indigenous cosmological realms to encompass modern, secular, naturalist thought, as well as its supernatural corollaries, all of which constitute what he calls "Dark Green Religion." In a remarkable rendering of biophilic and topophilic beliefs, tendencies, and practices within contemporary post-industrial societies, he shows how both animism and organicism (which he calls "Gaian Earth Religion") are strangely pervasive and yet hidden in plain sight. In short, both animism and Gaian organicism have supernaturalist and naturalist varieties (Taylor 2010, pp. 14–16), the first as "spiritual animism" and "Gaian spirituality," the second as "naturalistic animism" and "Gaian naturalism." Taylor's capacious categories of animistic experience and practice help open both the conceptual categories in the study of animism, and the terms of religio-political discourse onto new horizons of spiritual ecology as an active social force in the Anthropocene. This is especially important as we consider the fate of indigenous spiritual ecologies within authoritarian governance structures such as we find in the PRC under Xi Jinping today, but equally important in the study of indigenous and other spiritual ecological movements under neo-liberal fossil-fuel capitalist regimes such as we now face in the United States.

In this research, I show that the "spirit" in spiritual ecology is immediately active in a political sense when we see polity and ecology as mutually constitutive. Robbins (2011) elucidates the problematic nature of apolitical ecologies—ecological explanations that elide human variables, power relations, and the cultural construction of nature. The strength of political ecology as a disciplinary perspective and activist research agenda lies in its insistence on unveiling ontological, discursive, and institutional forms of power deployed on behalf of "nature" and "environmental norms," both degradative and supposedly ameliorative, especially when these disguise violence against people and other beings. In other words, ecology, as a practice and a field of subjects and objects, cannot be legitimately depoliticized; both institutional knowledge practices and ecological entities are wrapped up in, saturated with, or understood by way of social relations involving dominance and subordination. Even in "pure" forms of disinterested research on organisms and their myriad interrelationships with the environment, it can be difficult (and many would say impossible) to disentangle the viewer/researcher from the subject to a point that transcends distinctively idioanthropic interests and concerns. While this position has proven to hold potent analytical power, I contend that politicizing ecology is insufficient in the face of the climate emergency and cascading socio-ecological crises of the Anthropocene, Capitalocene, or Chthulucene (Haraway 2016; Moore 2016; Tsing 2015).[2] Rather, in concert with politicizing ecology, we must ecologize politics by problematizing non-ecological politics, specifically politics reifying a transcendent subject disconnected from the myriad ramifying connections, forces, influences—sensual, ideational, somatic, and more—by which and through which human being takes place moment-by-moment. There has never been a purely human, purely social (in the sense of inter-*personal* relations), or purely *cultural* being. Although this would seem obvious, holding it in mind can be difficult under the barrage of assumptions that define possessive individualist personhood engendered by industrial consumer capitalism, authoritarian socialism, and other productivist ideo-material complexes of late modernity.

As a geographer, I focus on animate landscapes and vital landscapes, specifically places endowed with supernatural and more-than-human essences, without romanticizing them, but (much like Haraway, Taylor, and others), with eyes, mind, and heart open to alternative modernities based on reciprocity between humans and myriad more-than-human subjects that assume multiple forms,

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[2] Literature on the Anthropocene, Capitalocene, Chthulucene, and other related terms designed to capture the massive anthropogenic transformation of global biogeochemical processes exceeds the scope of this paper. I cite several relatively recent works that take rather eclectic and expansive perspectives on this subject.

both transcendent and immanent. In this paper, I examine the ecology and polity of two kinds of sacred space and the complex geopieties[3] and geopolities that animate them. One involves a distinctively Tibetan form of geo-animism, found in what I call "animate landscapes," which include "god mountains" (a placeholder for Tibetan *gzhi bdag*, *yul-lha*, and *gnas ri*, Chinese *shenshan* 神山) (Karmay 1994; Ma and Chen 2005; Coggins and Zeren 2014; Yeh 2014a, 2014b; Smyer Yü 2015). The god mountains exemplify what Mircea Eliade would call theophanies—manifestations of the sacred (hierophanies) involving the presence of an anthropomorphic spirit or deity (Eliade and Sullivan 1987). I reference Eliade's term with the caveat that the deities (*theós* θεός) involved, in this case, are local, specific to particular places, endowed with distinctive personalities, and far from omnipotent, and in that sense, the term *theós* would be lexically interchangeable with what the ancient Greeks would call *daemons* (δαίμονα). The second is Han Chinese vitalism, as seen in village *fengshui* landscapes that include *fengshui* forests (Chinese, *fengshuilin* 風水林). *Fengshui* forests, and the landscapes of which they form a critical component, are what Eliade would call kratophanies—manifestations of the sacred presence of supernatural power but not endowed with (super)personhood or anthropomorphic essence (Eliade and Sullivan 1987). The goals of this study are, first, to initiate a broader dialogue on how these two relational ontologies continue to animate the spaces connecting body, mind, land, and polity; and, second, to show how these sacred spaces consecrate village community watersheds as enduring territorial common property regimes (CPRs) (Ostrom 1990). I argue that in *all* cases, this localized, collective form of geopiety/geopolity evolved in conjunction with community protection of local watersheds beyond the reach, or at least the full regulation, of the state and its systems of hydrological control. Keeping in mind Ostrom's eight design principles of long-enduring CPR institutions,[4] and that these institutions comprise socio-ecological adaptations by small communities to specific places and their environing topographic, hydrological, and other ecological features, I conclude that cosmologized landscapes (in this case animate and vital watersheds) encompass human and more-than-human forces acting in concert to ensure the persistence of beings-in-place over generations in temporal perpetuity. Assessing these conclusions with care requires rethinking the discursive and conceptual foundations of "landscape," as I discuss below.

A watershed consists of an area of land that topographically channels the flow of water to a specific point on the landscape. Although their borders are typically defined by high ground separating different streams, rivers, basins, or seas, every point on the earth's land surface has its own specific watershed, and thus they are fractal in nature. Human history has largely been defined by contests over major drainage basins, the fertile lands in and around their floodplains, and their upland resources—forests, pastures, fuels, wildlife, minerals, and other assets essential to grain-based, socially stratified civilizations (Scott 2017). Interstate wars and infra-state political contests over resource access have normally been contingent upon who counts as fully human within the symbolic, ideological, and aesthetic regimes determining caste, property, fate, and other essential ontological conditions that structure the hierarchically stratified urban networks comprising states. The earliest narratives of statecraft in China were premised on the moral imperative to conquer large watersheds and their tributaries by subjugating their human and non-human denizens within a growing urban network built on systematic taxation and tribute. Thus the Great Yu (Da Yu大禹), the "tamer of the floods" credited with establishing the semi-mythical Xia Dynasty (ca. 2070–1600) (now believed to

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3   Geopiety, a term once popular in the field of cultural geography, denotes reverence toward, and worship of, terrestrial features (Wright 1966; Tuan 1976; Cosgrove 2000). In my work, geopiety and geopolity are interchangeable. Although the term may be dated, I use it as a placeholder for both "animate landscapes" and "vital landscapes" in order to mark a distinction between the two.

4   In concise terms: 1. Define clear group boundaries. 2. Match rules governing use of common goods to local needs and conditions. 3. Ensure that those affected by the rules can participate in modifying the rules. 4. Make sure the rule-making rights of community members are respected by outside authorities. 5. Develop a system, carried out by community members, for monitoring members' behavior. 6. Use graduated sanctions for rule violators. 7. Provide accessible, low-cost means for dispute resolution. 8. Build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system (Ostrom 1990).

be associated with the Longshan Culture), reigned over a resource-hungry state that systematically marked out the boundaries of watersheds across the Loess Plateau and much of the North China Plain in order to incorporate them. Each section of the classic *Tribute to Yu* (禹貢) in the *Book of Documents* (尚書) describes how specific drainage basins are delineated, deforested, and cultivated; sacrifices are offered to the gods of rivers and mountains to ensure political order; native "barbarians" are conquered; soils are graded based on their suitability for the grain crops used for taxation; rivers are rerouted for irrigation and transport; tribute items (minerals, wild plants and animal parts) are enumerated; and riverine or interfluve trade routes are established. The following is simply one of many examples in the text, and each follows the same order with disciplinary exactitude:

> "Yu divided the land [and] following the course of the hills, he cut down the trees. He determined the highest hills and largest rivers (in the several regions) . . . [to mark off boundaries]. The Min and Bo hills were cultivated, the Tuo and Qian streams routed through their proper channels, and sacrifices offered to the Cai and Meng hills for the regulation of the surrounding country. Lands of the wild tribes around the He (Yellow River) were successfully subdued. The soil of this province was greenish and light. Its fields were the highest of the lowest class; and its contribution of revenue was the average of the lowest class, with proportions of the rates immediately above and below. Its articles of tribute were the best gold, iron, silver, steel, flint stones to make arrowheads, and sounding stones; with the skins of bears, foxes, and jackals, and nets woven of their hair. From the hills of Xiqing they came by the course of the Huan River; floated along the Qian, and then crossed the lands to the Mian; passed to the Wei, and (finally) ferried across the He."

By the time China's first empire was established in the Qin Dynasty (221–207 BCE), this form of statecraft was well established. After two millennia of imperial political ecology, one might assume that no watershed within the Han-dominated ethnolinguistic region remained beyond the reach of the state. In fact, the devastating ecological consequences and violent social conflicts marking the "progress" of dynastic growth and contraction are well documented by Elvin (2004) and Marks (2012). I will argue that many communities in the higher elevation areas of southern China were partial exceptions to the rule. As James C. Scott (2009) has shown, the trialectic of property, identity, and personhood plays out quite differently in the upper reaches of river basins, where imperial, or colonial, or national conquest has often been incomplete. While his mapping of "Zomia"—a region of largely autarkic "hill peoples" existing beyond the reach of valley states—overlaps with what is today upland Southeast Asia, southwest China, and northeast India, I contend that many upland communities in southern China also maintained a comparable (although not the same) degree of independence, despite the incorporation of their members as imperial subjects. In villages formed within the watersheds of first, second, and sometimes third order streams—the highest reaches of their respective drainage basins—CPRs have long been, by necessity, the constitutional form par excellence of local resource management. Where there are no communities upstream (or none more powerful than one's own), a given polity must by necessity take control of the lands, waters, fauna, and flora upon which their collective lives depend. The same holds true for Tibetan villages and the communities of myriad groups in the Sino-Tibetan borderlands (Yeh and Coggins 2014), in fact many communities in those regions could be counted as "Zomian." In fact, Tibet's lack of a tradition of state-controlled irrigation projects and other forms of large-scale water management is worth additional analysis, especially because at least one version of the nation's founding narrative suggests that this was a conscious choice.[5]

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[5] The classic, *dBa' bzhed* (an account of the advent of Buddhism to Tibet) describes how Padmasambhava attempted to create what appears to be a series of water control projects within the kingdom. These were rejected by King Muné Tsenpo (late 8th century), who feared that the tantric warrior's power would become too great if he was allowed to orchestrate the rerouting of rivers and other waterways. In the dBa' bzhed, his exhortation to Padmasambhava expresses significant anxiety: "The bTsan po [Muné Tsenpo] presented the mKhan po [Padmasambhava] with many offerings and said: "[Reverend]

This brings us to the present, and speaking broadly, while looking globally, we, as members of fractured and beleaguered collectives, must now reckon with our own long-term patterns of ecological degradation throughout watersheds worldwide. How we choose to face this task will determine the quality of life for all species on earth, as global warming, habitat loss, and resource shortages challenge polities of all sizes. Rethinking the political ecology of watersheds in ways that connect appropriately placed polities within their watersheds in a system of mutually supportive commons may turn out to be part of a long-term strategy for environmentally just sustainable resource use in the Anthropocene. Watershed-based CPRs represent a far more profound form of ecological ultimate concern than the political institutions by which we are subjectivized in consumer capitalist societies, providing models for contemporary activism around the rights of nature and the attribution of juristic personhood to terrestrial features, such as mountains and rivers, which compose multispecies, watershed-focused CPRs (Studley and Horsley 2019). In the conclusion, I examine the ways that the government of the People's Republic of China, despite sharply different ideological foundations and pragmatic interests, has partially embraced these village-level ecological polities in its campaign to promote "Ecological Civilization" (*Shengtai Wenming* 生态文明). I also consider how these spiritual landscape ecologies may be taken up within what Prasenjit Duara (2015, p. 59) calls "circulatory histories" in which "[e]vents simultaneously disperse across a variety of human and non-human orders, triggering and creating new events and processes. Historicality, narrative and power are, among other things, human modes of responding to this openness to time." In other words, the power of "spiritual ecology" to shape national policy or transnational socio-ecological movements should not be prematurely dismissed as merely an aspect of ephemeral subcultural and counter-cultural formations.

2. Methods

Between 2004 and 2011, I conducted multiple rounds of intensive fieldwork on village sacred landscapes in nine villages in Shangrila County, in the Diqing Tibetan Autonomous Prefecture (DTAP) of Northwest Yunnan Province (Figures 1 and 2). Having completed dissertation research that included preliminary work on *fengshui* forests in the mountains of western Fujian Province in 1994–1995 (Coggins 2003), I wanted to conduct comparative research on sacred forests in other culture regions of China. I soon discovered that I could not limit the scope of the investigation to forests because they were not, in themselves, the sites or landscapes of ultimate concern to Diqing Tibetans, rather, forests were protected (along with lakes, springs, streams, caves, and other terrestrial features) due to their association with deities who dwelled within the landscape, including sacred mountain abodes. I worked closely with Tibetan colleagues form the Diqing Institute of Tibetan Studies, The Nature Conservancy's Deqin Office, and Hamugu Village. All were fluent in both Mandarin and the Diqing Tibetan dialect and trained in a variety of specialties, including ethnography, conservation biology, animal husbandry, and Tibetan Buddhism. Their professional expertise, traditional environmental knowledge (TEK), and enthusiasm were of enormous benefit to the project. The fact that they believed in and practiced indigenous geopiety was a true blessing.

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mKhan po! You let the holy doctrine come to the country of Tibet. You have already achieved what was in my mind: you are bound by oath the gods and nāga and so on. That is enough. It is not necessary that the sand of Ngam should be covered with meadows and that springs appear. It is enough that there is the river called Yar khyi in my own land. [Acharya] please, please return to [your] homelands!" After this admonition, some twenty of the king's minions attempted to assassinate Padmasambhava as the latter was returning to India, but they " . . . were frozen like paintings, unable to speak and move, and he passed straight through them . . . " (Wangu and Diemberger 2000, pp. 58–59).
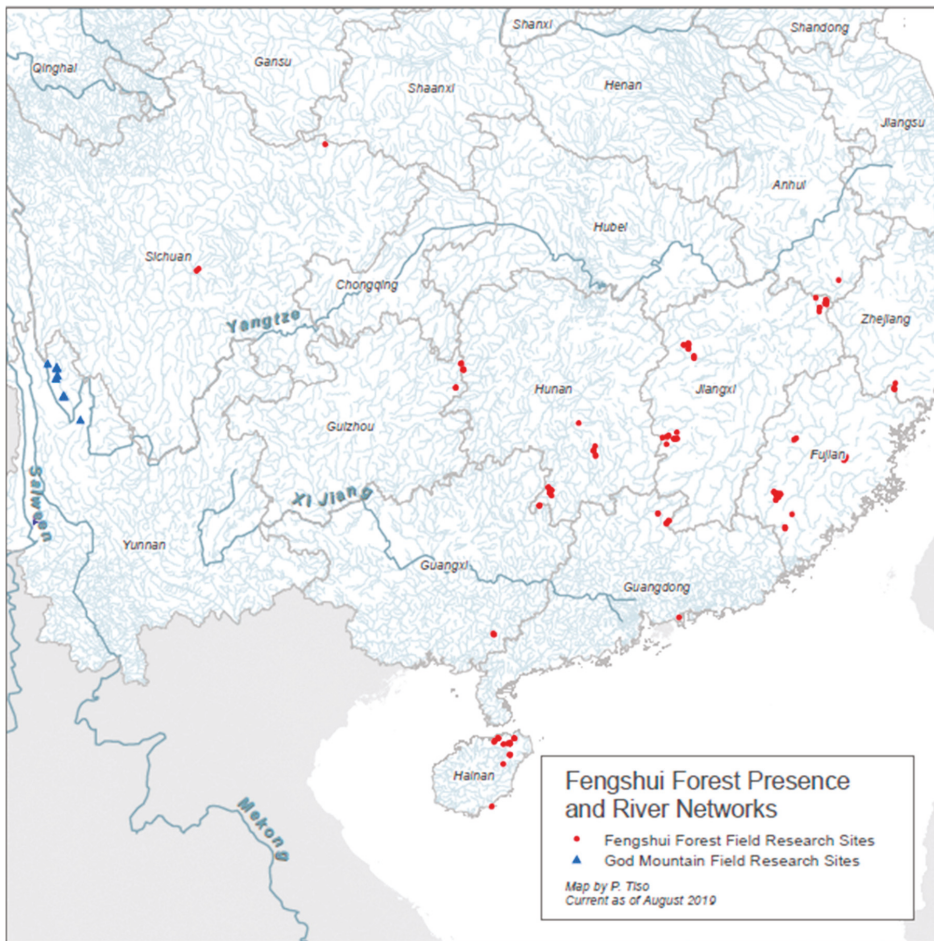
Figure 1. Map of rivers and field sites showing locations of 80 villages in 10 provinces where research on *fengshui* forests was conducted and 10 villages where research on Tibetan sacred landscapes was conducted.
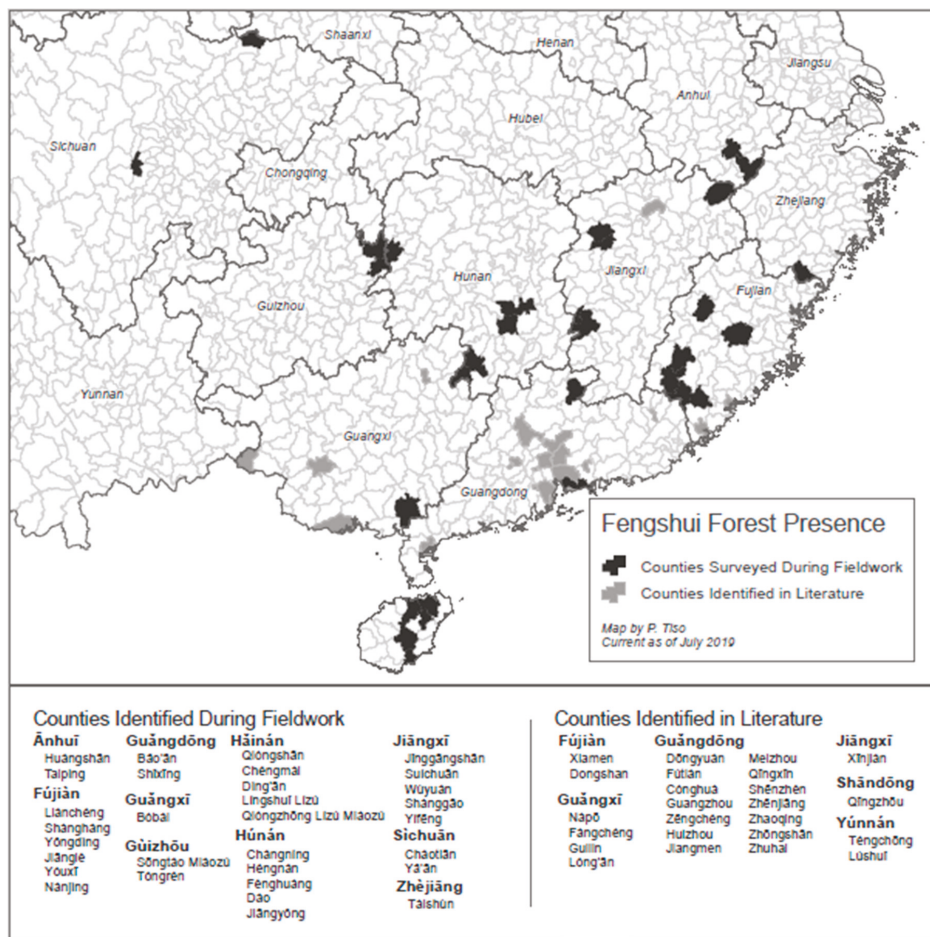
Figure 2. Map of counties where *fengshui* forest research was conducted and where *fengshui* forest research has been conducted by Chinese botanists (as seen in the literature).

My research took place during a period of unprecedented economic development in northwest Yunnan, throughout most of the Sino-Tibetan borderlands, and across many other parts of western China. Before 1949, Tibetans considered Northwest Yunnan a southeastern extension of Kham, a region of southeastern Tibet that included today's western Sichuan, southern Qinghai, and the southeastern Tibet Autonomous Region. From the early 1950s until 1979, the region was subjected to the same policies of collectivization and communization that transformed relations of production, cultural landscapes, socio-ecologies, and cosmological values in communities across China. During the 1980s and 1990s, with the spread of the Opening and Reform policies and the decollectivization of production, the area was subjected to intensive logging by county and prefectural government units and private entrepreneurs. In 1997, the Central Government declared a logging ban on the upper Yangzi River and the middle and upper Yellow River, which had dramatic impacts on employment patterns for Tibetans and other minority nationalities. In 1999, the Great Western Development Strategy (*Xibu Da Kaifa*) was initiated to accelerate economic growth based on sustainable development and a turn away from extractive industries such as forestry and mining. In 2001, China's State Council announced the "discovery" of Shangrila in northwest Yunnan. This was based on research by more than 40 scholars

from Yunnan and other provinces that "proved" that the region served as the setting of James Hilton's 1933 novel, *Lost Horizon*, which was purportedly drawn from landscape descriptions penned by Joseph Rock, the famous early 20th century botanist and ethnographer. In May, 2002, Zhongdian County was officially renamed "Shangrila" (Xianggelila). Jiantang, the county seat and site of the DTAP government, became the showpiece for the Greater Shangrila Ecological Tourism Zone (GSETZ), which extended across the Sino-Tibetan border areas of the Tibet Autonomous Region, Western Sichuan, and southeast Qinghai. The regional economy was reconfigured around a nascent ecological and cultural tourism industry that was growing exponentially by the time I arrived in 2004 (Litzinger 2004; Kolas 2008; Yeh and Coggins 2014). In 2002, representatives of the Nature Conservancy, the World Wide Fund for Nature, Conservation International-China, and more than eighty Chinese and foreign experts convened to develop policy initiatives for a newly declared conservation hotspot called "The Mountains of Southwest China," which largely overlapped with the GSETZ (Yeh and Coggins 2014). By 2006, planning experts in Diqing celebrated the advent of a new form of political economic governance embodied in "the ecological state" (*shengtai liguo* 生态立国), an idea whose time had come; in 2007 Hu Jintao announced plans to base China's national development on "Ecological Civilization."

It was in this context that I conducted research on sacred landscapes and the impacts of eco-cultural tourism in the DTAP. I focused mostly on Shangrila County, and all nine villages described in this study are located there. These communities are small cluster villages, called "natural villages" (*ziran cun*) in the national administrative lexicon, with an average of 119 residents per village. Despite the small size of these settlements, each encompasses large landholdings, especially in the context of the "administrative villages" (*xingzheng cun*), or groups of natural villages, of which they are a part. Most of the informants I spent time with in the villages spoke Mandarin, some did not, and though my colleagues did not speak English, they were adept at translating Tibetan terms into Mandarin. Very few people in Diqing can read or write Tibetan, and local Tibetan dialects are deeply influenced by long-term cultural exchange with Han Chinese who have lived in the region in substantial numbers for many centuries. Many local traditions are influenced by Han culture, including burial and funerary customs and the use of *fengshui* (all of the villages in my surveys but one reported using *fengshui* for house siting and planning). My translation of Gesang Zeren's geographic guides to Hamugu village also provided a deep sense of how Diqing's animate landscapes resonated in the lives of its people and how challenging it can be to translate cosmological concepts from Tibetan to Mandarin, as well taking the additional leap to English (Coggins and Zeren 2014). My mentor-collaborators generously devoted time to exegetical work required when specific terms and ideas defied translation, and several led me on numerous field trips into remote villages throughout the region. By 2006, I had conducted intensive research in all nine villages. Standardized semi-structured and unstructured interviews on sacred sites, village cultural ecology, forest management, and environmental history were conducted in each village using snowball sampling. These included indoor discussions and field site visits in sacred landscapes in and around each community. The focus of this research was on the intersection of sacred sites, indigenous landscape management, and environmental change. While anthropological research on the phenomenological dimensions of animism has been conducted in Diqing (Da Col 2007) that was not the focus of this project. I discuss several relevant findings from this ethnographic work on animism below, especially as it pertains to sacred space and spiritual landscapes. From 2004–2011, I conducted a long-term study of conservation initiatives and local development impacts in Hamugu village. Immersion in the political ecology of one community provided a strong foundation for understanding changes that were affecting many other communities in the DTAP during the seven-year-period of research.

From 2011 until 2018, I conducted field research on *fengshui* forests in 80 villages in 10 provinces across southern China, spanning from Fujian in the southeast, to Hainan Island in the southwest, and to Sichuan in the far west of China Proper—the Han Chinese cultural realm (Figure 1). During this time, I led or co-led seven team-based, multidisciplinary research trips involving professors, students, and forestry officials from China, the US, and Japan. The Jiangxi Province Forestry Bureau has

repeatedly offered hospitality and logistical support. In 2014, Bureau Director, Yan Gangjun, invited me to the capital, Nanchang, to address forestry bureau representatives from all 62 counties and a number of county-level cities and districts on our findings. Collaboration with Jiangxi forestry officials, especially in the field, has provided important information on how the local, provincial, and national state regard *fengshui* forests in the context of conservation planning for Ecological Civilization. In all 80 villages, we conducted research on *fengshui* forests and other sacred sites (temples, shrines, and other religious features), cultural ecology, and environmental history using semi-structured and unstructured interviews. We conducted forest surveys, identifying the species of the five largest trees found in each *fengshui* forests, measuring their dbh (diameter at breast height) and their height, and recording the forest management strategies and economic activities in each forest patch. In most villages, we also gathered data on aquatic ecology to determine the effects of *fengshui* forests on water quality. The methodology deployed to study aquatic ecology will have to be refined in future studies, so data from our preliminary efforts have not been useful for systematic analysis. Finally, we recorded village landscapes and interviewees with videos and photos, including drone use to record patterns of landscape ecology.

3. Results

3.1. Animate Landscapes and Environmental Activism in Tibetan Communities of NW Yunnan

In each of the nine villages in Shangrila County where I conducted field research, villagers had revived watershed common property management systems based on traditional spiritual ecologies. These consisted of two kinds of sacred mountains and associated forests, along with water source protection systems associated with streams, springs, and wells, along with individual trees and groves that served to protect them. Before describing these features in detail, it is critical to understand regional geographic patterns, land use history, and essential cosmological features of the Tibetan "landscape." The DTAP is a land where snowcapped peaks loom above wet prairies in the broad valleys that are known locally as "seas" (*hǎi* 海). These grasslands provide pasture for yak, cattle, goats, horses, and pigs. Following the summer rains, the prairies begin to flood, forming wetland habitat for the autumn waterfowl migration. Black-necked cranes and bar-headed geese feed among the livestock or find refuge in deeper waters. In the dry cold season, the floodwaters seep into subterranean limestone fissures and caverns, making their way down into the hot, dry gorges of the Yangzi, Mekong, Salween, and their tributaries, where cacti and other drought-resistant plants form scrublands that contrast sharply with the humid upland temperate forests nearby. Before collectivization and the imposition of a command economy in the early 1950s, seasonal cycles of village land use and labor composed regular rhythms within the longer, broader patterns of regional production and trade. From at least the first century, horse husbandry was important in the local economy since horses were the key to transportation and a major trade item on the Ancient Tea-Horse Road (Chámǎ Gǔdào 茶马古道)—a trade route with branches extending from Vietnam and Laos, north through Yunnan, and west to central Tibet and India. In addition to raising and trading horses for the long-distance trade network, Diqing Tibetans have long practiced agropastoralism, growing barley, buckwheat, potatoes, turnips, maize (in the dry valleys), and other crops, while also raising yaks, sheep, and goats in a transhumant system involving seasonal movement of stock from high mountain pastures in summer and fall to valley pastures in the colder months. Transhumant agropastoral production requires local common property management of watersheds. The classic village site lies on the edge of a broad valley backed by mountains and streams (Figure 3). Following streamside trails up a gorge, herders reach the warm-season grazing meadows situated among high cirques and terraces with tarns (glacial lakes) serving as water sources. Men, women, and sometimes children live in log herding huts over the course of the warm season, before returning downslope to the permanent settlement, where stock graze in the broad, wet grasslands in winter. Each village community makes use of this complex altitudinal zonation, depending on a variety of landscapes, from dry river valleys, to high valley

wetlands, to alpine forests, and up to the montane tundra above the tree line. As with Tibetans of other regions, Diqing residents believe that deities reside within the land, the waters, the sky, and the subterranean realms (Karmay 1994; Huber and Pedersen 1997; Da Col 2007; Coggins and Zeren 2014; Studley and Horsley 2019).

Powerful spirits and deities pervade Tibetan landscapes, and they have done so for over a thousand years, predating the advent of Tibetan Buddhism in the seventh century CE. In fact, the establishment of Buddhism in Tibet entailed the subjugation of chthonic deities and demons by the Indian Tantric warrior-sage, Padmasambhava, in the 8th century, and their conversion to protectors of Buddhism (Beyer 1978; Huber 1999; Wangu and Diemberger 2000). The land of Tibet is traditionally conceived as the body of a demoness, *Srinma* (an incarnation of Tara also known as Jetsun Dölma). This geobody is never fully pacified. In fact, Diqing Tibetans such as my collaborator Lazong Ruiba, attributed the Great Wenchuan (Sichuan) Earthquake of 2008 to Srinma's restless movements caused by the rapid and irritating construction of roads, railroads, and cities throughout Chinese-controlled Tibet (Ruiba 2008). For interpretive purposes, the English word "landscape" is simply inapplicable, related as it is, to the Dutch *landschap*, and the connotations of an area of land that is visible from a particular viewpoint, and can be mapped through cadastral surveys, commodified as property for capitalist markets and private owners, and fetishized as "nature" within schools of painting that arose in the course of early modernity. According to Tibetan folk tradition, the land is a layer of the cosmos teeming with untamed and partially tamed gods, demons, and other spirits. The cosmos encompasses three realms: the sky or upper region (*nam*; Wylie *gnam*); the atmosphere or intermediate space (Wylie *bar*); and earth (Wylie *sa*), which includes lakes, rivers, and the underworld. These realms are not strictly demarcated and separate. There are several types of deities associated with local sacred mountains, *zhidak* ("lords of place") and *yullha* ("base owners"). These terms are sometimes interchangeable, but all of my collaborators in Diqing confirmed the differentiation between the domains of local tutelary deities associated with indigenous practices that predate Buddhism, on the one hand, and the larger "abode mountains" *neri* (Wylie *gnas ri*), those associated with Buddhism as protectors of the Dharma (Karmay 1994; Huber 1999[6]). As Karmay (1994, p. 115) notes,

> " ... the mountain cult ... belongs to what I call the 'unwritten tradition of the laity.' This is because neither Buddhist nor Bonpo clergy have any significant role in the cult, although it represents a supremely important element underlying Tibet's national identity. By the mountain cult I mean particularly the secular worship of the mountain divinity (*yul-lha*, *gzhi-bdag*), who is usually depicted in the style of a traditional warrior and is worshipped as an ancestor or an ancestral divinity for protection."

There are also several other types of beings who occupy the mountain abodes. One class of beings is the fierce *nyen* (Wylie *gnyan*), who are yellow in color and usually associated with mountaintops, where they live among trees and rocks. The other, the *tsen* (Wylie *btsan*), comprise powerful beings dwelling in the atmospheric realm, where the sky touches the ground, primarily at the mountain summits or inside rocks. Nyen and *tsen* are among the most feared and respected deities in the region. They can become yullha and zhidak, but more research is needed to determine how this process transpires. Even those that lack the status of tutelary deities are an important part of everyday life. A Tibetan healer from Adong Village in Deqin County explained that they have the power to shoot holes into offending humans, causing more than 1500 kinds of disease. While *nyen* and *tsen* traverse the three realms, and *lha* (higher deities) inhabit the sky or specific terrestrial sites or objects, the *lu*

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6   Huber (1999, p. 23) makes note of "two types of cult mountains in Tibet: "In addition to néri mountains ... there exists a widespread cult mountain type identified more exclusively with the yüllha ("god of the locale") and shidak ("owner of the base") deities. These genii are generally understood as local and regional territorial gods and goddesses, whose worship apparently predates the intensive introduction of Indian religious systems into Tibet." See Huber (1999, pp. 23–25) for a thorough delineation of how the former are "mandalized" (Buddhicized) syncretic cults that include many features of the latter.

(Wylie *klu*) abide solely in or near water sources and trees. While residing in specific places any spirit may be called a *sadak* (Wylie *sa bdag*) ("master of the soil") (Ruiba 2005; Wang 2006; Dorje 2006; Paba 2006).

Sacred precincts within deity-mountains are roughly demarcated by a boundary or transition between the upper and lower elevation zones around midslope called a *rigua* (Wylie *ri 'gag*), "door of the mountain" or "barrier." Very roughly speaking, below the *rigua* lies the mundane world of humans, while above it extends the divine world of deities at the higher elevations (Litzinger 2004; Moseley et al. 2003). Humans are forbidden from appropriating any resources lying above the line from the mountain god's domain; the deity plays the role of host and may exact revenge for property transgressions of any kind. Since the line is not usually clear, sharp, or straight, human settlements below the line still lie within the mountain abode, thus they must maintain a contractual relationship of reciprocity with their hosts, the deities. Tree cutting, hunting, or fishing even in certain sacred areas *below* the *rigua* line typically leads to retribution in the form of disease, natural disaster, or other misfortunes (Coggins and Zeren 2014; Huber 1999; Ma and Chen 2005; Moseley et al. 2003; Zeren 2005). All nine villages in this survey protected forests on the slopes of at least one of their zhidak and yullha, or had recently restored the practice of forest protection. Forest protection measures promulgated by county forestry bureaus also include fines for tree cutting. Villagers are permitted to cut trees for their own use or collective use, with official permits. Most of the sacred mountains in this study lay within village collective lands (sheyou tudi社有土地 sheyou tudi) rather than national or provincial lands (guoyou tudi 国有土地), so CPR decision-making processes are important determinants of forest condition.

As mentioned, certain mountains have been incorporated into the Tibetan Buddhist pantheon, as their associated zhidak or yullha are said to have been conquered by Padmasambhava in the 8th century and converted into Dharma protectors who inhabit "abode mountains," or *neri* (Wylie gnas ri) (Karmay 1994; Huber 1999). While Mount Khawa Karpo is the only *neri* in Diqing, there are hundreds of other sacred mountains in the prefecture that date from Tibet's pre-Buddhist cultural foundations in the Tibetan imperial era. Mountains associated with *zhidak* or *yullha*, specifically where *nyen* and *tsen* deities reside, are classified as male or female, and often nuns or monks. These mountain deities are worshiped by, and associated with, specific groups of villages, individual villages, or even individual households (Abe 1997; Huber 1999; Paba 2006; Coggins and Hutchinson 2006; Coggins and Zeren 2014). In the nine villages surveyed, informants tended to use the word "*zhidak*" more frequently than "*yullha*" when referring to the sacred mountain abodes most important to their communities. In this sample, there was an average of 3.9 zhidak per village (with a range of 2–6), and each of these mountains was worshiped by all of the families in a given village. Some were male, some female, and generally female villagers could not join ritual processions on male mountains under normal circumstances (see below). Three villages were said to also have mountains associated with *yullha*, which were worshiped by individual families and small groups of families. Of these villages, one had 38 yullha (one per family), one had 24 yullha (one per family), and one had six yullha (several of which were shared by groups of families). More research needs to be conducted to ascertain the essential differences between *yullha* and *zhidak*, and to determine whether the familial associations with the former holds true for the entire DTAP and beyond. Since the gods residing within these mountains "own" all of the local lands and have retreated to their mountain strongholds to allow humans to settle as guests in arable lands at their feet, humans are required to behave as one would with the master of a household in which one is a visitor. For this reason, I refer to village communities in the DTAP as "guest-host polities." The geopious structure of regard assumed by guests is enacted through communal and individual rituals. Unlike the *neri*, the *zhidak* are not pilgrimage destinations. They compose a less literary, more oral, and yet universal Tibetan territorial practice. Their ecological significance is evident by the fact that although most of the Zhongdian basin was severely deforested by national timber-cutting operations from the 1970s to the 1990s, *zhidak* and *yullha* mountain forests are plainly visible on slopes behind many villages across the basin. Some are forest patches that survived intensive logging due to

their locations within *rigua*; others have been planted or have regenerated following the restoration of traditional religious practices since the 1980s. Lower elevation *zhidak* mountains typically have sacred forests on their slopes and summits. Higher elevation *zhidak* mountains rise into the alpine tundra zone, but also have sacred forests on their slopes. The forests are as closely associated with the *zhidak* and *yullha* deities as the mountains themselves, and these locales serve as refugia for spruce, larch, pine, oak, rhododendron, birch, and other subtropical and temperate tree species.

For each mountain deity, there are also specific prayers for specific occasions, many of which have been preserved in ritual texts called *songyi* (Wylie *bsang yig*). On the first, eighth, and fifteenth day of every lunar month, people visit shrines in the forests or at the foot of the mountain, where they offer barley, rye, wheat, buttermilk, wine, incense, and other items to the gods, who can be quite vicious when offended. The largest ritual occurs just after the Tibetan New Year, when each household sends at least one male representative to join a procession that ascends the *zhidak* mountain, starting before dawn and often not arriving until the afternoon. Each man inserts a bamboo pole representing an arrow into a stone ritual cairn (*zangbon*; Wyl. *rtse phung*), barley wine and barley grains are thrown into the air, and prayers specific to the abiding deity are recited. These acts bind families and individuals within community and cosmos, leaving the visible symbolic mark of cairns and arrows atop numerous peaks in the region through all seasons. Due to traditional assumptions that women are ritually impure, most villages still forbid them from ascending summits of major male god mountains; females can ascend with males during the New Year renewal ceremonies only if a family has no male representative. In some communities, they can also climb mountains associated with female *zhidak* for ritual or other purposes. A forty-nine-year-old woman from Jisha Village told me that the restrictions seem fair to her; women conduct the main rituals at *lu* worship sites (discussed below), give offerings to the *zhidak* and *yullha* at household and community shrines in the village, and, as she said, "Men have to leave the village to work, and they need more protection (Yangzong 2006)."

The forest and wildlife conservation function of traditional sacred geography is inseparable from hydrological conservation. God mountain forests not only conserve water in catchment zones above village settlements but also help prevent flooding during periods of high rainfall or snowmelt. Maintaining a supply of clean drinking water in dense settlements with an abundance of human and livestock wastes provides a strong impetus for forms of geopiety that protect community water sources. To this end, every village in my survey not only worshiped *zhidak* and *yullha*, but also maintained community and household sites for the propitiation of *lu*. In the village center and its immediate periphery, individual families or groups of families manage small groups of trees as abodes for *lu*. Snakes, frogs, and other reptiles and amphibians are associated with *lu*, either as guardians, possessions (so-called "livestock"), or representatives. At least five of the villages had individual *lu* sites for each family (one village had 39 individual sites, each associated with a different tree). It is not difficult to imagine that the presence of healthy individuals or populations of reptiles and amphibians near wooded water sources might be associated with the "wealth" of the *lu* and, in modern ecological terms, the quality of the water source. *Lu* are also considered guardians of secret treasures. Ritual acts at the familial *lu* sites are often prescribed by a local reincarnated master or *tulku* (Wylie *sprul sku*), or by traditional medical practitioners as a means of curing illness. *Lu* are closely associated with diseases of the skin, such as leprosy, and an offense against the *lu*, which can include contaminating a waterway, will lead to retributive illness. To cure a family member afflicted by a *lu*-related disease, of which there are more than 420, a person can bury tricolored cloth, grains, and other offerings in a cooking vessel at the base of one of the trees in the grove. As a Tibetan doctor and ritual master in Deqin County explained, "When the *lu* is sick, people can get sick." At such times, offerings can be made to the *lu* in order to heal it, just as herbal medicine is given to the patient (Dorje 2006). The human body-mind exists in physical and psychic continuity with land-as-spiritual-abode, which carries moral dimensions made manifest via immediate physical and mental consequences.

In addition to familial groves, there are also larger communal *lukong* (Wyl. *klu khang*), "palaces" or "temples" for the *lu* in the form of small stone altars or cairns near community wells, springs,

ponds, streams, or other nearby water sources, and these shrines are associated with water sources and surrounding groves and forests larger than those of household *lu* sites. All nine villages had *lukong*. Here, members of each family burn incense and make other offerings at regular intervals, and in spring and early summer, when barley crops are young and vulnerable, women gather in festive celebration to sing prayers for rain (*nianjing* 念经 or *qiuyu* 求雨). Women are said to be the primary intermediaries with *lu* because they are traditionally the water bearers, but this is an association that needs additional investigation. In any case, there is an association not only between women, the *lu*, terrestrial hydrology, and the cultivation cycle, but also between these deities of the aquatic realm and atmospheric sources of precipitation (Huber and Pedersen 1997). As a whole, geopiety in the form of *lu* worship, with its water-related concerns for purity and danger, provide a microgeographic CPR management system linking spirits, waterways, weather, animals, crops, human health, and community wellbeing. In summary, watershed CPRs are maintained not only through long-term patterns of land use and frequent religious rituals, but also through direct communications with, and the agency of, the spiritual powers of the landscape and its collectivity of beings.

Although this research did not focus on cognitive or ideational dimensions of animate landscapes, it is notable that animism involves the transmission of interiority from one exteriority (a physical body or object) to another (Descola 2013). Diqing landscapes, weather, and other environmental realms and processes are animated by the actions of gods and spirits, in ways that are related to, and analogous with, their involvement with human bodies and minds. Da Col (2007) notes that in Tibetan cosmology, humans and non-humans both possess consciousness (*rnam shes*). He describes, as many of my informants have, how mountain deities can see one another, communicate, marry, form alliances, and more. Humans can, and often do, interact directly with zhidak, yul-lha, and other deities, both intentionally and unintentionally. In the first case, through prayer and ritual acts (especially by leaving offerings, as described above), but also by serving as mediums (*lhawa*, in Diqing, *Meimo*) to bring them into public ritual spaces, channel their powers, and harmonize with their wills (Coggins and Zeren 2014; Makley 2014). Unintentional encounters include incidents such as one described by villagers in Hamugu.

"The mountain can hide/conceal (*cang* 藏) people who enter its domain. The zhidak can cause you to be lost in the mountains for 6–7 days or more and you never get hungry. You are under a kind of enchantment. The deity/spirit (*shen* 神) captivates you. Horse, cattle, and yak droppings turn into momo (steamed buns) that you can eat. You come out 6–7 days later convinced that you were in a kind of paradise. Two American doctors had this happen in 2003 when they were trekking here in Hamugu. They were lost for 3–4 days with a guide from Weixi County, and they said they never felt hungry. They even came back the next year! Two people from the village next to ours, a woman and her grandson, were "hidden" in the 1980s. Everyone thought they died, but no. They were lost for about a week or two." (Zeren and Ruiba 2004)

Comparing Tibetan perspectivism to that of indigenous animists in Amazonia (Viveiros de Castro 1998; Descola 2013), Da Col holds that the latter is defined by its spatiality whereas the former is defined by temporality, and this throws an important moral dimension into the complex syncretism comprising animism in Diqing. To summarize, in Amerindian perspectivism, a soul's location in the body of a particular kind of being—e.g., human or jaguar—determines the individual's perception of reality. Since all beings of significance have culture, their inner worlds are essentially the same but their objective, outer worlds manifest differently (thus Viveiros de Castro's argument for "multinaturalism" as a defining characteristic of animism). In contrast, Da Col sees Tibetan subjectivity as a form of temporal perspectivism in which a subject's karmic conditions are activated by particular events that crystallize the self's conception of their location in the moral and ontological temporality determined by karma. As he puts it "A 'Tibetan' object-event will agent a point of view which will ... define one's subjectivity in opposition to an Other (human, divine or demonic being [for example]) and give hints

about one's position in the cycle of reincarnations. The 'someone' [whom] is seized by an event becomes a local configuration of a greater nexus of circumstances, a singularity which will unfold a higher set of powers and karmic connections (Da Col 2007, p. 218)." While I concur with this assessment, I would add that the spatiality of unintentional possession in the *cang*, relates directly to one's location in the *rigua*, a liminal space for humans because it is part of the inner sanctum of the zhidak/yullha. In regard to the moral dimensions of these encounters, we can see that these are comparable to Obeyesekere (2002) contention that reincarnation is ethicized under the influence of Vedic thought and the laws of karma; Da Col sees the syncretism of animism and Buddhism as generative of subject formation through events that bring "fields of fortune" into clear and conscious realization. Karmic fields of fortune are evident in mountain deities themselves: while the Dharma protectors associated with the *neri* embody the ethical duty to guard Tibet as a Buddhist realm, the less exalted zhidak and yullha have idiosyncratic agendas and consistently protect their own, limited territorial domains. The following account shows how human conduct precipitates particular fields of fortune that include bodies, minds, landscapes, mountain spirits and the body politic in a network of socio-ecological relations. While I was interviewing two seventy-five-year-old men who had been well-known hunters in Hamugu for many years, I asked a number of questions about their encounters with local wildlife, apparent population decreases within certain species, and other topics that might provide a more complete picture of ecological change in the village watershed. My friend and collaborator, Lazong Ruiba, a former lama in Songzanlin Monastery, seemed uneasy with all the hunting stories, and he felt it necessary to intervene with an interpretation of their true significance:

> "These old men started hunting before Liberation because their families were poor—their living conditions were difficult, so they took up hunting. They hunted mostly musk deer and bears because of their high value, and this allowed them to make a go of it. At the age of sixty they stopped hunting. Now they regret having done it. Over the years their families and their livestock have suffered misfortunes of various kinds. Divinations at the monastery show that they've been punished for not respecting the zhidak. [In similar fashion] government-organized timber-felling destroyed thousands of ancient trees—a serious misfortune. We now protect the forests and I am very happy; not destroying the sacred mountains and lakes is excellent. We Tibetans believe that wild animals living in the realm of the deity-mountain have relationships with the zhidak, the ecology, the local people, and nature that is like the relationship between you and me. All are living beings. Conflicts between animals are like conflicts between people; if you violate someone they will take action against you . . . ." (Ruiba 2006)

Lazong Ruiba went on to explain how a local project involving the construction of a cable car to the summit of the village's main zhidak was already having severe effects on the community, which he rendered in conventional religious terms representing invisible, subjective, spiritual agency and modern scientific terms representing visible, objective, environmental phenomena in a holistic vision of moral ecological development.

> "The cable car system that is being built on Shika mountain is already having severe environmental impacts, and when droves of tourists ride up to the summit there will be destruction that takes forms not immediately visible to the eye. Already there are mudslides occurring in several nearby villages and the destruction is about to increase. Only by protecting the ecology, the zhidak, and the sacred lakes can there be peace, and only after there is peace can there be prosperity."

Tibetans living as far away as Chezong Village, on the other side of the Zhongdian Basin, agreed that the desecration of Shika was causing a regional drought, and Shika is not one of Chezong's zhidak (Deng 2005). Local narratives foregrounding fateful events play a critical role in the transmission of information regarding the relational web of animate landscapes and their inhabitants. The narratives

assume two forms, the first consists of grand genealogical legends on how the zhidak and yullha mountain gods came to settle in the landscape, and these stories perform a cosmogonic function for the community while explaining local sacred geography. Second are the everyday stories told by villagers about incidents that show how the gods continue to exercise their powers by meting out justice. Sometimes divine action is ferocious and sometimes it is kind, but however idiosyncratic the gods' behavior may seem, they are generally believed to keep the interests of the guest-host polity in mind as long as the guests exhibit gratefulness and good (ecological) conduct. In terms of the two kinds of narratives, the first explains the origins of the genii loci, and the mythico-geography of Hamugu village provides an excellent example. As Gesang Zeren explained shortly after I met him in 2004, the primary village zhidak consist of a male and a female who were lovers in real life, but who were unable to consummate their marriage.

"Shika and Chuji came from the holy land of the Ngari (Chinese Ali) region, in western Tibet. Shika was a handsome, talented young nobleman, sincere and upstanding. From a young age, he loved his homeland dearly and reveled in a free life of adventure on the high plains and snow-mountains, where he grew to be strong and hardy. Influenced by his social and physical environment, he understood the hardships of pastoral life and enjoyed helping the poor. Chuji was an upright and beautiful admirer—simple, hardworking, and diligent—a very good young woman who was born into the poor class of herders. All of her family worked as laborers on Shika's family estate. From a tender age, Shika and Chuji played together happily, riding horses, herding livestock, and growing as close as kin. Reaching adulthood, they had developed a deep affection for each other but never dared to express their love—such sentiments could not be shared between people of such different classes ... Shika realized deep in his heart that it didn't matter whether Chuji was from a poor family of serfs; there was no more beautiful and virtuous woman in the world. Perhaps through the work of the gods, the young people of the village arranged to have a tea party, where Shika found Chuji. They expressed their mutual love and, determined to stay together, cut ties with their respective social classes and decided to elope.

The next day, before dawn, they traveled to Yamdrok Lake to pray for the blessings of the Buddha. After several hours, a *dakini* emerged from the surface of the lake and said, "You two are of one mind in your mutual love, and you seek the blessings of the Buddha. If you can spend fifteen days and nights together, and keep the yaks with you, you will reach a land of clear streams, splendiferous flowers—a magical pureland. That is where you will establish your treasured home." She also added that if they could not spend fifteen days and nights, the marriage bond would fail. Before departing, the *dakini* gave them a pair of yaks, some yak butter, and fried noodles. After that, the two rode the yaks day and night without stopping. Crossing snowy mountains and fording three rivers [the Yangzi, Mekong, and Salween], they traveled for exactly fifteen days, and [traveling up Duji Sacred Gorge] they finally arrived at a place with level ground and dense forests—a veritable sea of green—with a cliff emerging above the trees. Just below the top of the cliff lay a cave resembling a Buddhist temple. The two lovers wondered whether this could be the holy land that the *dakini* had described. The sun was just setting behind a mountain to the west. Shika untied the yaks' halter ropes and began to tie the yaks to a tree branch. The two lovers also began to prepare a fire and haul water. Before dark, a thunderbolt rang out, the sky turned black, and a huge downpour began. The yaks, spooked by the lightning and thunder, broke the ropes and fled into the forest. Shika bolted after them, searching high and low. He searched until dawn but could not find the yaks. His efforts to manage the yaks for fifteen days and nights had failed; he lost his chance to secure the bonds of matrimony with Chuji, and he was heartbroken. Remembering what the *dakini* had said, he wondered how this could possibly be his fate. He vowed never to marry, and then he turned into a *zhidak*. When Chuji realized that Shika would never return from chasing the yaks, she wailed loudly, crying ceaselessly. Her tears formed the Rising Sun Spirit Lake. This beautiful and virtuous herding girl, having lost her lover, prayed daily for Shika's good fortune and health. Afterward, she, too, turned into a *zhidak* [near Shika], the Chuji Spirit Mountain that lies just behind Hamugu Village." (Zeren and Ruiba 2004).

Each of the geomorphic features mentioned in this story—the gorge, the cave, and the lake, are deeply familiar to the people of Hamugu, whose village occupies the mouth of the gorge. The mountains themselves—Chuji and Shika—are the most prominent landforms and determine the paths of watercourses that run through the gorge to sustain the crops, livestock, and people (Figures 3–5).

Everyday stories of the mountain gods' acts of retribution for transgression are common. The following story from Hamugu is a good example:

> "Two or three years ago, a family with a nine- or ten- year-old boy was pulling trees down the mountain; the mother was down below collecting firewood, and a tree slid down the mountain, killing her. Later, through ritual [involving a medium], we inquired about the situation, asking, "Do you think the *zhidak* has been offended?" and the voice of the mother coming off the mountain said that it was so . . . So now we say, the *zhidak* will always demand its debt from those who offend it.". (Zeren and Ruiba 2004)

These moral tales reinforce the regulatory functions required for sustaining watershed CPRs. As Gesang Zeren and Lazong Ruiba explained, "In terms of our ecological protection and our educational system, no other *minzu* (nationality) has this [particular] traditional protection system. It is built into our culture. We don't need the government to invest a bunch of money in it. That would be ineffective. We ourselves have a traditional conservation system." (Zeren and Ruiba 2004).

Figure 3. Hamugu village with Mount Chuji in the background. The recently restored sacred forest is visible on Chuji's slopes. (Photo by the author, 2004)

Figure 4. A view of Hamugu village from high in the Duji Sacred Gorge. Hamagu sits on the edge of Napahai, a wet prairie, where livestock are grazed. The Napahai Nature Reserve provides habitat for migratory waterfowl. Rising Sun Spirit Lake is a wetland lying within the prairie. (Photo by the author, 2006)

Figure 5. Mount Shika, the male zhidak of Hamugu village and Yak herding huts next to a sacred tarn (glacial pond). (Photo by the author, 2006)

3.2. Vital Landscapes and Environmental Activism in Han Communities in Southern China

Fengshui forests became primary components of southern China's cultural landscapes in the first millennium CE, as Han settlers adapted to and altered the rugged landscapes of the tropics and subtropics using *fengshui* principles to develop sustainable settlements based on wet rice agroecosystems (Coggins 2014; Guan 2012). These zones are characterized by high rainfall, ranging from an annual average of 800 mm (31 inches) along the Qinling-Huaihe ecotone marking the boundary between the subtropics and temperate climates in the north, to 2000 mm (79 inches) along the southern coast. Average annual temperature shows a similar north-south increase, ranging from to 14 °C (57 °F) at the Qinling-Huaihe ecotone to 24 °C (75 °F) along the southern coast. Environmental hazards include annual subtropical storms bringing high winds, heavy precipitation, and severe erosion, especially on steep and denuded slopes. In this biophysical context, *fengshui* comprises an ancient yet dynamic composite of indigenous cosmological beliefs and landscape management strategies focusing on topographic features and frequently utilizing groves and forests to enhance resilience at the scale of village watersheds. In the long history of Han Chinese migration and colonization of the mountains, valleys, and hills of the southern frontier, which peaked between the Han Dynasty (206 BCE–220 CE) and the Song (960–1279 CE), this system evolved as a means for locating ideal settlement sites and designing built environments and wet rice agricultural zones in close proximity with forests, meadows, and other upland resource utilization areas. *Fengshui* lore and literature provided both cognitive maps and graphic diagrams to guide this process, and *fengshui* masters have long supplied specialized expertise in choosing auspicious sites and in modifying the built environment.

Fengshui (風水) literally means "wind-water," but in addition to denoting crucial climatic elements of the living environment, it refers to a constellation of ideas and techniques for harmonizing human activities with the terrestrial and celestial forces that govern them (Bruun 2008; Feuchtwang 2002). Often translated as "geomancy," it is a form of traditional ecological knowledge (TEK) best understood as a form of cosmo-ecology in which the optimization of universal vital life force (*qi* 氣) is contingent on human design in harmony with more-than-human powers. A complex set of formulas and guidelines direct ongoing individual and collective involvement with vital landscapes through active manipulation and management, observation, reflection, divination, and continuing adaptive response to both anthropogenic and non-anthropogenic environmental change. My research shows that *fengshui* practice at the landscape scale—within the geographic context of villages and their immediate watersheds—is a cohesive and collective undertaking with centuries of precedent and the time-tested logic of trial and error. As an ethnogeographic practice, it encompasses a complex panoply of spiritual beliefs and magical practices involving supernatural forces and agents, including gods, ghosts, ancestors, and impersonal chthonic forces. Thus, there are strong animist and shamanic elements in Chinese folk religion as well. These have survived the bans on "feudal superstition" associated with the utilitarian, industrial, scientific ideology of the Maoist period (1949–1976), but not without changing and adapting to new social and environmental conditions.

Jane Bennett (2010) has rekindled an interest in vitalism within social theory, where it has gained traction among post-structural theorists of materialism. She invites us to rethink the notion that matter is passive and inert (in Heglian terms, devoid of *geist*). "This habit of parsing the world into dull matter (it, things) and vibrant life (us, beings) is a "partition of the sensible," to use Jacques Rancière's phrase. The quarantines of matter and life encourage us to ignore the vitality of matter and the lively powers *of* material formations, such as the way omega-3 fatty acids can alter human moods or the way our trash is not "away" in landfills but generating lively streams of chemicals and volatile winds of methane as we speak (Bennett 2010)." In studying *fengshui*, we do well to follow her lead in using Latour's (2004) conception of *actants*—humans or things that are sources of action—that have "efficacy, can do things, [that have] sufficient coherence to make a difference, produce effects alter the course of events (Bennett 2010, p. viii)." In studying *fengshui*, we are challenged to rethink the material agency or "effectivity" of nonhuman or not-quite-human things (Bennett 2010, p. ix). In striking contrast to the agency of zhidak, yullha, lu, nyen, and other chthonic beings that inhabit the landscapes of Tibet as

agentive, idiosyncratic quasi-persons, *qi* is an agentive ideo-material force devoid of anthropomorphic traits but susceptible to channeling by human intermediaries. This is true not only in landscapes as conceptualized in *fengshui*, but also in Chinese medicine, qigong, acupuncture, and other specialized techniques in which qi is a force that links mind and body and can be "mastered" for the cultivation of "extraordinary powers" (*teyi gongneng* 特异功能) (Chen 2003). In summary, *fengshui* is the landscape architecture of *qi*—a force that vitalizes mind, body, and polity in a collectivity of people, other beings, forces, and things.

This includes trees, which are both producers of *qi* (Chen 2003) and channelers of its flow via wind and water in and above the earth's surface. Village *fengshui* forests (*fengshuilin*) are important components of rural cultural landscapes representing not only nodes of connection between *fengshui* culture and ecology, but demonstrating the intricate connection between village *fengshui* and watershed conservation. In wet rice producing villages, watersheds comprise the infrastructure of life for humans, the non-human organisms upon which they consciously depend, and the complex biological assemblages that may not be well understood but are often no less crucial (Fan 1992; Hase and Lee 1992; Coggins 2014; Chen et al. 2018; Coggins et al. 2019). It should be noted that complex symbolic elements of *fengshui*, including its grounding in correlative cosmology (Henderson 2010) and its global proliferation have ensured that many of its practices, particularly in urban, metropolitan, and international contexts far exceed contemporary conceptions of "ecology," "environment," and indigenous sense of place. This has led many to assume, quite reasonably, that *fengshui* has little to do with the environment. An understanding of the role of *fengshui* in village landscapes belies this misapprehension of the vital role that it plays in cluster villages of southern China, which I call "wind-water polities" to denote the ultimate importance of their spiritual ecologies for community livelihood and sustainability.

The ideal village fengshui landscape consists of a nucleus of houses known as the "lair" (*xue* 穴) that is nested within a small drainage basin (Figure 6). The village rests on a slope above the floodplain croplands below, in a site where *yin* and *yang* energies are believed to be in, or close to, natural balance. Streams descending the slope on both sides of the village provide water for the irrigation of rice paddies in the valley floor below, in which terracing can be kept to a minimum. Since China is in the northern hemisphere, it is considered best to "sit in the north facing south" (*zuobei chaonan* 坐北朝南) with villages and individual houses "facing" the sun. Direct sunlight promotes the growth of rice crops, which are ideally (but certainly not always) located in a broad floodplain south of the village, and the sun's rays provide warmth for the village in winter, while mountains "behind" the village to the north block cold continental winds of the winter monsoon. The fertile and generative *xue* is surrounded and protected by the master mountain in the north, and spurs or ridges to the west (the white tiger, *baihu* 白虎) and to the east (the azure dragon, *qinglong* 青龍). This general crescent-shaped configuration can be replicated at all scales of the built environment, including tombs, shrines, temples, and homes. Higher mountains extending farther north from the master mountain include the parent mountain, grandparent mountain, and ranges extending to the Kunlun Mountains at the edge of the Tibetan Plateau. This series of mountains replicates the ancestral lineage structure and metaphysically connects distant villages to the sacred originary point of gods in the Daoist pantheon. In fact, the ancestral record for Gonghe village, in Meihuashan region of Fujian, notes that the dendritic pattern of qi flow into the village originates in the Kunlun Mountains far to the west (Coggins 2003).
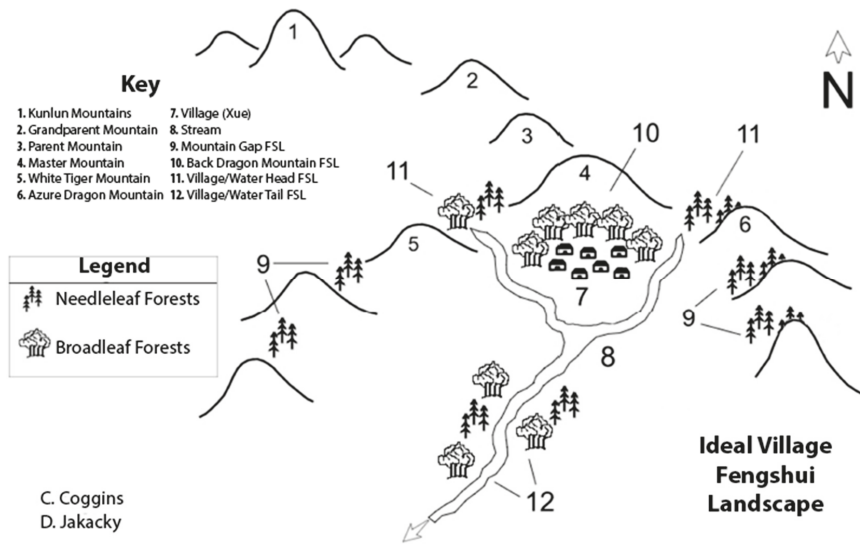
Figure 6. Village *fengshui* features, including landforms and *fengshui* forest types. (Coggins and Jackaky, 2016).

Flourishing natural vegetation is a crucially important element of the ideal *fengshui* landscape, as exemplified in this passage from the *Book of Burial* (*Zangshu* 葬書), the seminal text of the Forms School (*Xingshi* 形式) of fengshui. Written in the fourth or fifth century as a commentary on the now lost *Classic of Burial* (*Zangjing* 葬經), this passage contains the earliest use of the term "fengshui" in extant documents:

> "The *Classic* says, qi rides the wind and scatters, but is retained when encountering water. The ancients collected it to prevent its dissipation, and guided it to assure its retention. Thus it was called *fengshui* (wind-water). According to the laws of fengshui, the site that attracts water is optimal, followed by the site that catches wind . . . Terrain resembling a palatial mansion with luxuriant vegetation and towering trees will engender the founder of a state or prefecture." (Guo Pu, *The Book of Burial*; Zhang 2004)

As a practice that evolved in conjunction with cults of ancestor worship, the burial of the dead and their treatment after death play critical roles in linking and sustaining minds, bodies, and lands on behalf of lineage prosperity. In Chinese cosmology, the souls of the dead contain both *yin* and *yang* elements; the concentration of yin essence forms the *po* (魄), a semi-material body that if not cared for through sacrifices by descendants can develop into a dangerous ghost (*gui* 鬼). The concentration of yang essence forms the *hun* (魂), a lighter more ethereal body that if cultivated through sacrifice becomes a powerful and beneficent spirit (*shen* 神). *Fengshui* is as much about caring for the "homes of the dead" (*yinzhai*) as it is about caring about the "homes of the living" (*yangzhai*), because the two are continuously connected through the flow of *qi* in the landscape and probably other media as well. This is why Guo Pu also wrote that "Life is the condensation of qi. That which is coagulated becomes the bone, which remains after death. Therefore, to bury the dead is to obey the principle of returning qi to the bones, thus creating life out of yin" (Zhang 2004, p. 55). The continuity between the living and dead is thus not only experienced through memory, sacrifice, and the continuing presence of ghosts and spirits, but also through wind, water, and land, including the configuration of tombs, houses, shrines, and other human alterations of the landscape.

Tens of thousands of southern Chinese villages still show evidence of this idealized cultural model, even after a multitude of rural structural transformations entailed by the systematic development

projects associated with *xiandaihua* (现代化modernization). Thus, in both its ideal and instantiated forms, the village *fengshui* landscape exemplifies a stable and longstanding socio-ecological system. Within the village *fengshui* landscape complex, *fengshui* forests play a key role in maintaining the durability of the village-scale polity and its vital ecology through their material effects on flows of wind and water, their amelioration of erosion, their enhancement of biological prosperity, and their symbolic representation of ancestry and lineage.

Within the village fengshui landscape complex, fengshui forests are typically situated immediately behind and upslope from the village, on what is called the *zhushan*, or master (also "host" or "owner") mountain. Since the forests are located adjacent to human settlements in order to enhance the physical and spiritual qualities of the local environment, they are considered by current Chinese scholars as "pieces of history—living, cultural, biological, and ecological fossils" (Li 2011). Although imbued with spiritual significance, the forests are also subject to a wide spectrum of human management and influence, with some *fengshui* forests undergoing understory clearing, bamboo harvesting, and the gathering of herbs and mushrooms, while others are granted nearly total protection.

Although formal writings on *fengshui* forests are scarce in the classic fengshui guidebooks, a well-developed folk taxonomy quickly became evident during my early research in Fujian in the mid-1990s. In short, there are four types of *fengshuilin* according to the typology used by villagers in western Fujian. These are partially accepted as standard in other regions, but the only more-or-less uinversal type was number 1 (below). This forest type was observed in all study areas.. The four types are: (1) *Houlongshan fengshuilin* (後龍山風水林), which are immediately behind and upslope from the village, protecting it from erosion caused by overland flow, helping ensure a year-round supply of ground and surface water, and protecting the watersheds of the incoming streams which comprise the primary water supply for crop irrigation and everyday use. Similar forests are often found behind village ancestral temples (*citang*祠堂) (Figure 7). All of the *houlongshan fengshuilin* observed consisted of broadleaf forests or predominantly broadleaf mixed forests. (2) *Shan-ao fengshuilin* (山凹風水林), which block winds that enter the valley through wind gaps (*shan'ao* 山凹). In Fujian these consist almost exclusively of Chinese cedars (*liushan*, 柳杉) growing in saddles and along the streams that descend from them, and these trees are said to have been planted by village ancestors. (3) *Shuitou* (水頭) or *cuntou* (村頭) *fengshuilin*, which consist of Chinese cedar or broadleaved forest located where streams enter the village from higher elevations. (4) *Cunkou/wei* or *shuikou/wei* (村口/尾 or 水口/尾) forests, which are typically broadleaved forests located downslope from the village, either along a stream or along a path exiting the village, and these are believed to "hold in" the village's wealth and prevent it from flowing away with the water or wind that exit the village space down-valley (Figures 8 and 9). The concept of "holding in village wealth" is an apt metaphor describing how these forests prevent back-cutting erosion along stream banks and slopes that could rapidly destroy the cropping areas in front of the villages.

Each of these forest types provides not only hydrological services by improving the acquisition, retention, and slow release of ground and surface water, but also ecological services deriving from enhanced biodiversity. This includes the maintenance of plant and animal resources for food, fiber, medicine, building material, and more.

Figure 7. The main ancestral temple (*citang*) of Gonghe Village with a small, crescent-shaped *houlongshan* (back dragon mountain)-type forest protecting it. The ponds in front of the ancestral temple represent the seven stars of the big dipper. A classic *fengshui* feature, these pools hold heat in the winter and cool the area in the summer. (Drone photo by the author, 2018).

Figure 8. A shuikou (water mouth) fengshui forest below Sanjiaoqiu village, Zhejiang. This view is from downstream and shows a bridge temple in the foreground. (Drone photo by the author, 2018)

Figure 9. The same shuikou forest in Sanjiaoqiu village taken from slightly upstream and showing an ancestral temple nestled along the edge of the forest. (Drone photo by the author, 2018)

4. Discussion

In 2007, Premier Hu Jintao announced that China would become an "Ecological Civilization" (*Shengtai Wenming* 生态文明) (Yeh and Coggins 2014; Geall and Ely 2018; Goron 2018; Frazier et al. 2019). In 2012, the Chinese Communist Party (CCP) adopted Ecological Civilization as an explicit goal in its national constitution and in its Thirteenth Five-Year Plan (2016–2020). General claims and objectives include embracing social and environmental reform as a new foundation for national development, and to develop new forms of human civilization to adapt to and mitigate global anthropogenic climate change. In short, Ecological Civilization is meant to signify a synthesis of economic, educational, political, agricultural, and other reforms designed for comprehensive, socially just sustainability based on a national land use planning system based on "functional regions." As the first chapter of the Thirteenth Five-Year Plan states,

> "New progress has been made in the construction of ecological civilization, the main functional area system has been gradually improved, the discharge of major pollutants has continued to decrease, and the level of energy conservation and environmental protection has improved significantly." (CTB 2016)

Although it is difficult to gauge the degree to which ecological civilization will take precedence within the diverse set of national, regional, and international policy initiatives that vie for attention within a complex governance system, there has indeed been tremendous investment of fiduciary, institutional, and educational resources in the development of a national protected area system, one that has undergone remarkable expansion in recent decades (Coggins 2017). Key features of Ecological Civilization in the Thirteenth Five-Year Plan include a national zonation system for environmental management that is designed to "simplify the ecological security mechanism." Although the language deployed in the Five-Year Plan is turgid, technocratic, and general, the overall goals are fairly clear—delineate ecologically important areas for protection; manage these zones strictly; regulate the zones through a system of incentives, taxes, and fines; and establish an environmental damage monitoring protocol:

"Strengthen the construction of an ecological civilization system, establish and improve an ecological risk prevention and control system, enhance the ability to respond to sudden ecological environmental incidents, and ensure national ecological security ... Implement ecological space use control, delineate and strictly observe the ecological protection red line, ensure that ecological functions are not reduced, the area is not reduced, and that natural conditions are not altered. Establish a total forest, grassland and wetland management system. Accelerate the establishment of a diversified ecological compensation mechanism and improve the linkage mechanism between financial support and ecological protection effectiveness. Establish a green taxation system covering the exploitation, consumption, pollution discharge and import and export of resource products. Study and establish an ecological value assessment system, explore the preparation of natural resource balance sheets, and establish physical volume accounting. Implement the audit of the loss of natural resources assets of leading cadres. Establish and improve the ecological environment damage assessment and compensation system, and implement the lifelong investigation system for damage liability." (CTB 2016)

With a national nature reserve system comprising 2671 reserves (at all administrative levels) protecting 14.8% of the country's total land area by 2015, China was well on its way to developing a comprehensive biodiversity conservation strategy (Coggins 2017). A serious shortcoming of the system is the lack of support by local people, who continue to poach and to collect wild plants to meet domestic commercial demand. Tibetan god mountains and Han fengshui forests provide excellent models of local CPR management through spiritual traditions. Although they have functioned primarily to meet the immediate and long-term needs of small communities, they can serve as culturally meaningful models for active watershed and forest management. By granting special protection for *fengshui* forests, zhidak, and other landforms preserved by local geopiety in community-based conservation areas (officially designated "miniature nature reserves," *baohuxiaoqu* 保护小区), as I have observed in many provinces, the central and local state establishes compacts with local people to work cooperatively to protect natural resources and to enhance common understandings of the role of ancient spiritual landscapes in emerging visions of "ecological civilization." In 2014, as I was consulting with the Jiangxi Province Forestry Bureau to suggest effective methods for protecting the province's many *fengshui* forests, they initiated a conservation program to offer state support for the protection of existing fengshui forests and the improvement of degraded forests (Yan 2014). Since they were concerned about the negative political implications of the term "fengshui forest" due to the association of fengshui with "feudal superstition" (*fengjian mixin* 封建迷信) they deployed the similar but safer term *fengjinglin* (scenic forest or landscape forest) in all official transactions (Yan 2014). In 2015, they had begun the process of establishing 100 Model *Fengjinglin* (Scenic Forest) Villages" and an "Ecological Civilization Vanguard Demonstration Areas" system (Figure 10) across the province.

While this may show that provincial governments will augment the management of local spiritual landscapes, especially those with value for nature conservation and the preservation of cultural heritage, scholars within and beyond China are struggling to ascertain the scope and intent of Ecological Civilization policies. As Goron (2018, p. 40) notes, "[Some have argued] that Ecological Civilization has increasingly tended to restrain both public and scholarly debate within discursive boundaries controlled by CCP propaganda, hindering capacities to engage critically with capitalism, democracy, and other [essential categories in] green political thought. However ... many Chinese scholars, while paying lip service to [official] Ecological Civilization discourse, have remained committed to their academic research agenda and have continued to press for the development of their disciplinary contribution to the global scientific discussion on sustainability." An intriguing example is found in the radical eco-socialist thought of Huan Qingzhi, a researcher in comparative politics at the Research Institute of Marxism in Beijing. Arguing that " ... to make socialist eco-civilization our green future, we need to work simultaneously at three levels: identifying and defining a full set of key values or beliefs for socialist eco-civilization, such as social justice or equity, ecological

sustainability, economic well-being or sufficiency, which should be mutually consistent or supporting; envisioning a real alternative institutional framework of socialist eco-civilization, characteristic of the ecologically civilized economy, politics, society and culture fundamentally different from capitalist ones; analyzing and encouraging all kinds of mechanisms conducive to socialist eco-civilization, such as the demonstration areas of eco-civilization construction at the different administrative or spatial levels, introduction of the green evaluation index of economic and social development and multidimensional eco-compensation systems, etc. (Huan 2016, p. 63)" In 2015, with an eye toward radical reconfiguration of existing socio-ecological conditions in China and beyond, Huan established the China Research Group on Socialist Eco-civilization. Their primary foci for the first years of research included " . . . eco-Marxism and socialist eco-civilization theory and case studies of eco-civilization demonstration areas in China (Huan 2016, p. 63)."

Figure 10. Students at the entrance to Tangcun Village, Jiangxi, which is designated a "Model *Fengjinglin* (Scenic) Village" and an "Ecological Civilization Vanguard Demonstration Area." Detailed information on village history and ecology is shown on kiosks. (Photo by the author, 2015)

5. Conclusions

A transnational ecological politics for the Anthropocene requires new forms of imaginative synthesis and alternative ways of being within and knowing the world in all of its spiritual and ecological complexity and richness. These must be grounded in collective and individual experience with, and knowledge of, local environments, in a world that is becoming increasingly unsettled by a climate crisis precipitated, for the most part, by the dangerous promises of anthropocentric, fossil-fuel-based capitalism. How might more meaningful and sustainable settlement practices evolve in response to the "unthinkable derangements" of the anthropocene (Ghosh 2016)? Village and community polities linking mind, body, and land in creative and experimental fashion may be the "order of the day," an order with the capacity to absorb, and even venerate and celebrate the powers of disorder and the truths of cosmic indeterminacy. Recognition of the radical agency of things and beings deemed "non-human" in conventional Western thought may enhance our great potential for a new political ecology of the Anthropocene that is inclusive of both advanced environmental science and ancient modes of communication and experience. We will do well not to take for granted the sources of the energy that animate our cities, towns, villages, homes, and, by way of food, our very bodies and those of our fellow sentient beings. How can we more fully recognize the ultimate source of most of the energy that makes all life possible—the sun? How might we rethink our connection to the "stuff" we create, consume, and, despite its many afterlives, call "waste?" Finally, how might we rethink the ways in which we dwell within watersheds, the sources of life in a world in which melting ice caps, falling water tables, and rising sea-levels seem to be trying to teach us about the error of our ways? I conclude that despite their significantly different cultural ecologies and land-use traditions, the Tibetan and Han communities described in this study have maintained, to a remarkable extent, practices of geopiety that constitute indigenous multispecies CPRs and safeguard the watersheds upon which they depend for long-term socio-ecological wellbeing. These body politics will continue to be severely challenged as China continues to undergo rapid and extensive urbanization. I will also point out that despite profound differences in the property rights regimes of post-enlightenment possessive individualist societies and the ancient customary community rights that coalesce around particular terrestrial spirits, forces, and deities, the latter systems are increasingly informing contemporary legal initiatives to grant juristic personhood to rivers and other landforms in order to protect "the rights of nature" and communities in diverse socio-cultural contexts around the world. As Youatt (2017, p. 39) says of this nascent global movement, "[r]ather than assuming international space to be largely populated by state persons who in turn grant personhood to nature, these cases suggest that it is more productive to start by asking what kinds of collective persons populate world spaces, and in what ways they are made political." In this context, official PRC discourse on Ecological Civilization (*Shengtai Wenming*) provides a specific historical framework for analyzing the harmonies and conflicts that emerge when the contemporary nation state makes space, however tenuous, for spiritual ecology in conservation discourse and practice. As Prasenjit Duara (2015, p. 288) notes, emerging international laws of the commons represent "a force that posits inviolability without significant military backing and pursues its case through rational and responsible argumentation." He adds that "The custodians of this sacred space . . . are turning out to be the networks of hope constituted by the coalitions of civil society, local communities and their allies . . . In many respects they represent a weak force but can be sufficiently resilient to outlast the strong. One of their great strengths as a moral force is their ability to mediate the sacred with the rational. Armed with scientific, legal, technical and, not least, local knowledge, these coalitions represent our principal hope."

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References

Abe, Ken-ichi. 1997. Forest History in Yunnan, China (I): Tibetan God Mountain and Its Protected Forest in Jungden [Zhongdian]. Japanese. *Southeast Asian Studies (SEAS)* 35: 422–44.

Allerton, Catherine. 2009. Introduction: Spiritual Landscapes of Southeast Asia. *Anthropological Forum* 19: 235–51. [CrossRef]

Arendt, Hannah. 1970. *On Violence*. New York: Houghton-Mifflin Harcourt.

Bennett, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press.

Beyer, Stephen. 1978. *The Cult of Tārā: Magic and Ritual in Tibet (Hermeneutics: Studies in the History of Religions)*. Berkeley: University of California Press.

Bird-David, Nurit. 1999. 'Animism' Revisited: Personhood, Environment, and Relational Epistemology." Special issue, "Culture: A Second Chance? *Current Anthropology* 40: 67–91. [CrossRef]

Braun, Bruce. 2006. Towards a New Earth and a New Humanity: Nature, Ontology, Politics. In *David Harvey: A Critical Reader*. Edited by Castree Noel and Derek Gregory. Oxford: Blackwell, pp. 191–222.

Bruun, Ole. 2008. *An Introduction to Feng Shui*. Cambridge: Cambridge University Press.

Castree, Noel. 2012. *Making Sense of Nature*. London: Taylor and Francis.

Chen, Nancy. 2003. *Breathing Spaces: Qigong, Psychiatry, and Healing in China*. New York: Columbia University Press.

Chen, Bixia, Chris Coggins, Jesse Minor, and Yaoqi Zhang. 2018. *Fengshui* forests and village landscapes in China: Geographic extent, socioecological significance, and conservation prospects. *Urban Forestry and Urban Greening* 31: 79–92. [CrossRef]

Coggins, Chris. 2003. *The Tiger and the Pangolin: Nature, Culture, and Conservation in China*. Honolulu: University of Hawaii Press.

Coggins, Chris. 2014. When the Land is Excellent: Village Feng Shui Forests and the Nature of Lineage, Polity and Vitality in Southern China. In *Religion and Ecological Sustainability in China*. Edited by Jay Miller, Dan Smyer Yu and Peter van der Veer. London and New York: Routledge, pp. 97–126.

Coggins, Chris. 2017. Conserving China's Biological Diversity: National Plans, Transnational Projects, Local and Regional Challenges. In *Routledge Handbook of Environmental Policy in China*. London and New York: Routledge.

Coggins, Chris, and Tessa Hutchinson. 2006. The Political Ecology of Geopiety: Nature Conservation in Tibetan Communities of Northwest Yunnan. *Asian Geographer* 25: 85–107. [CrossRef]

Coggins, Chris, and Gesang Zeren. 2014. Animate Landscapes: Nature Conservation and the Production of Agropastoral Sacred Space in Shangrila. In *Mapping Shangrila: Contested Landscapes of the Sino-Tibetan Borderlands*. Edited by Emily T. Yeh and Chris Coggins. Seattle: University of Washington Press.

Coggins, Chris, Jesse Minor, Bixia Chen, Yaoqi Zhang, Peter Tiso, and Cem Gultekin. 2019. China's Community Fengshui Forests—Spiritual Ecology and Nature Conservation. In *Cultural and Spiritual Significance of Nature in Protected Areas*. Edited by Bas Verschuuren and Steve Brown. New York: Routledge, pp. 227–39.

Cosgrove, Denis. 2000. Geopiety. In *The Dictionary of Human Geography*, 4th ed. Edited by R. J. Johnston, Derek Gregory, Geraldine Pratt and Michael Watts. Oxford and Malden: Blackwell, pp. 308–9.

CTB (Compilation and Translation Bureau, Central Committee of the Communist Party of China). 2016. *The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China—2016–2020*. Beijing: Central Compilation and Translation Press.

Da Col, Giovanni. 2007. The View from Somewhen: Events, Bodies and the Perspective of Fortune around Khawa Karpo, a Tibetan Sacred Mountain in Yunnan Province. *Inner Asia* 9: 215–35. [CrossRef]

De Beauvoir, Simone. 1971. *The Second Sex*. New York: Alfred A. Knopf.

Deleuze, Gilles, and Felix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.

Deng, Ba. 2005. Chezong Village, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Descola, Philippe. 2013. *Beyond Nature and Culture*. Chicago and London: University of Chicago.

Dorje, Sinang. 2006. Adong Village, Deqin County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Duara, Prasenjit. 2015. *The Crisis of Global Modernity: Asian Traditions and a Sustainable Future*. Cambridge: Cambridge University Press.

Eliade, Mircea, and Laurence E. Sullivan. 1987. Hierophany. In *The Encyclopedia of Religion*. New York: Macmillan, vol. 6, pp. 313–17.

Elvin, Mark. 2004. *The Retreat of the Elephants: An Environmental History of China*. New Haven: Yale University Press.

Fan, Wei. 1992. Village Fengshui Principles. In *Chinese Landscapes: The Village as Place*. Edited by Ronald G. Knapp. Honolulu: University of Hawai'i Press, pp. 35–45.

Feuchtwang, Stephan. 2002. *An Anthropological Analysis of Chinese Geomancy*. Bangkok: White Lotus Company.

Frazier, Amy E., Brett A. Bryan, Alexander Buyantuev, Liding Chen, Cristian Echeverria, Peng Jia, Lumeng Liu, Qin Li, Zhiyun Ouyang, Jianguo Wu, and et al. 2019. Ecological Civilization: Perspectives from Landscape Ecology and Landscape Sustainability Science. *Landscape Ecology* 34: 1–8. [CrossRef]

Geall, Sam, and Adrian Ely. 2018. Narratives and Pathways Towards an Ecological Civilisation in Contemporary China. *China Quarterly* 236: 1175–96. [CrossRef]

Ghosh, Amitav. 2016. *The Great Derangement: Climate Change and the Unthinkable*. Chicago: University of Chicago Press.

Goron, Coraline. 2018. Ecological Civilisation and the Political Limits of a Chinese Concept of Sustainability. *China Perspectives* 4: 39–52. [CrossRef]

Guan, Chuanyou. 2012. *Fengshui Landscapes: The Culture of Fengshui Forests*. Nanjing: Southeastern University Publishers.

Haraway, Donna J. 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.

Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham and London: Duke University Press.

Hase, Patrick H., and Man-Yip Lee. 1992. Sheung Wo Hang: A Village Shaped by Fengshui. In *Chinese Landscapes: The Village as Place*. Edited by Ronald G. Knapp. Honolulu: University of Hawaii Press.

Heidegger, Martin. 2019. *Being and Time*. New Eastford: Martino Fine Books, First publish 1929.

Henderson, John B. 2010. Cosmology and Concepts of Nature in Traditional China. In *Concepts of Nature*. Leiden: Brill Publications, pp. 181–97.

Holbraad, Martin, and Morten Axel Pedersen. 2017. *The Ontological Turn: An Anthropological Exposition*. Cambridge: Cambridge University Press.

Huan, Qingzhi. 2016. Socialist Eco-civilization and Social-Ecological Transformation. *Capitalism Nature Socialism* 27: 51–66. [CrossRef]

Huber, Toni. 1999. *The Cult of Pure Crystal Mountain: Popular Pilgrimage and Visionary Landscape in Southeast Tibet*. Oxford: Oxford University Press.

Huber, Toni, and Poul Pedersen. 1997. Meteorological Knowledge and Environmental Ideas in Traditional and Modern Societies: The Case of Tibet. *The Journal of the Royal Anthropological Institute* 3: 577–97. [CrossRef]

Karmay, Samten. 1994. Mountain Cults and National Identity in Tibet. In *Resistance and Reform in Tibet*. Edited by Robert Barnett and Shirin Akiner. Bloomington and Indianapolis: Indiana University Press.

Kohn, Eduardo. 2013. *How Forests Think: Toward an Anthropology Beyond the Human*. Berkeley and London: University of California Press.

Kolas, Ashild. 2008. *Tourism and Tibetan Culture in Transition: A Place Called Shangrila*. London and New York: Routledge.

Latour, Bruno. 1993. *We Have Never Been Modern*. Cambridge: Harvard University Press.

Latour, Bruno. 2004. *Politics of Nature: How to Bring the Sciences into Democracy*. Cambridge: Harvard University Press.

Levinas, Emmanuel. 1987. *Time and the Other*. Pittsburgh: Duquesne University Press.

Li, Zhen, 2011. Sun Yat-sen Univeristy, Guangzhou, Guangdong, China. Personal communication.

Litzinger, Ralph. 2004. The Mobilization of 'Nature': Perspectives from North-west Yunnan. *China Quarterly* 178: 488–504. [CrossRef]

Lorimer, Jamie. 2012. Multinatural Geographies for the Anthropocene. *Progress in Human Geography* 36: 593–612. [CrossRef]

Ma, Jianzhong, and Jie Chen, eds. 2005. *Zangzu wenhua yu shengwu duoyangxing baohu [Tibetan Culture and Biodiversity Conservation]*. Kunming: Yunnan Science and Technology Press.

Makley, Charlene. 2014. The Amoral Other: State-led Development and Mountain Deity Cults Among Tibetans in Amdo Rebgong. In *Mapping Shangrila: Contested Landscapes of the Sino-Tibetan Borderlands*. Edited by Emily T. Yeh and Chris Coggins. Seattle: University of Washington Press.

Marks, Robert B. 2012. *China: Its Environment and History*. Lanham: Rowman and Littlefield.

Massey, Doreen. 2005. *For Space*. London: Sage.

Miller, James, Dan Smyer Yu, and Peter van der Veer, eds. 2014. *Religion and Ecological Sustainability in China*. London and New York: Routledge.

Moore, Jason W., ed. 2016. *Anthropocene or Capitalocene: Nature, History, and the Crisis of Capitalism*. Oakland: PM Press.

Moseley, Robert K., Sina Norbu, Ma Jianzhong, and Guo Jing. 2003. Kawagebo Snow Mountains Sacred Natural Sites Case Study. Paper presented at the Fifth World Parks Congress, Durban, South Africa, September 9–17.

Obeyesekere, Gananath. 2002. *Imagining Karma: Ethical Transformation in Amerindian, Buddhist, and Greek Rebirth*. Berkeley: University of California Press.

Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.

Paba, Aun, 2006. Nedu Village, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Quijada, Christine, 2018. Wesleyan University, Middletown, CT, USA. Personal communication.

Robbins, Paul. 2011. *Political Ecology: A Critical Introduction*. New York: Wiley.

Ruiba, Lazong, 2005. Hamugu Vililage, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Ruiba, Lazong, 2006. Hamugu Vililage, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Ruiba, Lazong, 2008. Songzanlin Monastery, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Scott, James C. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press.

Scott, James C. 2017. *Against the Grain: A Deep History of the Earliest States*. New Haven: Yale University Press.

Smyer Yü, Dan. 2015. *Mindscaping the Landscape of Tibet: Place, Memorability, Ecoasthetics*. Boston and Berlin: Walter de Guyter.

Sponsel, Leslie E. 2012. *Spiritual Ecology: A Quiet Revolution*. Santa Barbara, Denver and Oxford: Praeger.

Studley, John, and Horsley. 2019. Spiritual Governance as an Indigenous Behavioural Practice: Implications for Protected and Conserved Areas. In *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*. Edited by Bas Verschuuren and Steve Brown. London and New York: Earthscan Routledge.

Sullivan, Sian. 2010. Ecosystem Service Commodities' a new Imperial Ecology? Implications for Animist Immanent Ecologies, with Deleuze and Guattari. *New Formations* 69: 111–28. [CrossRef]

Taylor, Bron. 2010. *Dark Green Religion: Nature Spirituality and the Planetary Future*. Berkeley, Los Angeles and London: University of California Press.

Tsing, Anna Lowenhaupt. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.

Tuan, Yi-Fu. 1976. Geopiety: A Theme in Man's Attachment to Nature and to Place. In *Geographies of the Mind*. Edited by David Lowenthal and Martyn Bowden. New York: Oxford University Press, pp. 11–39.

Verschuuren, Bas, and Steve Brown, eds. 2019. *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*. London and New York: Earthscan Routledge.

Verschuuren, Bas, and Naoya Furuta. 2016. *Asian Sacred Natural Sites: Philosophy and Practice in Protected Areas and Conservation*. London and New York: Earthscan Routledge.

Verschuuren, Bas, Robert Wild, Jeffrey A. McNeely, and Gonzalo Oviedo. 2010. *Sacred Natural Sites: Conserving Nature and Culture*. London and Washington: Earthscan Routledge.

Viveiros de Castro, Eduardo. 1998. Cosmological Deixis and Amerindian. *Journal of the Royal Anthropological Institute* 4: 469–88. [CrossRef]

Wang, Xiaosong, 2006. Zhongdian, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Wangu, Pasang, and Hildegard Diemberger. 2000. *dBa' bzhed: The Royal Narrative Concerning the Bringing of the Buddha's Doctrine to Tibet*. Vienna: Verlag Der Osterreichischen Akademie Der Wissenschaften.

Weller, Robert, and Keping Wu. 2017. Overnight Urbanization and Religious Change: Non-equilibrium Ecosystems in Southern Jiangsu. Paper presented at Conference on Environmental Justice and Sustainable Citizenship, Duke-Kunshan University, Suzhou, China, May 22–24.

Wright, John Kirtland. 1966. *Human Nature in Geography: Fourteen Papers, 1925–1965*. Cambridge, Massachusetts: Harvard University Press.

Yan, Gangjun. 2014. Fengjinglin (Scenic Forests) and the Beauty of the Jiangxi Countryside. *Forests and Humankind* 294: 40–49.

Yangzong, 2006. Jisha Village, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Yeh, Emily. 2014a. Reverse Environmentalism: Contemporary Articulations of Tibetan Culture, Buddhism, and Environmental Protection. In *Religion and Ecological Sustainability in China*. Edited by Jay Miller, Dan Smyer Yu and Peter Van der Veer. London and New York: Routledge, pp. 97–126.

Yeh, Emily. 2014b. The Rise and Fall of the Green Tibetan: Contingent Collaborations and the Vicissitudes of Harmony. In *Mapping Shangrila: Contested Landscapes of the Sino-Tibetan Borderlands*. Edited by Emily T. Yeh and Chris Coggins. Seattle: University of Washington Press.

Yeh, Emily, and Chris Coggins, eds. 2014. *Mapping Shangrila: Contested Landscapes of the Sino-Tibetan Borderlands*. Seattle: University of Washington Press.

Youatt, Raffi. 2017. Personhood and the Rights of Nature: The New Subjects of Contemporary Earth Politics. *International Political Sociology* 11: 39–54. [CrossRef]

Zeren, Gesang, Lazong Ruiba, 2004. Hamugu Village, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Zeren, Gesang, 2005. Hamugu Village, Shangrila County, Diqing Tibetan Autonomous Prefecture, Yunnan, China. Personal communication.

Zhang, Juwen. 2004. *A Translation of the Ancient Chinese: The Book of Burial (Zang Shu) by Guo Pu (276–324)*. Lewiston: Edwin Mellon Press, pp. 58–74.

Article

The Reincarnation of Waste: A Case Study of Spiritual Ecology Activism for Household Solid Waste Management: The Samdrup Jongkhar Initiative of Rural Bhutan

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Abstract: As rural and subsistence households in the Global South take on the consumption habits of industrialized countries, shifting consumption patterns have contributed to cascades of nonbiodegradable solid waste overwhelming the ability of households, municipal authorities, and governments to manage. As global capitalism expands around the world, spiritual ecology approaches to waste and pollution can provide deeper insight into the attitudes and practices that create a "throw away" society. In rural southern Bhutan, the revered Buddhist teacher, Dzongsar Jamyang Khyentse Rinpoche, initiated a waste reduction project based on Bhutan's guiding development philosophy of Gross National Happiness. Through engaging cultural and spiritual values, and drawing on the inspirational qualities of social and spiritual leaders, the Samdrup Jongkhar Initiative's Zero Waste project is an example of spiritual ecology activism for household waste management and waste reduction.

Keywords: solid waste management; Vajrayana Buddhism; Bhutan; rural development; re-use; waste reduction; domestic waste; materiality; waste transformation; discard studies; reincarnation

1. Introduction

In cultural traditions across Asia, a spiritual connection with nature has been emphasized to support environmental protection and ecological goals. Rivers are worshipped as living goddesses (Drew 2012) and believed to be self-purifying (Alley 1994; Haberman 2006). Mountains are revered as the divine axis mundi around which life revolves, or as manifestations of deities, and glaciers are perceived as responding to moral infractions (Bernbaum 2006; Allison 2015). Trees have been ordained, hugged, and worshipped to protect them from the ravages of commodification in the global capitalist milieu (Darlington 2012; Shiva 1988; Guha 2000; Maathai 2010; Greenberg 2015). In the iconic Chipko peasant movement of the Garhwal Himalaya, peasant women hugged trees in defense of traditional rights to the forest, while drawing moral and spiritual strength from reading of the Bhagavad Gita (Guha 2000; Shiva 1988). Spiritual perspectives on ecology share an extension of an ethic of care beyond the human community to other life forms and biotic communities.

A connection to life and life-like processes—what the ecologists E.O. Wilson and Stephen R. Kellert have termed biophilia (Kellert and Wilson 1993)—is increasingly identified and elevated in contemporary expressions of religious traditions around the world (Grim and Tucker 2014; Tucker 2003). Such beliefs and practices are frequently understood within the rubric of "spiritual ecology", an umbrella term to describe the internal, subjective, emotional, mystical or religious connections that people experience in relation with ecology, the environment, and nonhuman nature

(Sponsel 2012; Vaughan-Lee 2013; Taylor 2007).[1] A central commitment of spiritual ecology is the understanding that "the universe is a communion of subjects rather than a collection of objects ... Existence itself is derived from and sustained by this intimacy of each being with every other being of the universe" (Swimme and Berry 1992, p. 243). This view emphasizes the ontological relationality of all subjects with each other, suggesting that any being is lessened by the loss of any of its relationships with others. The interrelatedness of Earthly bodies is then central to spiritual ecology. Spiritual ecology studies and activism have tended to focus on those living bodies that comprise the "communion of subjects", emphasizing interactions among and between humans and other living beings.

1.1. The Social Role of the Discarded

The material qualities and limitations inherent in bodies necessarily shape interactions with the biosphere. But what of those materials and bodies that are deemed to be polluting, impure, or nuisances that are denigrated and excluded from dominant systems (Bauman 2019)? Discourses of spiritual ecology have not fully grappled with the "remainder", that which is considered to be excess, inappropriate, or excised from dominant systems. The excess, or what is rejected from a system, is the negative image of that which is included in the "communion of subjects". Spiritual ecology reflection on material bodies must also consider that which human societies abject or reject: those people or organisms as well as the materials humans create and then discard.

Many of the world religions create and monitor boundaries that separate pure from impure, pristine from polluted, the valuable from the abject, thus contributing to beliefs about purity and pollution (Douglas 1966; Turner 1969; Kristeva 1982). While issues of ritual or symbolic purity and pollution may appear to be categorically distinct from issues of material pollution, litter, and waste, the anthropologist Mary Douglas argues that dirt represents disorder, in so-called primitive societies as well as in "advanced" societies (Douglas 1966, p. 2). Social efforts to "dispel dirt" are equivalent to efforts to maintain the boundaries of society. This analysis compels the field of spiritual ecology to take a deeper look at the roles of religions in creating, understanding, and addressing the discarded material remnants of human societies.

The field of "discard studies" examines the social and cultural aspects of waste, refuse, and decisions to discard (Evans 2014; O'Brien 2011; Hawkins 2010; Douny 2007; Gille 2007; Rathje and Murphy 2003; Thompson 1979). Concepts of waste are not fixed, but are inherently social, relational, and contextual, shaped by the norms of a particular time, place, and society. Although categorization and classification are universal acts, they are hardly universal in content (Foucault 1971). For example, in the "recycled cosmology" of the Dogon of Mali, positive connotations attach to things like animal excrement, food residue, smoke, bodily dirt, and litter that appear to Western eyes to be worthless or unclean (Douny 2007). Conceptualizing waste requires addressing the materiality of what is unneeded or out of place, along with considerations of the social work that concepts of waste, garbage, and refuse perform. If efforts to dispel that which is undesirable–understood as material or social disorder–maintain order in society, conceptions of waste perform political work to influence the behavior of others, and also police the symbolic boundaries necessary to maintain social order (Douglas 1966; Kaviraj 1997; Gille 2007; Nagle 2009). In separating out that which is undesirable, waste designations are ultimately about where and how a society locates value. Those items or materials perceived as waste are lacking in current value. This uni-directional trajectory of waste is profoundly anti-ecological, and ultimately

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[1] The study of human religious and spiritual perspectives on nonhuman nature goes by a number of names, including spiritual ecology, religion and ecology, and religion and nature (Sponsel 2012; Tucker and Grim 2001; Taylor 2010). Each of these terms has its own proponents and offers a slightly different valence. Parsing the differences between various ways of articulating a spiritual human-nature relationship is not the purpose of this article, so I will stick with the term "spiritual ecology," the theme of this special issues, with the understanding that the term is used broadly to include the fields of inquiry known as religion and ecology, and religion and nature.

wasteful, in the sense of being improvident, because resources are segregated away from larger cycles of regeneration.

1.2. Buddhist Approaches Transmuting Waste

While many religious traditions emphasize the separation of pure from impure, Vajrayana Buddhism recognizes the importance of sensory existence as a source of revelation, inspiration, and enlightenment (Ray 2000, p. 2). Vajrayana Buddhism embraces the existence of that which is negative, aversive, or offensive, and seeks to dissolve dualistic perceptions through wisdom and skillful means, transmuting obstacles into tools on the path to enlightenment. Ritual practices can dissolve dualistic perceptions that cause aversion, inviting the practitioner into a broader conception of existence.

In a highly innovative approach to waste management through spiritual ecology, the renowned Buddhist teacher Dzongsar Jamyang Khyentse Rinpoche launched the Samdrup Jongkhar Initiative (SJI), a project to enhance livelihoods, reduce waste, and slow rural-to-urban migration in rural southeastern Bhutan. The Samdrup Jongkhar Initiative works to put Bhutan's "Gross National Happiness Development philosophy into action on the ground and at a grassroots level, as a model for the rest of the country" through initiatives that support rural livelihoods, promote a democratic culture, and care for the natural environment, bringing about a "zero waste culture" (SJI 2018a). Drawing on Bhutanese cultural traditions of thrift, creativity, and artisanry, as well as Buddhist values, SJI strengthens self-reliance in rural Bhutan. Embracing the nondual perspective of Vajrayana Buddhism, the project helps villagers re-identify the value inherent in household materials perceived as waste, and restores these materials into the circulation of matter.

Dzongsar Jamyang Khyentse Rinpoche, also known as Khyentse Norbu, is understood to be a *tulku*, or reincarnation a previous Buddhist teacher, Dzongsar Jamyang Khyentse Chökyi Lodrö (1894–1959), a position that commands great honor and respect.[2] Though free of the wheel of *samsara*, the unending cycle of birth and death, a tulku manifests within samsara in accordance with local conditions.[3] A traditional metaphor provides insight into the general understanding of the tulku: the appearance of tulkus from the timeless ground of wisdom is like the moon effortlessly manifesting as many appearances of itself as there are pools of water to reflect it.[4] Recognized for numerous charitable efforts and foundations to promote the Buddha dharma and improve the lives of Himalayan peoples, Rinpoche is known around the world for his teachings, popular books, and production of four critically-acclaimed popular films.[5]

Heralding the spiritual ecology approach of the project, Rinpoche launched SJI at Chökyi Gyatso Institute, a *shedra* or monastic college that began as a small temple built by Dzongsar Khyentse

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[2] Dzongsar Jamyang Khyentse Chökyi Lodrö was one of the primary gurus of the meditation master and scholar Dilgo Khyentse Rinpoche (1910–1991), who was a teacher of His Holiness the Dalai Lama and the lineage holder of the Nyingma school of Vajrayana Buddhism. When Dilgo Khyentse Rinpoche first met his guru's reincarnation, Dzongsar Jamyang Khyentse Rinpoche, as a young boy, he is reported to have wept tears of joy and devotion as he perceived the contemporaneous presence of his guru (Ray 2002, p. 399).

[3] A tulku is one who has carefully chosen their rebirth by exercising thoughtful and deliberate choice to benefit sentient beings (Kyabgon 2015, p. 71). While tulkus are generally understood to be expressing wisdom, rather than ego, and to be the re-appearance of a previous holy person, tulkus seem to have a wide range of spiritual attainment (Ray 2002, p. 374). Tulku Thondup identifies three types of tulku: (1) the manifestations of the Buddha who serve beings through their fully enlightened power; (2) the manifestations of highly accomplished adepts who appear through their highly realized wisdom; and (3) rebirths of virtuous teachers or *lamas* who are fulfilling their own spiritual goals (Thondup 2011, pp. 1–2). Trungpa Rinpoche offered a different tripartite typology, consisting of (1) the tulku who occupies the position more in name than in fact, and who has been chosen in the present life to carry out particular social, religious, and political functions; (2) the "blessed tulku", a being far along the bodhisattva path, who is chosen by the previous incarnation to receive a transmission of spiritual energy from the predecessor; (3) the "direct tulku", a bodhisattva of a high level who takes reincarnation repeatedly to aid sentient beings (Ray 2002, pp. 374–78).

[4] Aaron Weiss, a doctoral candidate in Tibetan Buddhism at the California Institute of Integral Studies, kindly shared this metaphor.

[5] The films are: *The Cup* (1999); *Travellers and Magicians* (2003), the first full-length feature film shot in Bhutan, which featured Tshewang Dhendup, a Bhutanese journalist, actor, and producer, who later became the Executive Director of the Samdrup Jonkhar Initiative; *Vara: A Blessing* (2013); and *Hema Hema: Sing Me a Song While I Wait* (2016).

Rinpoche's maternal grandfather, the late Lama Sonam Zangpo, in Dewathang, Samdrup Jongkhar in 2010. The Prime Minister Lyonchhen Jigmi Y. Thinley, one of the chief architects of the Gross National Happiness paradigm, delivered the keynote address. Over the course of three days, experts in organic farming and sustainable practices, included Dr. Vandana Shiva, presented public talks (SJI 2018b).

This article presents the Samdrup Jongkhar Initiative, and particularly its Zero Waste Project, as a case study of spiritual ecology activism. Through the discussion of this unique case, salient factors of spiritual ecology activism can be identified which can contribute to theory generation (Yin 2003). In developing this case study, I triangulate multiple data sources to demonstrate the cultural context in which the project arose, and to highlight aspects of the project that have contributed to public engagement and subsequent household waste diversion.

Beginning with the cultural, political, and ecological context, the article discusses the particular intersection of spirituality and ecology in Bhutan. The article then discusses historical waste management practices in Bhutan, and identifies a sudden shift in the late 20th century in the sources and composition of the waste stream, which gave rise to a waste crisis that threatened ecological and economic sustainability. Government efforts to address this emerging waste crisis were seen as incompletely effective. While national and municipal governments struggled to engage citizens in new practices of waste management, the spiritual ecology approach of SJI, instigated by a revered, charismatic religious leader, incorporated and expressed local values to ignite greater public awareness of and engagement with waste management. The project evinced a systemic and interconnected view of human and ecological well-being, promoting the conditions that support the flourishing of both.

2. Methodology

This article builds on ethnographic field research on the influence of religion on environmental management conducted over the course of six visits to Bhutan, ranging in length from one to seven months, totaling fourteen months between 2001 and 2008. During eight months of sustained ethnographic fieldwork in 2007–2008, I researched attitudes and practices of household waste management in the context of local religious beliefs and practices as a participant observer with the Ministry of Works and Human Settlements. With the assistance of three primary research assistants who provided translation for interviews conducted in languages other than English, I interviewed 105 people throughout six of Bhutan's twenty districts. Interview transcriptions, ethnographic descriptions, and newspaper articles were sorted and coded in the qualitative analysis software program ATLAS.ti to generate analytical categories for the production of grounded theory (Glaser and Strauss 1967; Lofland and Lofland 2006, pp. 186–97) regarding the influence of religion on environmental management. This ethnographic data regarding historical and contemporary attitudes and practices related to religion and waste management provides the foundation for this paper.

This qualitative case study is intended to show how a waste management project that harmonized with local beliefs, practices, and values inspired local engagement and commitment. The construction of a case study calls for multiple data sources, including documents, archival records, interviews, direct and participant observation, and artefacts (Yin 2003). These sources come together with news articles, project websites, scholarly and grey literature to provide perspective on recent developments in Bhutan. Since 2008, I have continued to study issues of religion and environmental management in Bhutan through digital ethnography using unobtrusive observation of extant social media and internet posts (Salmons 2018). In developing and analyzing the present case study, I highlight factors that program staff and evaluators identified as salient to the success of the project, as well as those aspects of the project that resonate with themes that emerged from my earlier interviews including religious and spiritual perspectives, perceptions of waste, and methods and motivations for addressing it. My analysis is further informed by my previous professional experience managing a waste education and reduction program in Marin Country, California, as well as literature on effective organizations (e.g., Scharmer 2009; Collins and Porras 1994; Senge 1994). The guiding question here is: how are religious

concepts, language, images, and practices incorporated into or reflected in environmental management policies and practices?

3. Spiritual Ecology of Bhutan

The kingdom of Bhutan buffers its two gigantic neighbors, India and China, across the ridge of the Himalaya mountains. The last remaining Mahayana Buddhist kingdom, persisting after India annexed Sikkim and Ladakh, and China absorbed Tibet, Bhutan promotes its Buddhist heritage, the religio-cultural background of about three-quarters of the population of 735,553 (RGOB 2018a), as essential to national identity. Bhutan's Constitution, adopted in 2008, identifies Buddhism, which "promotes the principles and values of peace, non-violence, compassion and tolerance", as the "spiritual heritage" of Bhutan in Article 3: Spiritual Heritage, while granting freedom of religion (RGOB 2008a, p. 9). The importance of Buddhism to the culture of Bhutan is further explicated in Article 4: Culture, which requires the State to "endeavour to preserve, protect and promote" sacred places like Buddhist temples and pilgrimage sites. The government supports the National Monk Body of the *Drukpa Kagyu* school, the dominant school of Buddhism in western Bhutan. In eastern Bhutan, the *Nyingmapa* ("old") school of Vajrayana Buddhism is more influential. In addition to the Buddhist majority, about one-quarter of the Bhutanese are Hindu, primarily living near the southern border with India.[6]

Bhutanese government documents and popular discourse articulate a connection between spirituality and ecology based in the dominant ethos of Vajrayana Buddhism. Bhutan is "one of the most peaceful countries in the world and is considered a champion of the environment" (RGOB 2019). Explicating the cultural values that shape interaction with the natural environment, *Bhutan 2020*, a guiding vision document, identifies "formal and informal rules and norms" that teach people to "interpret nature as a living system in which we are part" (RGOB 1999).[7] The Foreword to *The Middle Path: National Environment Strategy for Bhutan* begins by identifying the ancient relationship between people and their environment, asserting "Buddhism and animism reinforced this traditional conservation ethic and promoted values such as respect for all forms of life and giving back to the Earth what one has taken away" (RGOB 1998, p. 12).

3.1. Gross National Happiness as an Economic Development Paradigm

The integral connection of religion, spirituality, and ecology is further developed in Bhutan's guiding development paradigm. Bhutan's Gross National Happiness (GNH) development paradigm seeks to balance socio-economic development with environmental conservation, cultural preservation, and good governance. These four "pillars" make clear that socioeconomic development represents only one-quarter of the necessary conditions for the promotion of GNH. Rather than being a central metric for measuring progress, economic development is part of a constellation of metrics. The fourth king, Jigme Singye Wangchuk, who ruled from 1972 to 2006, asserted his preference for "Gross National Happiness" as a measure of domestic well-being over "Gross National Product", challenging prevailing economic development theories (Munro 2016). In the late 1990s, the Prime Minister, Jigme Y. Thinley, promulgated the idea of Gross National Happiness as a development paradigm in international speeches. In emphasizing a preference for Gross National Happiness, the architects of the new development paradigm built on earlier Bhutanese social and political thought based in the 1200-year history of Buddhism in Bhutan.

While Gross National Happiness has garnered global attention as a development approach that does not reduce all of human endeavor to a single economic statistic, bringing the components of GNH into

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[6] The *Lhotsampa* of Nepali ethnicity have been subject to marginalization and persecution, resulting in a mass exodus to refugee camps in Nepal in the 1990s, and resettlement in third countries during the early 2000s. See Michael Hutt's *Unbecoming Citizens* (Hutt 2003) for a discussion of this contentious situation.

[7] As of 2019, a new guiding vision document was in preparation that would set out a vision for "for the next 100 years or at least for one lifetime" (RGOB 2019).

harmony has not always been straightforward. As some socio-economic indicators have increased, newly available consumer products have led to a decline in other parameters of GNH. In reviewing the progress made toward Gross National Happiness development goals, a 2011 report observed the decline of Bhutan's cultural traditions and environmental conservation: "Changes in traditional social value systems are already quite noticeable and becoming increasingly manifest in social behavior such as rising trends of ostentatious consumerism, drug abuse among youth, delinquency, desecration of temples and religious edifices, etc. Traditional values that once were the basis of the sound environmental conservation practices are possibly eroding and economic values, to an extent, are gradually overshadowing considerations for the natural environment" (RGOB 2011, p. 30).

3.2. Maintaining Ecological Quality

Yet, maintaining the quality of the natural environment is a "fundamental duty of every citizen" according to Article 5 of the Constitution, which requires citizens to "contribute to the protection of the natural environment, conservation of the rich biodiversity of Bhutan and prevention of all forms of ecological degradation including noise, visual and physical pollution through the adoption and support of environment friendly practices and policies" (RGOB 2008a). Bhutan's environmental conservation record is notable in the region: estimates place forest cover at 60 to 70% (Bruggeman et al. 2016), better than the 60% required in the 2008 Constitution. In addition to maintaining its forests and biodiversity, which has allowed it to become carbon negative, absorbing more carbon than it emits, Bhutan is seeking to convert all its agriculture to organic processes and to become a "zero waste" country by 2030 (Gyem 2019).

The obligation to prevent "ecological degradation, including noise, visual and physical pollution" has become a greater challenge in the past three decades, as economic development and greater integration into global markets have provided new material abundance that contributed to proliferating uncontrolled household waste by the early 2000s. Governmental and non-governmental agencies initiated studies, policies, and programs, seeking to harness extrinsic motivation to address solid waste, defined in the Waste Prevention and Management Regulation 2012, "**Waste**—means any material or substance in whatever form, whether solid, liquid, or gaseous, hazardous or non-hazardous, organic or inorganic that has lost its primary value and is disposed of, intended to be disposed of or recycled" (RGOB 2012a, p. 59; bold in the original).

In disavowing waste and separating it from centers of activity, waste materials are imagined to disappear into some unseen "away". In Bhutan's Waste Prevention and Management Regulation 2012, "**Disposal**—means the deposit, dumping, spilling, leaking, or placing of any kind of solid waste into or on any land or water so that such waste or any constituents thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters" (bold in the original), which could include an open[8] or controlled[9] dump site, incinerator[10], or sanitary landfill[11] (RGOB 2012a, p. 53). However, despite these efforts to address the waste crisis, uncontrolled litter continued to proliferate, much to the consternation of the government (Allison 2014).

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[8] "Open dump—means an open solid waste disposal site with minimal engineering and maintenance requirement which may be closed or upgraded with additional engineering and structural addition" (RGOB 2012a, p. 56; bold in the original).

[9] "Controlled dump—refers to a disposal site at which solid waste is deposited in accordance with the minimum prescribed standards of site operation . . . Disposal site—means an open dump or sanitary landfill site approved under this Regulation." (RGOB 2012a, p. 53; bold in the original).

[10] "Incinerator—means any structure or furnace in which controlled combustion of waste takes place which is implemented as a final disposal of waste or part of material recovery technique" (RGOB 2012a, p. 55; bold in the original).

[11] "Sanitary landfill—means a disposal site with specified criteria for its engineering design, maintenance requirement for specific waste type for the health and environment" (RGOB 2012a, p. 58; bold in the original).

3.3. The Organic Metabolism of Rural Livelihoods

Overwhelmingly rural until the late 20th century, and still included on the United Nations list of world's least developed countries, Bhutan has experienced greater socio-political change in the past fifty years than in the previous 500 years (Phuntsho 2013, p. 583). Historically, sparsely-populated rural subsistence farmers produced little that could not be returned to the land to decompose, returning nutrients to the land. Dispersed disposal of organic materials in the forests and fields was a sort of in situ composting that embedded villagers in the metabolism of the landscape. Bhutan's cultural traditions exemplified the habits and practices that are now termed "zero waste".

Manufactured consumer products were rarely available in the rural areas through the 1990s and into the early 2000s. Villagers' ingenuity and thrift devised useful second lives from the few manufactured products that were available. Like the concepts of karma and rebirth central to Vajrayana Buddhism–in which the karma, or fortune, accumulated during a lifetime would influence one's rebirth in the next lifetime–each item took multiple trajectories, moving from one useful phase to another. Plastic and glass bottles stored the famous distilled *arra* homebrew, cooking oil, or milk; plastic bags were used for carrying lunch to the agricultural fields; rice sacks were universally valuable for corralling supplies to be transported from one village to the next (Allison 2014). Old clothing was used to make scarecrows to frighten wildlife away from crops, as well as pillows or children's clothes. Even spent flashlight batteries could be used for drawing black lines, measurements, patterns, and black paint, which can be used for prayer flags or painting houses. Intact bottles were either reused or taken by a scrap collector, who paid one or two *ngultrums*[12] per bottle (Allison 2008).

Household goods were handcrafted from local organic materials to be beautiful, useful, and durable. Nearly every item needed for rural daily life–from baskets, to clothing, to construction–had been attentively elevated into an art form, feeding the need for beauty as well as usefulness. These traditional arts and crafts were codified into the "thirteen traditional arts and crafts" (*zorig chusum*)[13] of Bhutan, believed to have been established by Tenzin Rabgye (1680–1694), the fourth *Desi* (ruler) in the 17th century, an origin that weaves religion into daily life. Durability was prized over disposability. Items that ceased to function as intended were returned to the forest floor to decompose. In this way, artisanal household products could later experience a rebirth as nutrients for medicinal herbs, animal fodder, and forest products. Embedded within Bhutan's cultural practices were a range of habits that prevented the creation of extraneous waste: manufactured items were creatively re-used; artisanal items were valuable and durable.

4. Economic Development, Modernization, and Unintended Consequences

Within living memory, Bhutan has transformed from a nearly roadless feudal kingdom where Buddhist monasteries were the only public institutions, to an international thought-leader in environmental conservation and alternative economic and human development theories. Throughout its economic development and transition to a modern state, Bhutan has been guided by India. India has been the chief provider of economic development assistance and remains Bhutan's largest trading partner. The Indo-Bhutan Treaty of 1949 established free trade and commerce between the two countries, allowed India to guide Bhutan in external affairs, and provided a subsidy of 5 lakh[14] rupees to Bhutan (Phuntsho 2013, p. 562). Following the visit of India's Jawaharlal Nehru in 1959, Bhutan began modernization and national road construction. With Indian support for a succession of five-year plans, Bhutan built 1770 kilometers of motorable road during the first five-year plan (1961–1966),

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[12] The *ngultrum* is the primary unit of Bhutanese currency. It is subdivided into 100 *chetrum*. The ngultrum is pegged to the Indian rupee, at a one-to-one value. At the 31 July 2019 exchange rate, one ngultrum is equivalent to $0.015 USD.

[13] The thirteen traditional arts and crafts are drawing and painting, sculpture, papermaking, calligraphy, casting, construction, masonry, carving, wood-turning, blacksmithing, gold- and silver-smithing, tailoring (including embroidery and applique), and weaving.

[14] One hundred thousand, an Indian unit of measurement for large sums.

instituted its postal service, and began offering secular education. In 1959, eleven secular schools enrolled 440 students; by 1966, the number of schools had increased nearly ten-fold to 108, with 15,000 students enrolled (Phuntsho 2013, p. 587). The Trade and Commerce Agreement of 1995 further updated and maintained free trade between the two countries. In the 21st century, around 90% of exports from Bhutan went to India, the source of three-quarters of all imports (RGOB 2012b).

With Bhutan's economy so closely connected to India's, changes in the Indian economy greatly affect Bhutan. When India liberalized its economy in 1991, allowing greater access to private and foreign investment, as well as international trade and imported products, the consequences were felt strongly in Bhutan. A proliferation of manufactured products suddenly appeared in the marketplace.

A well-known Bhutanese historian and author recalled in an interview:

> "The problem happened suddenly. Before, there was no waste. There were only subsistence farmers. We got things from the garden, and stored them in the basement and the attic. Nothing was packaged. Now the main waste from households is food and food packaging. In Bumthap, we call it *jolepa*–the food waste for animals. The change wasn't slow. It was just overwhelming. The availability [of packaged food] came quickly, there were no facilities, no preparation . . . People my age can remember when we didn't have soap. We used leaves and berries. Convenience is a seductive quality". (interview in English with the author, Thimphu, 26 March 2008)

The introduction of processed packaged food, international fashions, and electronic gadgets increased the throughput of short-lived items destined to become waste (Dorji 2006). Shops on Thimphu's Norzin Lam, the main street of the capital, previously dedicated to fabric, sewing notions, religious and ritual objects, became filled with plastic bottles of shampoo and hair dye, disposable razors, dishwashing liquid and plastic sponges, Wai Wai noodles, and all manner of snacks in colorful plastic packaging.

The appearance of these new items represented a major shift in the material culture of Bhutan. New exogenous categories of materials baffled Bhutan's traditional disposal systems of decomposition and re-use. In rural areas, health workers and teachers advised villagers to dig pits in which to bury or burn non-biodegradable waste materials. However, adherence to this method of waste disposable was intermittent at best and failed to truly address the problem of nonbiodegradable waste. The influx of non-biodegradable materials and habits of consumerism was not accompanied by a concomitant practice for managing materials that had outlived their useful lives. As the historian Karma Phuntsho observed: "People initially fell for the new, light, cheap and weather-proof materials [plastic and other synthetic materials] but their attraction is slowly fading away as the non-biodegradable synthetic materials outlast their use, clogging drains or littering even remote sacred sites" (Phuntsho 2013, p. 587). Central to understanding waste is its *materiality*–the specific physical qualities of waste in a particular context (Gille 2007). The material qualities of new waste forms resisted traditional practices, creating new problems such as befouled sacred sites, and clogged drains, especially problematic during the summer monsoon season. With no systematic way to incorporate exogenous materials into the comprehensive organic worldview, the new nonbiodegradable materials were ignored and disavowed. The increasing prevalence of non-biodegradable waste materials quickly overwhelmed Bhutan's historical practices of household waste management: thrift, in situ composting, creative re-use, and cherishing of artisanal items.

4.1. Uncontrolled Waste as a Threat to Economic Development

By the early 2000s, the lack of formalized waste disposal systems was causing household waste, comprising an estimated 70–80% of the waste stream, to be disposed of in Bhutan's rivers and forests (UNEP-RRCAP 2001), threatening Bhutan's identity as an environmental exemplar. Bhutan's reputation as "clean and green" tourist destination made the rectification of the situation economically imperative as well. At a 2005 World Environment Day presentation to government and NGO leaders, Lyonpo

Kinzang Dorji, the Minister of the Ministry of Works and Human Settlement, warned that litter and uncontrolled solid waste threatened Bhutan's reputation as a "green" destination (Dema 2005). Tourists, important to Bhutan's economic growth, were complaining that garbage on the footpaths, open sewers, and indiscriminate littering were interfering with their enjoyment of tourism in a nation positioned as a spiritual and environmental exemplar (Rai 2007; RGOB 2007; Dendup 2008; editorial 2008).

Tourism, an important source of foreign exchange, has been a steadily growing industry in the 21st century, increasing tenfold between 2008 and 2017 (RGOB 2008b, 2018a). The "high value, low volume" tourism policy that prevailed at the end of the 20th century was relaxed to a "high value, low impact" standard, allowing Bhutan to welcome 254,704 tourists in 2018, nearly 1 for every three citizens, which contributed nearly $80 million USD to the approximately $2.4 billion USD gross domestic product in 2017, or about 3% of GDP, comparable to the contributions of the forestry sector, but far less than electricity generation and water supply, which accounted for 13% (RGOB 2018a, 2018b). The dispersed disposal of waste was destroying Bhutan's most valuable assets: its relatively pristine forests, threaded with trekking destinations and day hikes, and age-old cultural institutions (Dendup 2016).

4.2. Ecological Modernization and Its Deficiencies

Globally dominant approaches to waste management draw on theories of ecological modernization, a technologically-optimistic management paradigm that relies on expansive human ingenuity to continually devise improved technology to address environmental harms (Allison 2016; Mol and Sonnenfeld 2000). Ecological modernization theory, developed by European social scientists in the 1980s, suggests that environmental concerns can be incorporated into the project of modernity, woven into existing social practices of neoliberal capitalism and governance through technological innovation, requiring no major overhaul of these systems (Mol and Sonnenfeld 2000; Spaargaren and Mol 1992). Ecological modernization theory supports efforts to apply rational "management" to the environment, to address environmental concerns through private sector innovations in manufacturing and disposal, and to "improve" the environment through large-scale infrastructure projects like dams, power plants, and waste incinerators which decrease litter but increase air pollution (Buttel 2000).

Bhutanese government officials absorb these globally-dominant ideologies through education at universities in Australia, USA, and UK, and through collaboration with European development organizations. The adoption of ecological modernization theories has the benefit of building on existing research and policy, but may not adapt to local conditions. As the waste researcher Taylor Cass Stevenson notes, "Officials involved in the creation and enforcement of Bhutan's waste regulations admitted that some aspects of the regulation were likely brought in from abroad, though couldn't cite specific examples" (Stevenson 2013, p. 53).

In this way of thinking, technology is deterministic; increasing technology is the best way to address ecological concerns (Spaargaren and Mol 1992, p. 336). In Bhutan, government agencies and foreign donors favored purchase of expensive technology, such as garbage compactor collection trucks, concrete waste collection bins, and machinery for a municipal scale composting plant (whose construction and operation were plagued by delays and mismanagement, resulting in a short-lived facility) over less material-intensive interventions like education, community-level composting, and traditional reuse practices. The waste researcher Stevenson learned from a World Bank representative visiting Bhutan that "the World Bank would only be interested in easily quantifiable technological assistance aimed at waste treatment rather than education or waste prevention initiatives" (Stevenson 2013, pp. 54–55).

It is only by contrasting ecological modernization with other eco-social theories that prioritize different values–such as, for example, deep ecology which emphasizes the interconnected nature of life–that the pitfalls of ecological modernization come into sharp relief. Ecological modernization privileges the technologically connected and adept, and lacks intrinsic value for nonhuman nature. Ecological modernization emphasizes a single dimension of human life–technological ingenuity–at the expense of all other aspects of the multi-faceted experience of being human. This paradigm prioritizes the experience of the world's "haves"–who have been called WEIRD (Western, educated, industrialized,

rich, and democratic)–while ignoring the varied complexity of the human experience across a diversity of cultures and environments. Ecological modernization does not recognize spiritual and religious perspectives on human life, and leaves untouched the harms that late modern capitalism imposes on nonhuman nature and poor and marginalized human communities. In Bhutan, technological improvements designed to corral and contain waste, including the introduction of garbage collection trucks and the installation of steel collection drums around town, while necessary, were not sufficient because they did not address the social and relational nature of waste (Allison 2014).

5. A Buddhist Spiritual Ecology of Waste

An approach to waste management that harmonizes more closely with Bhutanese cultural and religious values was introduced in the rural southern district of Samdrup Jongkhar by a revered Buddhist teacher. In contrast to waste management initiatives that had appeared to be "fragmented" or "atomistic" (Stevenson 2013, p. 33), this comprehensive rural development program included waste reduction as one component of a holistic approach to rural livelihoods. Through the civil society organization that he created, Dzongsar Jamyang Khyentse Rinpoche sought to advance livelihoods and well-being according to the Buddhist values enshrined in Bhutan's guiding development philosophy of Gross National Happiness. The Samdrup Jongkhar Initiative's Zero Waste project is an example of spiritual ecology activism for household waste management and waste reduction. By engaging cultural and spiritual values, and drawing on the inspirational qualities of social and spiritual leaders, the project was able to inspire villagers to address household waste management.

Dzongsar Jamyang Khyentse Rinpoche, a revered and internationally-known Bhutanese Buddhist teacher and tulku, understood to be the reincarnation of a previous Vajrayana Buddhist teacher,[15] created the Lho Mon Society in 2010 and registered it as a civil society organization in 2012. Among the projects of the Lho Mon Society is the Samdrup Jongkhar Initiative, which works to improve rural livelihoods, strengthen communities, and protect the natural environment in Samdrup Jongkhar dzongkhag, a district in southeastern Bhutan, in accordance with Bhutan's guiding development philosophy of Gross National Happiness (SJI 2018a). Taking a holistic approach to rural livelihoods and well-being, the project infuses principles of Gross National Happiness and ecological sensitivity into development activities, including organic agriculture, appropriate technology, waste reduction, and youth engagement, to strengthen self-reliance and food security, with a larger goal of slowing rural to urban migration.

The website of Rinpoche's organization, the Lho Mon Society,[16] observes: "Bhutan is facing a tidal wave of consumerism, conflicts, and waste that comes with modernization. There is no turning back and no way to keep the floods at bay. Through Lho Mon's grassroots initiatives, we are creating small islands of refuge, beacons to guide, and essential skills training to help the people chart a sustainable course that encourages equitable economic development, environmental conservation, cultural promotion, authentic education, and good governance". This purpose statement identifies the problem of waste in Bhutan, and implicitly links it with the Buddhist concept of "three poisons"–greed, ignorance or delusion, and hatred–that provoke consumerism and conflict. In proposing to provide "small islands of refuge", the Lho Mon Society harkens to the Vajrayana Buddhist idea of the *beyul* (Tib.:

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[15] Dzongsar Jamyang Khyentse Rinpoche, whose honorific title means "precious teacher", is heir to an important Buddhist lineage. He is the son of Buddhist teacher Thinley Norbu Rinpoche, and grandson of the influential Dudjom Rinpoche. At age seven, Dzongsar Jamyang Kyenste Rinpoche was recognized as the main incarnation of Dzongsar Jamyang Khyentse Chökyi Lodrö (1894–1959). In addition to his secular education, Rinpoche has studied with a number of contemporary Buddhist masters, including H.H. the 16th Karmapa; H.H. Dudjom Rinpoche and Lama Sonam Zangpo (his paternal and maternal grandfathers); Chatral Rinpoche; Nyoshul Khen Rinpoche; and Khenpo Appey. He is a leader of the Rime (nonsectarian) movement for Vajrayana Buddhism, and the guardian of the teachings of the Dzogchen master Jamyang Khyentse Wangpo.

[16] In Dzongkha, the national language of Bhutan, *lho* is "south" and *mon* refers to the people living south of the Tibetan Plateau, which includes Bhutan, Assam (India) and Burma. According to the website, this name was chosen to indicate that people are united not only by political borders but also by ecological regions. https://www.sji.bt/the-lhomon-society/.

sbas yul), or sacred hidden valleys found throughout the Himalaya, believed to have been hidden by the great Buddhist teacher and second Buddha, Guru Rinpoche, as sites of refuge for Buddhists during future times of trouble. The final clause of the statement echoes the four pillars of Bhutan's guiding development philosophy, Gross National Happiness, and adds, as a fifth pillar "authentic education". This addition likely refers to a Buddhist "middle path" for education between the monastic education that prevailed before planned economic development began in the 1960s, and the subsequent secular education modeled on the Indian system and guided by Indian teachers that did not particularly adapt to or incorporate the uniquely Bhutanese context.

With an international perspective gained from his education at Sakya College in India and at the School for Oriental and Asian Studies (SOAS) in London, as well as his lectures around the world, Rinpoche is known for his subtle teachings of Buddhism that extend beyond lectures to include several popular films and books, in addition to his leadership of several charitable efforts to preserve the teachings of the Buddha and improve the well-being of Himalaya peoples.

5.1. Rural Development to Reduce Waste in Samdrup Jongkhar

Samdrup Jongkhar is one of the poorest and most remote of the twenty dzongkhags of Bhutan, with food security and rural to urban migration as issues of concern. While 83% of the population continued to practice subsistence agriculture, farmers faced increasing difficulty in meeting their household needs with the growth of the cash economy and increasing development: only 39% of the households were sufficient in-home grain production for consumption in 2008 (Green-Tracewicz and Landry 2015). The district has less than 180 miles of roads of any type, making transportation across the rugged terrain slow and difficult (RGOB 2017, p. 165). The livelihood challenges, as well as the lack of healthcare resources, education, and economic opportunities, drive rural to urban migration, eroding community connections, and creating labor shortages for farming. Young people are increasingly departing from rural districts, especially in the south and east, to seek education and livelihood opportunities in Thimphu (Gosai and Sulewski 2014). By enhancing livelihood opportunities and self-sufficiency, SJI seeks to slow rural-urban migration and re-invigorate village life.

The Samdrup Jongkhar Initiative approached socio-ecological resilience in this remote and poorly-resourced dzongkhag with a comprehensive and systemic lens, recognizing that villagers would be more able to address waste reduction from the position of stable livelihoods. From the outset, the project exemplified the holistic relational awareness of the human connection to deities, animals, and other living beings. In a conversation with the author, a former project director recalled: " . . . before we construct a house . . . that ceremony is when we seek permission from the deities . . . who actually are the actual owners of the land. So knowing that we are just guests in this world . . . we have to be very, very mindful of our actions and their consequences, this consciousness is at the very core of zero waste, and without that, it's not going to be functional" (25 June 2019).

The project began by addressing farmers' livelihood needs, including supporting the transition to organic agriculture which could help Bhutanese farmers receive a premium for their crops and advance the carbon-negative status of the country. At the outset of the project, two dozen farmers were taken on a study tour to Punjab district in India, where they observed the consequences of heavy agricultural chemical use, including decreased productivity of the soil, poisoned drinking water, and even suicide among farmers unable to profit from their labors. They also visited Dr. Vandana Shiva's demonstration farm, Navdanya, in Dehradun where they learned about methods of enhancing soil fertility (Dorji 2011). In addition to providing an educational opportunity and cultural exchange for farmers from Bhutan and India, this study tour expanded the worlds of the Bhutanese farmers, many of whom had not even visited the capital city of their own country (Dorji 2011). This demonstration of respect allowed the farmers to feel valued for their participation in the project. While an agricultural study tour may seem to be far removed from waste reduction, the launch of the SJI project with this study tour shows the project's commitment to assisting farmers in tangible ways that are valuable in their lived experience, and providing needed benefits.

SJI's approach to collaborating with the farmers reveals a Buddhist acceptance of present conditions. The project met the farmers where they were, presenting information via study tours, direct interaction with other farmers, peer-to-peer learning, festivals, dances, and handicrafts which fits with the farmers' customary ways of gaining knowledge. Illiterate farmers typically gain knowledge through story, myths, narrative, repetition, rhymes, and traditional art forms in this oral culture. To promote public education and participation, the project organized Zero Waste Festivals, at which school children performed Zero Waste dances, wearing costumes fashioned from waste materials like plastic wrappers, bottles, and straws (Lindström 2012, p. 7). The festivals included presentations on composting and bio-gas techniques from Indian experts, as well as a recycled art workshop by an expert from the USA (Lindström 2012, pp. 8–9).

Another important aspect of the project, according to a former director of the project, was its community-based design. In conversation with the author, he commented "Being on the ground, being in the grassroots with the community allows you to gain more realistic and more profound understanding of the realities on the ground . . . " Being on the ground, he continued, means being "able and physically present to provide backstopping and advocacy and interaction with the community at a consistent level" (20 June 2019).

5.2. The Zero Waste Project

A core activity of SJI is waste reduction and the promotion of "zero waste". The Zero Waste Project of SJI was launched in July 2012 with the goal of initiating "responsible and sustainable waste management practices that help preserve the environment and, at the same time, create economic opportunities in the region, thereby also contributing to the GNH pillar of promoting sustainable and equitable socio-economic development" (SJI n.d.) The project sought to contribute to the minimization of plastic use in the dzongkhag, and also to promote the segregation of wastes in households and institutions so that "new small-scale recycling, re-use and up-cycling businesses for non-biodegradable waste" could be created–thereby contributing to slowing rural to urban migration–and biodegradable waste could be diverted to composting and bio-gas generation (SJI n.d., p. 1).

The Zero Waste project began in two *gewogs* (blocks, subdivisions of the district), Dewathang and Wooling, and then was extended to a third gewog, Orong, with the goal of scaling up to other locales in the dzongkhag, and eventually creating a replicable model as a "Zero Waste region" from which other dzongkhags could learn. In 2017, the project received a grant to 1.707 million ngultrum (about $24,700 USD) from the Bhutan Trust Fund for Environmental Conservation to expand to three villages in nearby Trashigang dzongkhag (Subba 2017).

The project established Zero Waste teams in each village, and identified Zero Waste Trainers, who received both a stipend and international training for taking on this role. From the beginning, the project focused on eliciting local concerns and preferred methods for addressing waste in the community (Lindström 2012, pp. 15–16). Such bottom-up organizing recognizes and builds on community strengths, enhancing a community's capacity to articulate and address its own challenges, and avoiding imposing one-size-fits-all predetermined interventions from a central government or NGO office (Cheki 2017). Beginning with listening to local needs is essential to eco-spiritual activism to advance a holistic approach that incorporates the whole person in their surroundings, recognizing inherent strengths and abilities to respond to emergent challenges.

Building on Bhutan's rich tradition of thrift and creativity (Allison 2014; Choden and Roder 2008), as well as the dedication to artisanal production of household goods and handicrafts,[17] the Zero Waste project provides education and support to help local producers create goods by re-using discarded

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[17] The thirteen traditional arts and crafts (*zorig chusum*) are a highly valued aspect of Bhutan's cultural traditions. Traditional artisans, including weavers and other textile artists, painters, sculptors, and woodworkers are revered; students can attend Zorig Chusum schools to be trained in the thirteen traditional arts and crafts.

materials. This process, in which people look more closely at that which they have abjected or discarded, can be likened to Vajrayana rituals that deconstruct dualistic perspectives and challenge attachment by transforming aversive or disgusting substances into vehicles on the path toward enlightenment (Stevenson 2013, p. 73). Exemplifying the Vajrayana "crazy wisdom" approach of using sly tricks and inverted hierarchies to teach about Buddhism, Rinpoche envisions sending monks across Bhutan to "beg not for money or food, but for garbage", and plans "to build a trash chorten (stupa) to encourage people to take a closer look at their waste" (Stevenson 2013, p. 78).

The project works with local people to establish small-scale and low-cost waste collection, recycling, reusing, repairing clothing and shoes, and 'up-cycling' businesses that both improve livelihoods and reduce waste (Dahal 2012). These projects of re-creation connect people to their identifies as artisans and makers, rather than consumers and disposers. Deploying creativity and ingenuity, artists from the Voluntary Artists Studio Thimphu (VAST) in the capital, along with an internationally-known re-use artist from the United States, Taylor Cass Stevenson, guided students in learning to make a range of household items and crafts from re-used materials, including useful items like totebags, containers, boxes, lamp shades, and brooms. Traditional Bhutanese weaving techniques were adapted to strips of plastic bottles and wrappers that were woven into bracelets, belts, and bags. Discarded cement bags were re-made into rope. Broken umbrellas were remade into cushions, filled with shredded plastic wrappers (Lindström 2012, p. 10). To bring waste materials back into the stream of useful materials, the district acquired a machine to manufacture bio-degradable plates and cups from areca nut bark–the shells of the ubiquitous beetle nut–which is readily available.[18]

In addition to training students in making handicrafts from re-used materials, Stevenson trained more than one thousand villagers over three years to make "bags, boxes, brooches and other jewellery [sic] from used truck inner tubes, plastic bottles, wrappers and used phone vouchers" (Lindström 2012, p. 13), transforming 1200 kilograms of waste plastic into attractive and useful goods. Dzongsar Jamyang Khyentse Rinpoche asserted that, with the right motivation, these crafting practices could become Buddhist practice: "that I can confidently tell you, yes. Especially in Mahayana Buddhism, all you have to do is have the right motivation and everything becomes practice. Especially like with zero waste, that is very wholesome" (interview with Rinpoche in Stevenson 2013, p. 79).

5.3. The Zero Waste Tschechu

To link waste reduction with religion and culture, the project assisted the village of Wooling in hosting a "Zero Waste Tshechu". The *tshechu,* meaning "tenth day", is an annual religious festival honoring Guru Rinpoche, in which monks perform intricate dances, providing didactic lessons in Buddhism. Each district, as well as many towns and villages, hosts a tshechu, which is the most important religious and social event of the year. In linking waste awareness and reduction to this central event, the SJI organizers established a strong link with Bhutanese religion and identity in the minds of participants. The Zero Waste committee encouraged ritual participants to honor the festival with "zero waste" offerings–at any ritual, gifts of food, incense, butter for butter lamps, and money are traditionally presented. With the increased availability of manufactured products, offerings have tended to be packaged biscuits and commercially-bottled juices. The Zero Waste committee encouraged participants to revert to offering local produce, such as fruit, and homemade biscuits and traditional cakes.[19] The Committee identified and set up three-bin waste segregation stations, collecting PET bottles and tetra paks in one container, paper in another, and glass bottles in a third to facilitate collection and recycling. Other buckets collected biodegradable waste to be fed to livestock

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18 http://www.sji.bt/2017/07/02/slowly-but-surely/.
19 On its website, the Lhomon Society, the parent organization of SJI, offers a list of eco-friendly and sustainable choices that can serve as feast offerings as a temple or home, including "cooked rice, boiled potatoes, cooked vegetable, egg . . . dumpling . . . apple, guava . . . " emphasizing fruits, grains, and cooked vegetables (meats are generally not appropriate religious offerings). "What is a simple choice"? Lhomon Society.

and used for fertilizer on fields. The efforts paid off. At the conclusion of the festival, "Wooling elders and leaders mentioned repeatedly the marked reduction in the littering in the courtyard [of the temple, where the tshechu was held]" (Lindström 2012, p. 16). Weaving waste reduction activities into the annual tshechu incorporates waste reduction into an annual ritual central to Bhutanese identity, as the structure and inspiration for the ritual came from Guru Rinpoche. This links responsible use of the material world directly to the Buddhist identity of the worshippers.

6. Conclusions: Spiritual Ecology Activism for Waste Management

Building on the rural habits of reuse and the value of thrift in the context of teachings from a revered Rinpoche, the Samdrup Jongkhar Initiative has connected with existing local mores to incorporate waste reduction and re-use into local practice. The project emanated from the religious and moral authority of a revered Buddhist teacher who is widely renowned for his sophisticated and subtle teachings of Buddhism. Rinpoche commands a devoted following in Bhutan and around the world. His words and actions convey moral authority by dint of his extensive education in Buddhism and secular matters. This moral authority and attention from a globally renowned teacher likely inspired intrinsic motivation among the villagers in a way that admonitions from a government agency would not. As in the rest of Bhutan, farmers in this area are deeply religious, blending Vajrayana Buddhism and local animistic belief in terrestrial deities to guide their agricultural decisions. More than three-quarters of farmers interviewed pray to local deities, and more than half of farmers interviewed reported that they consult a local astrologer (*tsipa*) to identify auspicious days for planting (Green-Tracewicz and Landry 2015, p. 83). A former project director recognized "When we discouraged burning of waste, we could link it with the prevailing spiritual ethos of respecting the realms of other beings including the protectors, deities and animals" (interview with the author, 7 July 2019).

SJI's waste management and reduction strategies exemplify Buddhist values of interconnection, harmony, beauty, and self-efficacy. In keeping with the centrality of interconnection, or interdependent co-arising, in Buddhist thought, SJI weaves a holistic web of support structures for reaching goals of rural development and waste reduction that include youth and adult education, engagement with local monasteries, and supporting rural collaboratives, in contrast to neoliberal technocratic structure that would place responsibility for waste reduction on the individual without significant community support.

SJI promotes public engagement and reducing waste by employing strategies that are compassionate and holistic, encompassing all aspects of rural livelihoods, and addressing basic human needs such as food security as well as engaging villagers in projects that enhance the beauty and harmony of their surroundings. SJI honored cultural traditions, drawing on cultural and traditional ecological knowledge of farming, weaving, and other livelihood practices to strengthen community self-reliance. Recalling habits of two decades ago, plastic bags have been banned in favor of reusable cloth bags from Dewathang, which now avoids more than 600 kg of plastic bags every month (SJI 2018b). In beginning with Gross National Happiness as a guiding principle, SJI has sought to balance the multiple aspects of human life, recognizing the importance of cultural preservation and environmental conservation along with economic development. No single goal has taken precedence over others. In keeping with the Buddhist notion of a "middle path" between asceticism and luxury, SJI sought to walk a middle path of rural development to increase food security and economic opportunity while decreasing litter and waste. In so doing, the project gives lie to dominant economic arguments that suggest that through put of materials is a necessary by-product of increasing human material well-being.

SJI's activities fit within the ecological economics paradigm of *degrowth*, a concept that promotes civilizational change toward societies where material consumption is de-emphasized, and local, democratic, place-based values come to the fore, with sharing, healthy relationships, and care for the commons as priorities (Gerber and Raina 2018). Creative crafts projects put villagers into attentive interaction with these materials that formerly seemed to be useless, showing how diverse and novel materials can be incorporated into the Buddhist cosmology. The Project Coordinator, Cheku Dorji,

noted that people realized the value of waste materials (Dorji 2016). Waste materials are placed back into the relational, reciprocal circulation of animated Buddhist cosmology. Rather than remaining inert and unidirectional, waste materials become source materials for new useful creations that participate in social circulation. As waste artist and researcher Stevenson learned in her interview with Rinpoche, from the Buddhist point of view, there is nothing that is not useful and must be excised from social life:

> "Dzongsar Jamyang Khyentse Rinpoche asserts that Tantra discounts the idea of uselessness:

> '[In] the Sharchopka language ... the word for garbage, *tsokpa*, means dirty. *Tsokpa* and waste are actually two different things, and this is what Tantra teaches. There is nothing called *tsokpa*. Everything is useful and more than useful, actually. Everything is primordially pure. It is your habit and patterns that make it so complicated'". (Stevenson 2013, p. 89)

This statement about the always-already primordial purity of substances that appear to be impure to the relative–rather than absolute–perception is profoundly ecological in that organic materials continually break down–sometimes undergoing chemical transformations or other types of transmutation–to become nutrients for other living beings. In ecological systems, everything is useful. In modern technological societies our "habits and patterns" complicate the situation such that technological transformations of materials then require *subsequent* technological transformations of wastes to prevent material harm to humans or other living beings. As the science and technology theorist Donna Haraway has argued, humans are "kin" with all other living beings, as well as with the "cyborgs" we have created, including transgenetic organisms and transuranic elements (Haraway 2016). As "kin" on a finite planet, we must then find ways to live together with these unruly organisms and elements, recognizing that they are now part of our Earth, and "away" is never very far away from someone. The Bhutanese villagers have confronted the by-products of their newly-consumerist society and have found methods to transform and transmute previously rejected materials into useful items. The *tsokpa,* or "dirtiness" Rinpoche refers to (also known as *drib* in Tibetan and Dzongkha (*sgrib* or *grib*)) is a form of ritual or spiritual pollution that can result from upsetting the social or moral order, and requires the intervention of a ritual specialist for rectification (Allison 2014). Like waste, it is not a permanent condition, but can persist without outside intervention and steps to rectify the moral or spiritual infraction. As Rinpoche indicates, this condition, too, might lead to deeper insight or moral improvement, and thus would no longer be *tsokpa.* From the Vajrayana perspective, disturbed emotions and situations can become grist for Buddhist meditational practice and deeper wisdom.

The Samdrup Jongkhar Initiative has gained government and grant support to expand into other districts around the country. Like the Zhabdrung Nawang Namgyal who traveled throughout Bhutan in the seventeenth century, providing Buddhist teachings and introducing rituals and practices that became central to Bhutanese society, the practices of waste reduction and waste management that build on existing belief systems may be woven into the fabric of society across the country. As the example of SJI shows, connecting with local values and practices is vitally important to engaging local people in sustainable waste management. Furthermore, initiatives that draw on local values can be self-sustaining in that they can be incorporated into the habitual practices of daily life, rather than requiring continual inputs of material, energy, and training. Similar to other religion and ecology efforts around the world that link religious teachings to sustainable environmental practices, such as those of the Alliance of Religions and Conservation and Interfaith Power and Light, SJI's Zero Waste project connects environmental sustainability concerns with the heart of religious practice, linking new habits to a beloved age-old customs, and helping believers incorporate new environmental practices into their existing religio-cultural identities.

References

Alley, Kelly D. 1994. Ganga and Gandagi: Interpretations of Pollution and Waste in Benaras. *Ethnology* 33: 127–45. [CrossRef]

Allison, Elizabeth. 2016. At the Boundary of Modernity: Religion, Technocracy, and Waste Management in Bhutan. In *Religion and Modernity in the Himalayas*. Edited by Megan Sijapati and Jessica Vantine Birkenholtz. New York: Routledge.

Allison, Elizabeth. 2015. The Spiritual Significance of Glaciers in an Age of Climate Change. *Wiley Interdisciplinary Reviews: Climate Change* 6: 493–508. [CrossRef]

Allison, Elizabeth. 2014. Waste and Worldviews: Pollution Challenges in Bhutan. *Journal for the Study of Religion, Nature, and Culture* 8: 405–28. [CrossRef]

Allison, Elizabeth. 2008. *Household Waste Management and Rural-Urban Linkages in Bhutan: Draft Report*; Thimphu: Department of Urban Development and Engineering Services, Ministry of Works and Human Settlement.

Bauman, Whitney. 2019. Environmental History and the Materialization of Bodies. In *After the Death of Nature: Carolyn Merchant and the Future of Human-Nature Relations*. Edited by Kenneth Worthy, Elizabeth Allison and Whitney Bauman. New York: Routledge.

Bernbaum, Edwin. 2006. Sacred Mountains: Themes and Teachings. *Mountain Research and Development* 26: 304–9. [CrossRef]

Bruggeman, Derek, Patrick Meyfroidt, and Eric F. Lambin. 2016. Forest Cover Changes in Bhutan: Revisiting the Forest Transition. *Applied Geography* 67: 49–66. [CrossRef]

Buttel, Frederick H. 2000. Ecological Modernization as Social Theory. *Geoforum* 31: 57–65. [CrossRef]

Cheki, Karma. 2017. Making a GNH Country. *KuenselOnline*. December 25. Available online: http://www.kuenselonline.com/making-a-gnh-country/ (accessed on 31 July 2019).

Choden, Kunzang, and Walter Roder. 2008. *Chilli and Cheese: Food and Society in Bhutan*. Bangkok: White Lotus.

Collins, James C., and Jerry I. Porras. 1994. *Built to Last: Successful Habits of Visionary Companies*. New York: Harper Business.

Darlington, Susan M. 2012. *The Ordination of a Tree: The Thai Buddhist Environmental Movement*. Albany: State University of New York Press.

Dahal, Rabi C. 2012. Festival to Address Rural Waste. *Bhutan Observer*. October 12. Available online: http://www.sji.bt/assets/PDFs/Bhutan-Observer-05.10.2012.pdf (accessed on 31 July 2019).

Dendup, Tashi. 2008. Litter along trekking trail. *Kuensel: Bhutan's National Newspaper*, June 12.

Dendup, Tshewang. 2016. Trash versus Treasure. *The Druk Journal.* Available online: http://drukjournal.bt/trash-versus-treasure/ (accessed on 31 July 2019).

Dema, Kesang. 2005. Bhutan's Clean and Green Image at Stake. *Kuensel: Bhutan's National Newspaper*, June 9.

Dorji, Cheku. 2011. *Report on Organic Study Tour to India Sponsored by Samdrup Jongkhar Initiative*. Dewathang, and Funded by International Development Research Centre. Deothang: Samdrup Jongkhar Initiative.

Dorji, Lam. 2006. *Public Private Partnership for the Urban Environment: Policy Framework for Solid Waste Management*. Thimphu: Royal Society for Protection of Nature.

Dorji, Tshering. 2016. Shopkeepers Refrain from Using Plastic Bag. Available online: https://www.pressreader.com/. (accessed on 31 July 2019).

Douglas, Mary. 1966. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge.

Douny, Laurence. 2007. The Materiality of Domestic Waste: The Recycled Cosmology of the Dogon of Mali. *Journal of Material Culture* 12: 309–31. [CrossRef]

Drew, Georgina. 2012. A retreating goddess? Conflicting perceptions of ecological change near the Gangotri-Gaumukh Glacier. *Journal for the Study of Religion, Nature and Culture* 6: 344–62. [CrossRef]

editorial. 2008. A Clean Country-Too Much to Hope For? *Kuensel: Bhutan's National Newspaper*, July 2.

Evans, David. 2014. *Food Waste: Home Consumption, Material Culture and Everyday Life*. London: Bloomsbury.

Foucault, Michel. 1971. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon Books.

Gerber, Julien-François, and Rajeswari S. Raina. 2018. Post-Growth in the Global South? Some Reflections from India and Bhutan. *Ecological Economics* 150: 353–358. [CrossRef]

Gille, Zsuzsa. 2007. *From the Cult of Waste to the Trash Heap of History: The Politics of Waste in Socialist and Postsocialist Hungary*. Bloomington: Indiana University Press.

Glaser, Barney G., and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory; Strategies for Qualitative Research*. Chicago: Aldine Pub. Co.

Gosai, Mayur A., and Leanne Sulewski. 2014. Urban Attraction: Bhutanese Internal Rural–Urban Migration. *Asian Geographer* 31: 1–16. [CrossRef]

Grim, John, and Mary Evelyn Tucker. 2014. *Ecology and Religion*. Washington, DC: Island Press.

Green-Tracewicz, Emily, and Erik J. Landry. 2015. An Investigation of Agricultural Systems and Ways of Knowing in Samdrup Jongkhar, Bhutan: Outcomes of research undertaken by the Samdrup Jongkhar Initiative: 2011–2015. Available online: https://pdfs.semanticscholar.org/251d/e59c39f3dd0b5f3994e7a07144ec802b0afa.pdf (accessed on 31 July 2019).

Greenberg, Joy H. 2015. From Sacred Grove to Dark Wood to Re-enchanted Forest (Part I): The Evolution of Arborphilia as Neo-romantic Environmental Ethics. *Journal for the Study of Religion, Nature and Culture* 9: 376–413. [CrossRef]

Guha, Ramachandra. 2000. *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*. Berkeley: University of California Press.

Gyem, Phub. 2019. *Her Majesty the Gyaltsuen Graces the Launch of Waste Management Initiatives*. Thimphu: BBS-Bhutan Broadcasting Service.

Haberman, David L. 2006. *River of Love in an Age of Pollution: The Yamuna River of Northern India*. Berkeley: University of California Press.

Haraway, Donna Jeanne. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.

Hawkins, Gay. 2010. *The Ethics of Waste: How We Relate to Rubbish*. Lanham: Rowman & Littlefield Publishers.

Hutt, Michael. 2003. *Unbecoming Citizens: Culture, Nationhood, and the Flight of Refugees from Bhutan*. New Delhi and New York: Oxford University Press.

Kaviraj, Sudipta. 1997. Filth and the Public Sphere: Concepts and Practices about Space in Calcutta. *Public Culture: Bulletin of the Project for Transnational Cultural Studies* 10: 83. [CrossRef]

Kellert, Stephen R., and Edward O. Wilson. 1993. *The Biophilia Hypothesis*. Washington, DC: Island Press.

Kristeva, Julia. 1982. *Powers of Horror: An Essay on Abjection*. European perspectives. New York: Columbia University Press.

Kyabgon, Traleg. 2015. *Karma: What It Is, What It Isn't, Why It Matters*. Boston: Shambala.

Lindström, Pia. 2012. Progress Report: SJI Zero Waste Project, Mid-Term: July 2012–December 2012. Available online: http://www.sji.bt/assets/PDFs/Progress-report-SJI-Zero-Waste-Project-Jul-Dec-2012.pdf (accessed on 31 July 2019).

Lofland, John, and Lyn Lofland. 2006. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. Belmont: Wadsworth/Thomson Learning.

Maathai, Wangari. 2010. *Replenishing the Earth: Spiritual Values for Healing Ourselves and the World*. New York: Crown Publishing Group.

Mol, Arthur P. J, and David A. Sonnenfeld. 2000. *Ecological Modernisation around the World: Perspectives and Critical Debates*. London: Frank Cass Publishers.

Munro, Lauchlan T. 2016. Where Did Bhutan's Gross National Happiness Come From? The Origins of an Invented Tradition. *Asian Affairs* 47: 71–92. [CrossRef]

O'Brien, Martin. 2011. *A Crisis of Waste? Understanding the Rubbish Society*. London: Routledge.

Nagle, John Copeland. 2009. The Idea of Pollution. *UC Davis Law Review* 43: 1–78.

Phuntsho, Karma. 2013. *History of Bhutan*. London: Random House India.

Rai, Bishal. 2007. The Ever Mounting Problem. *Kuensel*, April 6.

Rathje, William L., and Cullen Murphy. 2003. *Rubbish! The Archaeology of Garbage*. Tucson: University of Arizona Press.

Ray, Reginald A. 2002. *Secret of the Vajra World: The Tantric Buddhism of Tibet*. Boston: Shambhala.

Ray, Reginald A. 2000. *Indestructible Truth: The Living Spirituality of Tibetan Buddhism*. Boston: Shambhala.

RGOB (Royal Government of Bhutan). 2019. *Enhancing Happiness and Sustainable Development through Partnerships*; Joint Task Force (JTF) for the 14th RTM Royal Government of Bhutan and United Nations System in Bhutan. Thimphu: RGOB.

RGOB (Royal Government of Bhutan). 2018a. *Bhutan at a Glance 2018*; Thimphu: RGOB.

RGOB (Royal Government of Bhutan). 2018b. *National Accounts Statistics*; Thimphu: Royal Government of Bhutan.

RGOB (Royal Government of Bhutan). 2017. *Dzongkhag-Wise Inventory of Resources-Bhutan: Eastern Region*; Thimphu: Royal Government of Bhutan.

RGOB (Royal Government of Bhutan). 2012a. *Waste Prevention and Management Regulation*; Thimphu: RGOB.

RGOB (Royal Government of Bhutan). 2012b. *Diagnostic Trade Integration Study*; Thimphu: RGOB.

RGOB (Royal Government of Bhutan). 2011. *Turning Vision into Reality: The Development Challenges Confronting Bhutan*; Thimphu: Gross National Happiness Commission.

RGOB (Royal Government of Bhutan). 2008a. *The Constitution of the Kingdom of Bhutan*; Thimphu: Royal Government of Bhutan.

RGOB (Royal Government of Bhutan). 2008b. *Bhutan at a Glance 2008*; Thimphu: RGOB.

RGOB (Royal Government of Bhutan). 2007. *National Strategy + Action Plan for Integrated Solid Waste Management*; Thimphu: Royal Government of Bhutan.

RGOB (Royal Government of Bhutan). 1999. *Bhutan 2020: A Vision for Peace, Prosperity and Happiness*; Bangkok: Royal Government of Bhutan.

RGOB (Royal Government of Bhutan). 1998. *Biodiversity Action Plan for Bhutan*; Thimphu: Royal Government of Bhutan.

Salmons, Janet. 2018. Chapter 12|Using Social Media in Data Collection: Designing Studies with the Qualitative E-Research Framework. In *The SAGE Handbook of Social Media Research Methods*. Edited by Luke Sloan and Anabel Quan-Haase. Thousand Oaks: SAGE Publications Inc.

Scharmer, Claus Otto. 2009. *Theory U: Leading from the Futures as it Emerges*. San Francisco: Berrett-Koehler Publishers, Inc.

Senge, Peter M. 1994. *The Fifth Discipline*. New York: Doubleday/Currency.

Shiva, Vandana. 1988. *Staying Alive: Women, Ecology, and Development*. London: Zed Books.

Spaargaren, Gert, and Arthur P. J. Mol. 1992. Sociology, Environment, and Modernity: Ecological Modernization as a Theory of Social Change. *Society & Natural Resources* 5: 323–344.

SJI (Samdrup Jongkhar Initiative). 2018a. Who We Are. Available online: https://www.sji.bt/who-we-are/ (accessed on 31 July 2019).

SJI (Samdrup Jongkhar Initiative). 2018b. Zero Waste. Available online: https://www.sji.bt/zero-waste/ (accessed on 31 July 2019).

SJI, Samdrup Jongkhar Initiative. n.d. Concept Note for Funds from the CSO Fund Facility: SJI Zero Waste Project. Available online: http://www.sji.bt/assets/PDFs/SJI-Zero-Waste-Concept-Note-CSOFF.pdf (accessed on 31 July 2019).

Sponsel, Leslie E. 2012. *Spiritual Ecology: A Quiet Revolution*. Santa Barbara: Praeger.

Stevenson, Taylor Cass. 2013. Beyond the Dustbin: Bhutan's Changing Values of Waste and Want. Master's thesis, International Christian University, Tokyo, Japan, May 15.

Subba, MB. 2017. Bhutan Trust Fund Supports Four Environment Conservation Projects. *KuenselOnline*. Available online: http://www.kuenselonline.com/bhutan-trust-fund-supports-four-environment-conservation-projects/ (accessed on 31 July 2019).

Swimme, Brian, and Thomas Berry. 1992. *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era*. San Francisco: HarperSan Francisco.

Taylor, Bron Raymond. 2010. *Dark Green Religion: Nature Spirituality and the Planetary Future*. Berkeley: University of California Press.

Taylor, Sarah McFarland. 2007. *Green Sisters: A Spiritual Ecology*. Cambridge: Harvard University Press.

Thompson, Michael. 1979. *Rubbish Theory: The Creation and Destruction of Value*. Oxford and New York: Oxford University Press.

Thondup, Tulku. 2011. *Incarnation: The History and Mysticism of the Tulku Tradition of Tibet*. Boston: Shambala.

Tucker, Mary Evelyn. 2003. *Worldly Wonder: Religions Enter their Ecological Phase*. Chicago: Open Court.

Tucker, Mary Evelyn, and John A. Grim. 2001. Introduction: The Emerging Alliance of World Religions and Ecology. *Daedalus: Proceedings of the American Academy of Arts and Sciences* 130: 1–22.

Turner, Victor Witter. 1969. *The Ritual Process: Structure and Anti-Structure*. Chicago: Aldine Pub. Co.

UNEP-RRCAP (United Nations Environmental Program-Regional Resource Center for Asia and the Pacific). 2001. *State of the Environment Bhutan*. Bangkok: UNEP.

Vaughan-Lee, Llewellyn. 2013. *Spiritual Ecology: The Cry of the Earth, a Collection of Essays*. California: Golden Sufi Center.

Yin, Robert K. 2003. *Case Study Research: Design and Methods*, 3rd ed. Thousand Oaks: Sage.

Buddhist Integration of Forest and Farm in Northern Thailand

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Abstract: Usually seen as incompatible, forests and farms are integrated by Buddhist environmental activists in Thailand. Monks engaged in environmental conservation see the conditions of farmers' lives as related to how they treat the forests surrounding their farms. If farmers seek their livelihood through cash-cropping and contract farming, they see the forest as a material resource in terms of land for future farms. This attitude contributes to the rapid deforestation occurring across northern Thailand's mountainous region and a cycle of environmental degradation and economic struggle. Buddhist monks work with non-governmental organizations and sometimes state agents to encourage farmers to shift to integrated agriculture, growing a mix of food crops and raising animals mimicking ecological relations. The monks teach that the forest is part of this eco-system, as it supplies water and other natural resources and must be protected. This paper examines the work of Phrakhru Somkit Jaranathammo, a monk in Nan Province, Thailand, who promotes dhammic agriculture and engages a new interpretation of Right Livelihood, a basic Buddhist principle, to support and protect the well-being of both the forest and farmers.

Keywords: spiritual ecology; Buddhism; deforestation; Buddhist agriculture; Thailand

1. Introduction

Traveling across Nan Province in northern Thailand provides spectacular views of rolling mountains stretching into the distance. The problem is that one can see into the distance: few trees block the view. Nan wrestles with a severe problem of deforestation, even as forests are recovering in the rest of Thailand. Between 2000 and 2012, Nan's forests declined 33% (Baicha 2016, p. 90). Forest cover in Thailand overall increased by 31–33% in the same time frame (Trisurat et al. 2019, p. 2). Fields of feed corn dominate the landscape in Nan, yet the government declares 86% of the province as protected areas, national parks, and reserve land. Having no land title, farmers encroach into the protected forests to plant fast-growing maize, leaving the mountains bald and themselves often in debt.

Combating the problem of deforestation and its causes requires creativity, commitment, and morality. Phrakhru Somkit Jaranathammo, a Buddhist monk from Nan Province, brings an innovative approach to dealing with the impacts of deforestation on both the environment and the people who depend on it. Having grown up in Nan, Somkit experienced the changes in farmers' livelihoods that contributed to loss of the forests and its impacts. Learning from other activist monks, he turned to Buddhism to provide insights and actions for helping people cope with the changes. Buddhism, Somkit argues, offers a moral compass that enables people to live in harmony with the natural world and to care for themselves and their communities.

The forest "is essentially a part of life," Somkit told me (interview, 6/27/2019).[1] It provides water, soil, food, and knowledge for the people who care for it. The forest cannot be separated from

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[1] As a public figure, Phrakhru Somkit Jaranathammo and his work are well known. He gave me permission to use his name at the beginning of the interview.

human life, especially the agriculture of rural people who live in and around it. Buddhist teachings can encourage farmers to shift from the destructive production of maize to what he calls dhammic agriculture. As part of an informal Buddhist environmental movement in Thailand (Darlington 2012), Somkit uses Buddhism first to identify the root causes of the environmental problems—especially greed and ignorance—then to find creative solutions that integrate pragmatism and spirituality.

Somkit's concept of dhammic agriculture applies Buddhist principles together with scientific and economic practices to farming. Through honesty, tolerance, patience, and sharing—the four values the Buddha taught for householders (*Gharavasa-dhamma* in Pali) (Payutto 1985, p. 135)—farmers can shift from capitalist agriculture to dhammic agriculture. Somkit described his focus as "Do a little, gain a lot. Only produce good quality products" (interview 6/27/2019). He stresses an interpretation of Right Livelihood, part of the Noble Eightfold Path in Buddhism, that enables farmers to increase their income and their agency while caring for both the natural environment and their community.

Phrakhru Somkit's case illustrates how Buddhist spiritual ecology works on the ground, integrating Buddhist teachings, nature, and farmers' livelihoods. Yet his approach represents an innovative interpretation of Buddhism. It draws from the monk's relationship with the people in his community and his reputation as a monk who understands and cares for the people and the forest. First, the ways in which he interprets Buddhism and the problems causing and emerging from deforestation must be unpacked. Somkit collaborates with farmers to negotiate a political and economic environment that cannot be separated from the natural or spiritual contexts.

Leslie Sponsel (2019) defines spiritual ecology "as a vast, complex, diverse, and dynamic arena of intellectual and practical activities at the interfaces of religions and spiritualities with ecologies, environments, and environmentalisms." In this arena, activists engaging spiritual ecology as a means of dealing with environmental problems call for a radical transformation of the industrial capitalist societies underlying the rapid deterioration of the natural environment. Somkit challenges capitalist agriculture and its impacts on nature and farmers' lives. His approach is radical in how he integrates morality and pragmatism.

This paper examines Phrakhru Somkit's efforts to deal with the impacts of deforestation on the people of his village and the surrounding area. The monk continually reassesses both the problems and how Buddhism and social and political factors can be used to find solutions. He ultimately sees both the causes of deforestation—including economics and politics—and the potential solutions as moral issues. His case sheds light on both the potential and the challenges of integrating Buddhism and environmentalism. Somkit's concept of dhammic agriculture offers a new approach to how farmers can earn a comfortable living in moral terms. The problem of deforestation provides a focus for this intersection.

2. Spiritual Ecology in Thai Buddhism

During the twentieth century, Thais began to see forests and land as material goods rather than part of the larger ecosystem upon which humans and all life depend. Prime Minister Field Marshall Sarit Thanarat established new economic goals in the 1960s that contributed significantly to this process, especially emphasizing industrial agriculture for export. Multi-national corporations moved in, buying agricultural land to create expansive, single-crop plantations ((Darlington 2012, pp. 102–3; Lohmann 1993, p. 205); for more on the complexities of development and environment, see (Rigg 1995; Trébuil 1995)). In search of a more comfortable life and encouraged by the government, many farmers shifted from subsistence farming and small-scale production into cash-cropping and contract farming. These shifts required more agricultural land, leading farmers and companies to encroach into the nation's forests.

A few Buddhist monks saw these changes in the rural landscape as a moral crisis. They began to draw from Buddhist principles to understand the crisis and propose new ways forward. They used the three roots causes of suffering in Buddhism—desire, anger, and delusion—to analyze the emerging social and environmental problems. Concepts of interdependence, non-self, impermanence, and the

four sublime virtues (compassion, loving-kindness, sympathetic joy, and equanimity) provided new approaches to guiding farmers into rethinking their relationship with nature, especially the ways in which they use the forest. These interpretations form what I consider the "spiritual ecology" of the Thai Buddhist monks engaged in environmental conservation work through working with farmers on a small scale to address the challenges of the industrial agricultural system and its capitalist roots.

Spiritual ecology for these monks entails drawing from Buddhist teachings to analyze the roots of the problems facing the farmers and the natural environment upon which they depend. They argue that the shift from subsistence farming to export and industrial agriculture reflects a growing greed among farmers, the government, and corporations alike, driven by material ambitions. Money rather than food became the goal. Concerns for the well-being of farmers and the land diminished as corporations expanded their plantations to grow products for the global market. Deforestation increased dramatically. Many village farmers, seeking more income, sold their land and moved into contract farming, often leading to economic insecurities and communal disruptions. Somkit believes that in their effort to improve their lives, farmers began to "only appreciate the forest for its monetary value. . . . The forest has been turned into wooden products, into beds and the couch on which we sit. This furniture becomes part of the way we enhance our status. . . . The forest becomes just a commodity" (interview 6/27/2019).

Agro-chemical companies encouraged the expansion of agricultural land. They provided farmers with seeds, fertilizers, herbicides, and pesticides often as loans to be repaid at harvest. In Nan Province, feed corn was the primary crop supported by the companies. Seed corporations set strict standards for the quality of the produce they would buy from farmers to whom they lent seeds and fertilizers. If farmers could not meet these standards, they slipped into severe debt. This debt created a cyclical process as farmers again cut the forest in search of greater returns. Community norms for using forest resources and access to land were often thwarted as farmers sought their own gain.

According to these monks, this cycle of debt, deforestation, and selfishness lay on a firm grounding of delusion, the third root cause of suffering in Buddhism. Farmers bought into what the government and seed companies told them about the benefits of cash-cropping. They believed that having more material goods leads to happiness and success. Somkit describes this process as the result of delusion. "People don't understand. The problem is the power [of agro-chemical companies] and money combined with the use of [villagers'] ignorance . . . to obscure people's vision." Corporations told farmers that if "your crops are not growing well, you must use fertilizers. If there are weeds, you must use herbicides. They don't teach people that if they use these [chemicals], there will be consequences" (6/27/2019).

The monks saw the growing debt as creating deeper dissatisfaction, problems, and social conflict. Beyond the village, continual deforestation degraded and destroyed natural resources. Deforestation threatens watersheds and biodiversity, lessening critical resources for the village and forest alike. Without trees, soil eroded, carrying chemicals from fertilizers and herbicides into waterways. Annual flooding increased, alternating with more severe droughts in the dry season. The environmental problems exacerbated the difficulties of farming in the mountains. Villagers had greater difficulties making a livelihood despite their efforts and the promises of the corporations and government.

Environmental monks interpreted the roots of these problems as lying in the greed, anger, and delusion of people across society. They therefore began to look for ways to help people out of the cycle of debt and social and environmental destruction. They turned to Buddhist principles and practices to motivate change in the farmers' behavior.

These Buddhist monks began working with non-government organizations (NGOs) to find alternatives to this process. They introduced alternative agricultural practices in the form of integrated or mixed agriculture (Darlington 2012). Through diversified cultivation of crops and animals in a way that mimics nature, integrated agriculture helps farmers move towards greater self-reliance. Counter to the argument of Thailand's agrarian myth (Dayley 2011), these methods do not aim to return to an

idealized past of self-sufficiency and independence (a past that probably never fully existed) but to give farmers more control over their livelihoods.

What makes this response of Buddhist monks and activities a form of spiritual ecology? The question could be asked: what even makes this response Buddhist? Key is the explanation of greed as the underlying cause of this cycle of debt and environmental damage. The crisis is the result of spiritual and moral loss, as the people driving it – from the corporations to the government to many individual farmers—seem to care more for their own accumulation of goods, money, and the commodification of the forest than the well-being of other people or nature.

Buddhist monks help farmers make spiritual progress through reframing the causes of the environmental and economic problems they face and supporting alternative ways of living in line with Buddhist ethics. The ultimate goal of Buddhism is to escape the cycle of rebirth and suffering (achieving Awakening). This goal is soteriological, focused on a future life—or lack of rebirth—rather than more mundane, worldly problems. Yet most lay Buddhists are householders, not renunciants as the monks are. They do not actively think about achieving Awakening. They are concerned with getting through daily life, being able to feed their families, and having enough to live (maybe even comfortably). As the revered abbot in Chiang Mai, Luang Pu Chan Kusalo, used to say, people are not going to practice meditation if they are worried about how to feed their children (Darlington 2012, pp. 114–20). Therefore, some Thai Buddhist monks see it as their responsibility to assist people in finding both pragmatic and spiritual solutions to these problems. For them, the forests and people's livelihoods intersect in creating a moral society.

Forests play a role for Buddhist monks as a place for meditation and overcoming obstacles to spiritual progress. They are also a key resource for farmers in northern Thailand, providing water, wood, and land (among other resources). These monks reframe the forest in Buddhist terms, teaching practical aspects of Buddhist principles while helping farmers overcome the obstacles that lead them to cut the forests in search of material benefits.

Phrakhru Somkit emphasizes Right Livelihood. In undertaking Right Livelihood, farmers engage in the following actions while earning a living: farming with compassion; enacting loving kindness; taking care of the environment to include the land, water, animals, and other aspects of nature; taking care of one's family; taking care of the community; and taking care of the temple. These actions contribute to building Right Livelihood in the modern context. A key aspect of Somkit's interpretation of Right Livelihood involves caring for the forest rather than destroying it, a concept found in many aspects of Buddhist history.

3. Forests in Buddhist and Thai History

The Buddha's life was intimately linked with the forest. He was born, achieved Awakening, established monasteries, and passed away (*parinibbana*), all in the forest. His first sermon occurred in a deer park outside of the small town of Sarnath, India. The stories of the Buddha's close connections with the forest highlight the value of the forest in Buddhist teachings and practice (Chatsumarn 1998), even as much of his life was spent in cities and with lords and kings.

As with any religion, interpretations of the history, myths, and teachings enable practitioners and scholars to frame the religion in support of pressing issues (Gottlieb 2006; Queen 1996). Environmentalism is one such issue. Seeing environmental destruction and climate change in terms of a moral crisis, religious activists can provide a basis for analysis and shaping behavior towards a solution. For Buddhist environmentalists, this process begins with the Buddha's life and the forest (Chatsumarn 1998; Tucker and Williams 1997).

Forests became crucial in early Buddhism as a place of retreat and escape from the pressures and ills of society. Buddhism emerged in India during a time of relative urbanization. As populations grew, cities became the centers of society. Kingdoms and republics vied for control of different regions. The rural areas surrounding cities provided food and resources, while the forests and more remote areas remained as "wild" and "uncivilized" (Ling 1973). Monks and nuns lived in forest communities to

benefit from the quiet as they concentrated on their spiritual progress. The forest became a teacher, challenging practitioners to live in isolation and simplicity. In both ancient India and Thai society into the 20th century, the forest was also seen as dangerous (Kemp 1988; Stott 1991). Bandits, wild animals, ghosts, and spirits forced monks to establish equanimity and loving-kindness as well as learning to conquer fear and connection to self (Kamala 1997).

These elements of the role of the forest in Buddhism formed the basis for the practice of *dhutanga* (Pali) in Theravada Buddhist societies. Known as the forest monk tradition, this practice spread across Buddhist Sri Lanka and Southeast Asia. Dhutanga entailed individual monks emphasizing meditation and ascetic practices, including wandering in the forest, in order to intensify concentration and spiritual progress.

The forest monk tradition became a revered practice in Thai Buddhism. Renowned forest monks emerged, establishing lineages for their practice. These monks, such as Achan Man and Achan Cha, were seen as exemplars of Buddhist practice, drawing disciples from across the nation. Yet, as with the Buddha himself, forest monks remained connected with the hierarchies of the state and what became state Buddhism in the twentieth century (Kamala 1997; Taylor 1993).

Tiyavanich Kamala (1997) documents the process of how influential forest monks were used by the state in Bangkok to extend its influence and power into the peripheral and border areas of the nation during the first half of the twentieth century. Because of their reputations as sources of spiritual power and religious merit, forest monks commanded the respect and reverence of rural villagers. Initially, they practiced distinct regional forms of Buddhism, focused on meditation and austerities. The state authorities in Bangkok pushed them to teach Buddhist practice grounded in the Pali scriptures, homogenizing religious concepts and rituals. The Bangkok government saw localized forms of Buddhism as supporting the diverse principalities and ruling families across the land, often opposed to Bangkok's authority.

Key to my discussion of Buddhist concepts of forests, the government discouraged reverence of local spirits, especially the tutelar "lords of the land," in northern Thailand (Shalardchai 1984). These spiritual lords long held sway over the forest and land for local people. Farmers requested their permission before using forest resources, clearing land, or establishing farms. Spiritual leaders introduced anyone new in the area to the local spirit lords or risked illness or accident indicating the spirit's dissatisfaction. For rural people, spirits and the teachings of Buddhism co-existed. Spirits—such as the lords of the land or Mae Thoranee (Mother Earth)—guided behavior in the mundane aspects of life, including farming and family life. Phrakhru Somkit connects these spirits directly with an agricultural lifestyle. "According to local wisdom," he said, "good soil is protected by a beneficent spirit, Mae Thoranee, goddess of earth.... Good water is protected by the water goddess, Phramae Khong Kha" (interview 6/27/2019). The role of humans in these relations, he states, is to venerate these spirits and care for the natural resources they protect.

Limiting local religious concepts and practices gave the government in Bangkok greater control of the rural people and their land. Kamala (1997) lays out a chronology of the state's policies towards the forest that impacted how rural people and Buddhism interacted with and used the forest. These changes similarly affected farming practices and the conditions of the natural environment. The historical periods Kamala outlines are: (1) the "Forest-Community Period," prior to 1957; (2) the "Forest-Invasion Period," from 1957 to 1988; and (3) the "Forest-Closure Period," from 1989 to the present.[2]

During the Forest-Community Period, people followed regional and local practices and lived relatively isolated from the Bangkok government's influence. They used natural resources surrounding villages as they needed. With a low population density, people had a minimal impact on the environment. Villages had their own Buddhist temples with local monks in residence, providing

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2   Kamala's book was published in 1997, but I argue that the Forest-Closure Period continues today, even as some changes are occurring.

spiritual and communal guidance. Forest monks, especially in the North and Northeast, roamed the countryside, interacting with villagers as they encountered them or needed support (Kamala 1997).

The Forest-Invasion Period began after a coup brought Field Marshall Sarit Thanarat and the military into power in 1957. As prime minister, Sarit implemented economic policies that pushed Thailand into the global economy, based on industry and export agriculture (Lohmann 1993, p. 205). The fertile regions in the nation's lowlands became sites of expansive mono-crop plantations. Multi-national seed companies benefited from both large plantations of crops and the establishment of contract farming—selling seeds and lending fertilizers and herbicides to small-scale farmers to produce crops and seeds. Roads built by the military in pursuit of Communist insurgents opened remote forested areas. Due to population pressures and the search for new lands, farmers from the lowlands followed the roads, expanding their fields into the forests. At the same time, small-scale farmers were either being bought out or pushed into debt through contract farming. They also sought more land through clearing forests (Kamala 1997, pp. 226–51). In northern Thailand in particular, a rapid process of deforestation began.

4. Deforestation

Thailand has long had a high rate of deforestation. According to official government documents, forest cover declined from 53.3% of the nation's area in 1961 (just as Sarit introduced his policy of agricultural intensification) to 25.1% in 1999. Forest activists, non-governmental organizations, and environmentalists disagree with these figures based on definitions of forest cover, arguing that the state includes plantation forests, not only natural forests. Some claim forest cover went as low as 15% of the country's area (Lohmann 1993, p. 200). With an emphasis on protecting the forest and reforestation efforts by both the state and environmentalists, the amount of forest cover increased and stabilized between 2000 and 2016 at 31–33% (Trisurat et al. 2019, p. 2). Over time, however, the loss of natural forests has been severe, even with reforestation and regrowth in the early 21st century.

Nan Province faces among the worst deforestation in the nation today, illustrating the economic and environmental challenges rural farmers face even as the state attempts to protect the forests. Although natural forest covered 41.5% of Nan in 2012, this amount represents a loss of 33% of the province's natural forest since 2009 (Baicha 2016, p. 90). Nan is also one of the most mountainous regions in the country, with only a small stretch of lowland area following the Nan River from north to south through the center of the province. Most of its population of 478,000 (in 2013; Baicha 2016, p. 88) live in the lowlands, resulting in low population density across the province. The loss of forests in Nan means the mountains are being laid bare, creating additional problems of soil erosion, flooding, drought, and loss of biodiversity.

Concurrent with the deforestation, expansion of cultivated land occurred. According to Trisurat et al. (2019, p. 650), land used for agriculture doubled in Nan from 16% of the provincial GDP in 2000 to 32% in 2016.

While the causes and impacts of deforestation remain complex (Forsyth 2006; Forsyth and Walker 2008), shifting forms of agricultural production played a key role is exacerbating the problems. The rise of permanent agriculture, cash- and mono-cropping, and contract farming occurred simultaneously with increased deforestation. Farmers, aware that their lands were less productive and water less available, turned to local leaders, including monks, for guidance. Government agents and agro-chemical corporations advised increased production of cash crops to provide more income. The rising price of feed corn contributed to farmers in Nan planting more maize, clearing more forested areas in the process.

A handful of local monks envisioned a different approach, one that they hoped would help villagers focus more on ethical aspects of farming while protecting the remaining forests. They aimed to move farmers away from what they saw as a focus on materialism and the commodification of nature to emphasize a form of sustainability that cares for both the villagers' lives and the condition of

the forest.[3] Together with local non-governmental organizations (NGOs), these monks encouraged and supported farmers to shift from cash-cropping and contract agriculture to integrated agriculture.

Integrated agriculture (*kaseet phasom phasaam* in Thai) consciously entails mimicking nature. Plants that support each other are planted together, such as nitrogen-providing peas with plants that need nitrogen to grow well. Fish are raised in the water of rice paddy fields. Chickens and pigs are allowed to run freely around the vegetables, routing out weeds and eating insects while fertilizing the ground at the same time. Plants and animals thrive better in biodiverse settings rather than requiring the chemical additives mono-crops need to grow (see Delcore 2000, 2004).

Delcore (2004, p. 37) describes integrated agriculture as follows:

> In Thai NGO circles, integrated agriculture refers to the intensive and diversified cultivation of a limited area of land with environmentally friendly methods and reliance on domestic labor. The goals of the method include decreasing land under cultivation (abandoned fields are ideally allowed to return to forest), use of domestic resources, avoidance of debt, and production of a variety of foods for household consumption with only a secondary emphasis on commercial production.

Mostly NGOs promote integrated agriculture as a more sustainable alternative to the agricultural intensification encouraged by both the state and multi-national corporations. Yet monks who are concerned about both the condition of the environment and the issues farmers face, especially a growing cycle of debt, seek alternative forms of agriculture as well. This investment in a crucial aspect of villagers' lives is not new among Thai monks, as there have been monks actively working on rural development and environmental issues since the 1970s.

5. Buddhist Agriculture

Many Thai monks undertake agricultural and community development. For example, Luang Pu Chan Kusalo, the founder of the Foundation for Education and Development of Rural Areas in Chiang Mai, began doing development work in support of farmers in the early 1970s. He provided farmers with knowledge, tools, and financial support necessary to change their economic circumstances and bring their lifestyles within the realm of what he considered a good (i.e., Buddhist) life (Darlington 1990, 2012, pp. 93–132).

Other monks are now going beyond this model. They are not just offering guidance and resources, but are investing themselves in the act of farming, whether directly or through running model farms. They undertake this work for multiple reasons, ranging from protecting and preserving the forest to working to end farmers' suffering emerging from the impacts of global economic practices such as industrial and contract farming.

One such monk is Phrakhru Somkit Jaranathammo in Nan. Somkit uses agriculture as a means to support his community and promote environmentally and economically sustainable livelihoods. He works with groups of villagers, building collaborative relationships and networks among them rather than focusing only on the issues of individual farmers.

Somkit's ideas emerged from several influences, including Buddhism, secular science, and his own experiences. First, he learned from other monks. Within Nan Province, the monk, Phrakhru Pitak Nanthakhun, began working with NGOs concerned with the livelihood and environmental issues facing the province. Somkit joined with Pitak in the early 1990s, learning his methods and gaining the support to undertake his own community and environmental work. Somkit was also influenced by Phrakhru Manas Natheepitak, the monk who performed the first tree ordination in 1988. Tree ordinations quickly became a symbolic ritual designed to reframe the relationship between

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[3] Dayley (2011) argues this approach taps into Thailand's agrarian myth of an idealized past. While some monks do prioritize this idealized image of self-sufficiency, many, such as Phrakhru Somkit, look for ways to meet farmers' desires for a more economically viable livelihood than subsistence farming while promoting practices framed by Buddhist ethics.

villagers and the forest from one based on providing material resources to a consideration of spiritual interdependence (Darlington 1998, 2012). Manas observed the negative impacts of commercial farming and logging in the early 1970s as drought impacted farmers' livelihoods in his district in Phayao Province. At the request of villagers, he initiated first a long-life ceremony (*suep chata*) for waterways, and later rites to consecrate trees and forests, both aimed at engaging villagers and helping them understand the connections between their agricultural and livelihood methods and the condition of the natural resources on which they depend (Darlington 2012, pp. 58–61). Both monks served as models of monks who engage directly with their lay followers in order to deal with the social, economic, and environmental problems that farmers face.

Somkit pursued both religious and secular education in his efforts to help his community. While moving through levels of the Buddhist hierarchy based on his knowledge of scriptures, Somkit also completed bachelor's and master's degrees, the latter in Man and Environment Management at Chiang Mai University. Obtaining a secular scientific background enabled him to collaborate more fully with NGO and state agents as he implements his form of dhammic agriculture.

I first met Phrakhru Somkit in 1991, just as I was starting my research on the intersection of Buddhism and the environment in Thailand. Somkit was a monk in his mid-twenties, having ordained as a novice when he was 12. At the time, Somkit was just beginning his own research and experiments with integrated agriculture on the land behind the village temple where he lived.

Somkit took me to see his small farm. Initially, I did not realize we were in the farm. I thought we were still walking through woods and over-grown fields until the monk pointed out the fruit trees surrounded by pea vines and other vegetable plants. A small fish pond provided water in the middle of the farm, with chickens running freely and eating both insects and fruit remnants.

Farming is not a typical activity for a monk. The Vinaya, the rules of behavior for monks, forbids monks from digging the soil to avoid harming any life there. Generally, village monks perform rituals and give spiritual advice to the laity in exchange for material support. Villagers give donations, or *dana* (generosity, Pali), to monks in order to get their blessings and gain spiritual merit towards a better rebirth, or, some believe, a better situation in this life. In accepting dana, monks are acting as "fields of merit" (Hanks 1962). Their presence and their acceptance of offerings enable the laity to accrue positive merit towards a future rebirth. The monks' primary aim is to help relieve the suffering of the villagers through guiding them spiritually. Most monks are concerned about the material conditions of the villagers as well, as that can impact the degree of their efforts to make merit and to support the temple. But drawing on the distinctions between householders and renunciants, there tends to be a division of labor between the lay leaders (often former monks) and monks who live at a village temple. Lay leaders focus on material conditions of villagers' lives while the monks emphasize spiritual practice and perform rituals.

Phrakhru Somkit broadened his role due to recognition of the suffering farmers encounter from rapid economic and agricultural changes and resulting environmental degradation. The monk witnessed the impacts of government development policies that promoted contract and cash-cropping, and the rise of consumerism and its consequent tolls on the well-being of villagers' lives. He noticed that "some villagers have had negative experiences from practicing capitalist agriculture. They have bad health. . . . [This] agriculture has destroyed the nature on which they depend." As farmers adopted the new techniques and technologies of capitalist agriculture, this approach prevented "the farmers from seeing the value of the forest" (interview 6/27/2019).

At the same time, NGOs across the country were stepping up their efforts to counter the negative impact of these policies, promoting alternative agriculture (Delcore 2004) and environmental sustainability. Conditions were ripe for Somkit to step into the social arena through an area both familiar and of direct concern: agriculture. He chose to use his position as a village monk to explore and promote alternatives to the farmers' debt-ridden lifestyle resulting from contract agriculture.

To do this, Somkit runs a model integrated agriculture farm on the land behind his temple. He received the first plot outside of the temple land as a gift from his father in the mid-1990s. The land

donated to him by his father was exhausted from erosion caused by cultivation of feed corn on the steep hillside combined with intensive chemical fertilizer use. After letting the land lie fallow for ten years, Somkit noted that it had once again become lush forest full of biodiversity of plants and animals. Because his father gave him land in order to make merit, people said that Somkit went on *bindabat* for land. Bindabat is the practice of going on alms rounds and accepting the offerings from the laity. Usually donations take the form of food and other necessities, but in this case, people began to give land to the monk for his farm (Darlington 2012, p. 157).

Receiving the land from his father pushed Somkit to recognize his responsibility to care for land. He realized that cash-cropping and contract agriculture damaged the land; because the soil was worn out, farmers could no longer productively grow crops on their land. Somkit observed the cycle of debt that farmers faced as they changed their livelihoods based on pressure from seed companies and government development policies encouraging intensive, market-based agriculture. As he watched the land his father donated to him recover gradually, he understood the complicated relationship of land and farmers. Farmers need healthy land, which requires care and mindfulness in how the land is used. Healthy land contains biodiversity with numerous plants and animals interacting and supporting each other. Somkit begin to experiment with integrated agriculture on the land behind his temple.

Accepting land as donations and putting it to use in order to relieve the suffering of farmers forms a new activity for a village monk. Somkit's father no doubt received merit for his donation of land—the fact that villagers referred to such donations as a response to Somkit's bindabat rounds indicates the reciprocal exchange involved in merit making. Somkit remained a "field of merit" for the villagers, enabling them to make merit and spiritual progress through donations. The form of the donations and what the monk did with those donations did not follow the customary practices, however. Somkit, as other engaged Buddhists, expanded the concept of the monk's responsibility to relieve suffering to include actively working towards improving the villagers' livelihoods and the state of the natural environment, particularly the forest, in which they live.

Such interpretations of a monk's role create controversies as well as positive change. Critics of engaged Buddhism often see such emphasis on modern problems as inappropriate for renunciants who should focus on achieving Awakening. Others argue that concepts of Buddhist environmentalism are an anachronistic application of ecological ideas into Buddhist teachings (Harris 1991; Pedersen 1995). While engaged Buddhists remain a minority in the Buddhist world, their interpretations of how to apply Buddhist principles to contemporary suffering have gained increasing acceptance (King 2005, 2012; Queen 1996). In Thailand, activist monks face criticism and personal attacks on their reputation and even person because of their efforts to promote social justice. They are scrutinized closely and find they need to behave according to Buddhist norms more carefully than most monks (Darlington 2012, pp. 197–221).

Somkit started his farm as the economy was changing in Thailand. The government had been promoting economic development based on industrial and export agriculture since the 1960s. Farmers in Nan Province, being one of the more remote areas of the nation, only began to shift from subsistence and limited market-based agriculture to more intensive cash-cropping in the 1980s, after the end of the Communist insurgency in the region. Somkit's father was among the first in his village to give up subsistence farming in the mountainous uplands to begin growing feed corn.

The shift to cash-cropping and intensive mono-crop agriculture did not prove as fruitful for small farmers as they expected. For many farmers across Thailand, the push for agricultural development and industrialization resulted in debt and environmental degradation, and consequent social problems. Somkit's own family shifted from primarily growing food for subsistence on the steep hillsides of Nan Province to engaging cash-cropping in the early 1980s. They sought to improve their lives, seeking to participate in the benefits they saw in the modern, material world. They were encouraged by the government's promotion of agricultural development that they believed would bring them from a backwards lifestyle into modernity and comfort. The reality was different as the crops often did not

meet the high standards of the companies, and farmers went into debt. They expanded their fields through clear-cutting more forest to try to make ends meet.

Somkit established an integrated agriculture farm to show the villagers an alternative to contract farming. He involved villagers in his farm so that they could see the effectiveness of integrated agriculture. Initially, he invited local kids to the farm, showing them methods and values of integrated farming and the value of nature through Dhamma walks into the forest. He taught the children how to plant trees and take care of them.

The kids took their new knowledge and experiences home and told their parents what the monk was doing on his farm. Gradually family members begin to engage as well. Somkit supported the families with seedlings and baby animals and fish stock from his farm. The success of his farm served to inspire villagers to emulate his practices.

Somkit informed me in an interview in June 2019 that these activities formed the first of three stages of his activism. The first stage, "twenty to thirty years ago when we started to experience problems [of deforestation], the idea was to preserve the forest." Yet, these efforts did not account for all the costs for farmers to engage in alternative or integrated agriculture without alternative sources of income. In the second stage, "given the technological investments [required for agricultural production], people became more indebted. In order to fight against indebtedness, we created different savings funds. Still, we couldn't stop the debt" (6/27/2019).

The increase of technological and material goods in society exacerbated rural debt. People became addicted to convenience, the monk argued. He encouraged people to live simple lives, not to depend on material things for comfort. Preaching simplicity, however, "is like using a small piece of wood to ward off a large log," he told me. "It is like we are using a small idea to fight the very big idea of capitalism" (interview 6/27/2019). Somkit realized he needed something more effective that would show people how to transform their thinking as well as their actions.

Somkit refers to the new approach he adopted as dhammic agriculture. Dhammic agriculture goes beyond subsistence farming. In the initial phases of his activism, he encouraged farmers to produce enough to eat and sell only the excess. "This idea is outdated," he claims, as it does not enable farmers to improve their lives or truly get out of debt. Instead, he now focuses on income generation through effective means. People should "grow less but gain more produce." To do this, farmers should "focus on quality so that consumers are willing to buy our products and they can consume our produce with dignity" (interview 6/27/2019).

The monk says he is now working with approximately 50 farmers in an agricultural cooperative. The farmers support each other as they shift from contract agriculture to dhammic agriculture. Somkit demonstrates in his model farm a method of intensive planting that uses a small plot of land to produce quality crops for the market. This method incorporates vertical space through trellises surrounding fish ponds that hold fish and water plants and provide nourishment for all the crops. The cooperative, through the monk's efforts, works with a market in Bangkok that collects their produce and transports it to the capital. Crops such as a local squash—not the conventional, hybrid type promoted by agro-chemical companies—not found in central Thailand have become popular in the Bangkok market, giving the farmers greater income. In the process, Somkit puts more effort into "promoting production and management and marketing" of produce rather than simple self-sufficiency (interview 6/27/2019). The income farmers gain from this intensive, quality-driven approach exceeds what they were making through either contract or cash-cropping or sufficiency-based integrated agriculture.

In this way, Somkit would probably agree with Dayley's critique that "the agrarian myth is not progressive but inhibits farmer autonomy and disparages developments in agricultural science, production technology, and market exchange" (Dayley 2011, p. 342). Somkit is not trying to return to a past ideal (the "agrarian myth") but support farmers in making a good income based on their knowledge and observations coupled with enacting Buddhist principles. In particular, he emphasizes the four virtues the Buddha taught for householders. Through combining Buddhist values, scientific

knowledge, and economic market strategies, Somkit promotes dhammic agriculture as a means of giving farmers more agency while caring for the forest.

A major challenge facing farmers in Nan is the lack of land title. The government created around 80% of the province as protected land, including national parks and national preservation forests. Only about 14% of the province's population owns their land (Phimonphan 2018). Farmers plant maize illegally on remote mountainsides for two key reasons: Maize grows quickly and does not require long-term investment, thereby reducing farmers' losses should they be pushed off the land; and the price of maize is high. Without land title, farmers feel no responsibility for caring for the forest as they seek their livelihood.

One aspect of Somkit's efforts to promote dhammic agriculture included inviting the then-minister of natural resources and the environment to participate in a seminar on the forest held at his temple. The monk succeeded in getting the minister to declare farmers in the district as responsible for maintaining the forest. Based on his concept of Right Livelihood, Somkit created dhammic agriculture as a means to care for the well-being of both the forest and the farmers. His method of intensive agriculture and collective marketing facilitates farmers to earn a decent living from a small plot of land. With the support of the Ministry of Natural Resources and the Environment giving them permission legally to establish small farms in the forest, many local farmers are embracing this new approach.

6. Spiritual Ecology in Practice

Together, the Buddhist and secular knowledges he taps enables Phrakhru Somkit to structure his relationship with the surrounding community. His work forms a new Buddhist approach to relieving suffering, of people and of nature. Dhammic agriculture, for Phrakhru Somkit, does more than relieve immediate suffering of individual farmers. He is enacting a form of what he sees as economic and environmental justice, following the moral ethics taught by the Buddha.

This case is an example of the ways in which rural agricultural communities are impacted by social, economic, and political change, and how these changes then affect the temples and monks in the community. This process leads to innovative responses by Buddhist monks through challenging the status quo, using Buddhist and secular, especially scientific and economic, knowledges, and rethinking Buddhist practices to enable farmers to help themselves, their community, and the forest. With dhammic agriculture, the forest and the farm are integral to protecting the well-being of the natural environment and the people within it.

References

Baicha, Wongtui. 2016. Land use dynamics and land cover structure change in Thailand (as exemplified by mountainous Nan Province). *Geography and Natural Resources* 37: 87–92. [CrossRef]

Chatsumarn, Kabilsingh. 1998. *Buddhism and Nature Conservation*. Bangkok: Thammasat University Press.

Darlington, Susan M. 1990. Buddhism, Morality, and Change: The Local Response to Development in Thailand. Ph.D. thesis, the University of Michigan, Ann Arbor, MI, USA.

Darlington, Susan M. 1998. The ordination of a tree: The Buddhist ecology movement in Thailand. *Ethnology* 37: 1–15. [CrossRef]

Darlington, Susan M. 2012. *The Ordination of a Tree: The Thai Buddhist Environmental Movement*. Albany: State University of New York Press.

Dayley, Robert. 2011. Thailand's Agrarian Myth and Its Proponents. *Journal of Asian and African Studies* 46: 342–60. [CrossRef]

Delcore, Henry D. 2000. Localizing Development: Environment, Agriculture, and Memory in Northern Thailand. Ph.D. dissertation, University of Wisconsin at Madison, Madison, WI, USA.

Delcore, Henry D. 2004. Development and the Life Story of a Thai Farmer Leader. *Ethnology* 43: 33–50. [CrossRef]

Forsyth, Timothy. 2006. *Sustainable Livelihood Approaches and Soil Erosion Risks: Who Is to Judge?* London: LSE Research Online, Available online: http://eprints.lse.ac.uk/archive/00000909 (accessed on 9 September 2019).

Forsyth, Tim, and Andrew Walker. 2008. *Forest Guardians, Forest Destroyers: The Politics of Environmental Knowledge in Northern Thailand*. Seattle and London: University of Washington Press.

Gottlieb, Roger S. 2006. Introduction: Religion and Ecology—What Is the Connection and Why Does It Matter? In *The Oxford Handbook of Religion and Ecology*. Edited by Roger S. Gottlieb. Oxford: Oxford University Press, pp. 3–21.

Hanks, Lucien M. 1962. Merit and Power in the Thai Social Order. *American Anthropologist* 64: 1247–61.

Harris, Ian. 1991. How Environmentalist is Buddhism? *Religion* 21: 101–14. [CrossRef]

Kamala, Tiyavanich. 1997. *Forest Recollections: Wandering Monks in Twentieth-Century Thailand*. Honolulu: University of Hawai'i Press.

Kemp, Jeremy. 1988. *Seductive Mirage: The Search for the Village Community in Southeast Asia*. Dordrecht: Foris Publications.

King, Sallie B. 2005. *Being Benevolence: The Social Ethics of Engaged Buddhism*. Honolulu: University of Hawai'i Press.

King, Sallie B. 2012. Socially Engaged Buddhism. In *Buddhism in the Modern World*. Edited by David L. McMahan. London: Routledge, New York: Taylor & Francis Group, pp. 195–213.

Ling, Trevor. 1973. *The Buddha: Buddhist Civilization in India and Ceylon*. London: Temple Smith.

Lohmann, Larry. 1993. Land, Power and Forest Colonization in Thailand. In *The Struggle for Land and the Fate of the Forests*. Edited by Marcus Colchester and Larry Lohmann. Penang: The World Rainforest Movement, London: Zed Books, pp. 198–227.

Payutto, P.A. 1985. *Photcananukrom Phutthasat (Dictionary of Buddhism)*. Bangkok: Mahachulalongkorn Buddhist University, (In Thai and English).

Pedersen, Poul. 1995. Nature, Religion and Cultural Identity: The Religious Environmentalist Paradigm. In *Asian Perceptions of Nature.* Edited by Ole Bruun and Arne Kalland. Surrey: Curzon Press Ltd., pp. 258–76.

Phimonphan, Sakitram. (Chiang Mai University, Chiang Mai, Thailand and Hug Muang Nan Foundation, Nan Province, Thailand). 2018. Personal communication.

Queen, Christopher S. 1996. Introduction: The Shapes and Sources of Engaged Buddhism. In *Engaged Buddhism*. Edited by Christopher S. Queen and Sallie S. King. Albany: State University of New York Press, pp. 1–44.

Rigg, Jonathan. 1995. Counting the Costs: Economic Growth and Environmental Change in Thailand. In *Counting the Costs: Economic Growth and Environmental Change in Thailand*. Edited by Jonathan Rigg. Singapore: Institute of Southeast Asian Studies, pp. 3–24.

Shalardchai, Ramitanondh. 1984. *Phii Cawnaaj. [The Spirit Lords.]*. University Monograph Project, Monograph Series No. 18; Chiang Mai: The Library of Chiang Mai University. (In Thai)

Sponsel, Leslie E. 2019. Ecology and Spirituality. In *The Oxford Research Encyclopedia of Religion*. Edited by John Barton. New York: Oxford University Press.

Stott, Philip. 1991. *Mu'ang* and *pa*: Elite views of nature in a changing Thailand. In *Thai Constructions of Knowledge*. Edited by Manas Chitakasem and Andrew Turton. London: School of Oriental and African Studies, University of London, pp. 142–54.

Taylor, Jim. 1993. *Forest Monks and the Nation-State: An Anthropological and Historical Study in Northeastern Thailand*. Singapore: Institute for Southeast Asian Studies.

Trébuil, Guy. 1995. Pioneer Agriculture, Green Revolution and Environmental Degradation in Thailand. In *Counting the Costs: Economic Growth and Environmental Change in Thailand*. Edited by Jonathan Rigg. Singapore: Institute of Southeast Asian Studies, pp. 67–89.

Trisurat, Yongyut, Hiroaki Shirakawa, and John M. Johnston. 2019. Land-Use/Land-Cover Change from Socio-Economic Drivers and Their Impact on Biodiversity in Nan Province, Thailand. *Sustainability* 11: 649. [CrossRef]

Tucker, Mary Evelyn, and Duncan Ryuken Williams, eds. 1997. *Buddhism and Ecology: The Interconnection of Dharma and Deeds*. Cambridge: Harvard University Center for the Study of World Religions Publications.

Article

Fatwas on Boosting Environmental Conservation in Indonesia

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Abstract: Concern about the importance of getting Muslims involved in the movement for a better environment in Indonesia has existed since the 1980s, since the involvement of the Islamic boarding school leaders in triggering their community and the involvement of NGOs in empowering the community, particularly in environmental and agricultural restoration. After the Bogor Declaration on Muslim Action on Climate Change 2010, in 2011, The Indonesia Council of Ulama (MUI) established the Institute for Environmental and Natural Resources (PLHSDA) in the MUI's Clerical Conference. The role of this unit within the MUI is very important because the MUI has a special unit in tackling various important issues in the environment, where Muslims can find authoritative answers to environmental challenges. So far, there have been seven MUI fatāwa (edicts) released by MUI related to the environment and the conservation movement. This paper will highlight environmental movements by the Muslim community in Indonesia, and describe how the implementation of the MUI fatāwa can contribute to addressing the massive increase in environmental challenges and increase the involvement and understanding of the Muslim communities in tackling biodiversity conservation as well as climate change.

Keywords: Islam; environmentalism; fatwa; biodiversity; conservation

1. Introduction

Indonesia is the country with the largest Muslim majority population in the world. At the end of 2017, a population census noted that the country had 265 million inhabitants, with 87.2 percent being Muslim. The country became independent from Dutch Colonial rule in 1945. Indonesia became one of the nations that have grown steadily over the last several decades, despite experiencing revolution and conflict at the beginning of its independence. As a developing country, Indonesia seeks to develop the prosperity of its population, open up various industrial sectors, trade, and advanced agriculture for food security.

Besides having a wealth of biodiversity and being included in the State of Megadiversity (Mittermeier and Mittermeier 1997), the country also has abundant mineral wealth, such as nickel, copper, and bauxite. This wealth is one of the cornerstones of exploitation and foreign and domestic investment. Indonesia is also rich in agriculture and plantations. The country is very dependent on natural products including natural forests and all forest resources that come from them and can become commodities. But biogeographic areas in this country such as Sundaland (Sumatra, Kalimantan and Java) and Wallacea (Sulawesi, Maluku and Nusa Tenggara) are categorized as hotspot areas, that is, areas that have high biodiversity and endemicity, but are threatened by excessive exploitation (Mittermeier et al. 1999; Myers et al. 2000).

The religion of Islam entered Indonesia and developed between the 7th and 13th centuries CE, which was proven by the existence of kings from the Indonesian kingdom who wrote and asked for instructions on the teachings of Islam and then embraced it.[1] After that, Islam developed in the archipelago and experienced a period of glory with sultans and small kingdoms oriented to the caliphate that developed, especially in the Ottoman Age.

Islamic rule developed in the 13th century and experienced a peak of the 15th century until the 18th century, when the period of European colonialization went on in several islands and controlled several kingdoms in the archipelago. After the era of independence, Indonesia declared itself as a nation state. The kingdoms in the archipelago joined together to become a unitary state: the Republic of Indonesia, which later became sovereign and independent in 1945.

The roots of Islam as a religion has been inherited for a very long time. Many classical texts on Islamic teachings, including fiqh books, were written in Arabic script but in the Malay language. The governmental system is including the prevailing government system was the kingdom or empire of Islam, where Islamic law was adopted as the law of the State and the king was always accompanied by the ulema, such as the Mufti. The Islamic Sultanate (Mamluk) in the Archipelago applied Islamic law, but this law was later replaced by Dutch colonial law. Religious teachings like those of *muamalah* and worship, have long been guided by what is taught by scholars who have studied in the Middle East. In addition, in the 17–18th century, the development of Islam was supported by a network of Indonesian scholars, especially those from Southeast Asia, networking with teachers and colleagues in the Middle East (Azra 1998), therefore, as a country growing in a culture with a Muslim majority population, Muslims in Indonesia really appreciate their scholars. Some religious organizations with very large followings, such as Muhammadiya, founded in 1912, and the Nahdatul Ulama (established in 1926), were founded by ulama as leaders. The advice of scholars, for Muslims in the archipelago, is a guideline that can direct them in their religious life, because the cleric is the authority in providing answers and guidance in practical matters of religion. A narration of the Prophet Muhammad (pbuh), said:

> "Indeed, the ulama 'are the heirs to the prophets. Indeed the prophets did not inherit the dinar or dirham. But they inherit knowledge. Whoever seizes it has taken a bountiful share indeed." (Related by Ibn Majah)[2]

Some of these scholars, then, not only became leaders in the community, but their advice and commands also became guidelines, especially in carrying out daily religious life. However, after experiencing independence from the Dutch colonial invaders, the State of Indonesia became a republic with all its dynamics wanting to achieve economic prosperity and social justice. The Indonesian government adheres to a secular modern democratic system, but on the other hand, this country has a State guideline called Pancasila which requires all its citizens to believe in God Almighty.

The Republic of Indonesia was formed as a nation-state that respected and gave a place to various religions and ethnic groups. Since its establishment in 1945, the founders of this country have agreed on this policy, making Indonesia a nation-state by adopting five principles (Pancasila) as a view of statehood. Therefore, in principle, following the rules handed down by God is an accepted practice in national life.

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[1] Pulungan (2019), says, Islam spreads in Indonesia escalated by the kingdom of Islam or at least trade relations between indigenous Muslim merchants. Islam arrived six means: (1) traders, (2) politic, (3) marriage, (4) education, (5) arts, (6) sufism. This paper is sensitive to an emphasis on politics and education, as the transformation of politics caused the massive conversion due to the King and the Kingdom system, which instructed that they adopt the Islamic sultanate, thus Islamic law, and their education follows.

[2] See: hadist from Sunan Ibn Majah, Chapter: The Book of Sunnah, hadith no 223, https://ahadith.co.uk/permalink.php?id=6803 (accessed on 6 October 2019).

2. The Role of Majlis Ulama Indonesia

The development of a massive environmental movement throughout the world has brought to Indonesia a regular and active movement of efforts to manage its environment. In recent decades, the role of religion in environmental action activities has been seen to be important, even recommended (Bhagwat et al. 2011). Several studies have been carried out even in early 2000, with the publication of the Harvard *Religion and Ecology* series, including the Islam and Ecology (Foltz et al. 2003).

Indonesian Ulema Council (MUI), is an assembly that provides a place for Indonesian ulama leaders and Muslim scholars. MUI has an important role to fill and provides answers that are motivational about the practicalities of Muslims in carrying out the teachings of the Islamic religion. Equally important, in each discovery, the MUI provides clues to their interpretation of the teachings of Islam. MUI is a non-governmental organization that was established to respond to the needs of Muslims in providing certainty of religious teachings and their implementation within the framework of a plural country like Indonesia.

Since the establishment of the MUI in 1975, it has been noted that the MUI, according to the intentions of its birth, was a forum for connecting the Islamic scholars, leaders and intellectuals from various groups among Muslims. One important role of the MUI is in providing fatwas for Muslims. Even though a fatwa in Indonesia is not a positive law and is not legally binding, a fatwa is believed to be very influential in its implementation in the community. Muslims still want to base their lives on religious beliefs, because, if someone follows the law that is based on God's precepts in the World, then there will also be the demands of God in the hereafter. MUI fatwas become an important reference guide for the religious life of Muslims, especially in Indonesia. And the fatwa continues to be an important reference in religious life, including in matters of *al mu'amalah* (conducting buying and selling transactions and social activities), as well as being a moral foundation in social life.

Also, as a developing country, the fatwas sometimes form the basis for laws which are then determined by the State and can become a positive law adopted by the state. Besides, the MUI fatwa can be adopted as a source of inspirational law for the state, an expert to Indonesia national law, Indrayana says:

> " . . . The MUI fatwa is only an aspirational law that can be transformed into a positive law if it is enacted in a statutory regulation or decided in a judicial ruling with permanent legal force, and eventually becomes jurisprudence."[3]

As a multicultural nation-state, Islamic law in Indonesia is not positive law, but a moral law that can inspire the best choices in carrying out daily activities, especially among Muslims. In short, the MUI fatwa can be classified as a source of material law and a non-binding source of law (Suhartono 2018).

In its historical record, MUI was formed as an independent institution. In its independence, this institution established cooperation on a basis of with mutual respect and did not deviate from this vision, mission and function. It remains as originally intended, a forum for the scholarly network and leadership from various groups among Muslims.

It is said in its history[4] that the establishment of the MUI was also related to the awareness of the diversity of the Indonesian nation, is a unique feature that must be maintained, therefore it is also necessary to live side by side and work together among other national components for good and progress. In the end, MUI wants their role to be one of contributing and endeavouring to realize Islam as grace to all the universe.

MUI was founded to provide religious instructions and answers to the questions of Muslims. Although the fatwa is seen as a non-binding regulation for anyone who wants to obey it, as a doctrine derived from Islamic teachings, a fatwa is a guide for Muslims in seeking answers and

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[3]   Indrayana (2016), Kompas . . . .
[4]   Sejarah MUI. Available online: https://mui.or.id/sejarah-mui/ (accessed on 17 July 2019).

certainty—especially about religious law—for their religious practice. The search for forms of implementation of sharia law has experienced different developments in various places, including good developments in Aceh (Yasa 2015).

After more than 44 years, MUI's very prominent role is in giving fatwas to Muslims. La Jamaa (2018), examining all fatwas issued by MUI from 1975 to 2011 produced 137 fatwas, and 50 decisions in total, aimed both at Muslims and the Indonesian government. The fatwa for the last 26 years has contributed positively to the transformation of contemporary Islamic law in Indonesia.

The confidence in the MUI fatwas, which were then followed by the community, then promoted the dynamics of Islamic Sharia instructions based on the Koran, that were later adopted as binding laws promulgated publicly as part of civil law in a modern state. Some examples are Law No. 1 of 1974 concerning Marriage Law; No. 10 of 1998 concerning Banking; Law No. 17 of 1999 concerning the Implementation of Hajj; Law No. 38 of 1999 concerning Management of Zakah; Law Number 41 of 2004 concerning Waqf, and Law No. 21 of 2008 concerning Sharia Banking. Also there is Law No. 44 of 2008 concerning Pornography; Law No. 50 of 2009 concerning Religious Courts; Law No. 33 of 2014 concerning Guaranteed Halal Products, and Law No. 34 of 2014 concerning Hajj Financial Management.

3. Environmental Conservation Fatwas

The request for fatwa is a way to guide Muslims in Indonesia in their lives who want to base their lives on religious law, which began in the 1980s. Engagement activities with ulama have also been carried out during President Soeharto's efforts to bring development efforts closer to the community including sanitation and water issues in collaboration with UNICEF. Besides, there was also a fatwa on limiting population growth through the Family Planning Program (KB) as a result of the MUI National Conference in the 1980s. The fatwa later became the driving force behind the success of the National Family Planning Movement that was enacted by the government in 1982. The limitation on the number of children in the family planning program was not easily accepted by the community, especially Muslims, because this involved their beliefs. The fatwa support the development program by stated among other:

> "Islamic teachings approve family planning for the health of children, and children, education of children to be healthy, intelligent and pious."[5]

However, when religious leaders were involved, the effort was supported (Warwick 1986). This program was so successful, that President Soeharto was asked to address the UN Session to explain about his experiences in 1992.

Hence, almost no more Fatwas related to the environment were issued by the MUI. It was only after 2009 that the MUI issued a fatwa again related to the environment. Therefore, some environmental conservation NGOs have become aware of the success of this approach and conducted some facilitation to work together with the religious leaders (Mangunjaya 2011). Some fatwas issued by MUI related to the environment are as follows:

1. Fatwa 30 October 1983 Regarding Populations, Health & Development[6]
2. Fatwa 2/2010 Recycling Water for ablutions
3. Fatwa 22/2011 Environmentally Friendly Mining
4. Fatwa 4/2014 The Protection of Wildlife for The Balance of The Ecosystem
5. Fatwa 47/2014 The fatwa on Wastes Management

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[5] See (Majelis Ulama Indonesia [MUI] 2011), p. 324.
[6] This fatwa generated from an MUI National Conference about Kependudukan, Kesehatan dan Pembangunan, tanggal 10 s/d 13 Muharram 1404 H, bertepatan 17 s/d 30 October 1983 M. See (Majelis Ulama Indonesia [MUI] 2011), Himpunan Fatwa MUI Sejak 1975, pp. 318–330).

6. Fatwa No. 1/MUNAS-IX/MUI/2015 The Utilization of Zakat Infaq Shadaqah and Waqf (ZISWAF) for the Construction of Community Water & Sanitation
7. Fatwa 30/2016 The law of burning and land and forest

The edicts for the environment and biodiversity conservation constitute a response to Muslims wishing to know the Islamic perspectives regarding the preservation of wildlife and nature as well as the environment. As an institution that has religious authority to provide religious advice to the community, the MUI, as stated in its organizational regulations, says that the Indonesian Ulema Council has the authority to issue fatwas on shari'ah issues in general, both in the areas of faith, sharia, social relations, morals, culture, and the environment, by always upholding the principles of truth and the purity of religious practice by Muslims in Indonesia. The statement was made in the MUI Organizational Regulation.[7]

The fatwa commission can carry out a process to determine the fatwa through several meetings and deliberations, because the fatwa is an answer

- to requests or questions from the public;
- to requests or questions from the government, institutions/organizations or MUI itself;
- the development and findings related to religious problems that arise due to changes in society, advances in science and technology, culture and arts.

However the issuance of a fatwa is an attempt to get a view of how religion views an issue. Fatwas are discussed in Fatwa Commission hearings and issued with the signature of the fatwa commission and secretary of the fatwa commission (see Figure 1).

The submission process in terms of fatwa submitted to MUI is shown in a recent official document published by PLHSDA-Majelis Ulama Indonesia [MUI] (2014) "Procedures for Determining and Applying Fatwas about the Environment and Management of Natural Resources." It explains, by the way of introduction, that there are four kinds of "tasks and functions" involved in deriving a ruling (Gade 2015):

- the *mustafti* (the party seeking the fatwa);
- the mufti (the author of the fatwa);
- the issue to be determined; and,
- the users of the fatwa or "related parties".

The "framework" for developing and applying the fatwa includes a "workshop" to be attended by the mufti, the *mustafti*, as well as "experts in the area and personages from the society who will utilize the fatwa". The goal at this stage of the process is to achieve a "comprehensive and holistic" formulation of the issue with an eye to an implementable solution, through "various sources of Islamic law" as well as "comparative study and/or field research.

In the process of releasing the fatwa, the stipulation of the fatwa, procedures, is stated in paragraphs 1 to 4 of Article 2. Paragraph 1 of the MUI Fatwa Guidelines stipulated in Decree of the MUI No. U-596/MUI/X/1997, such as the following: "Any fatwa must be based on Quran and the Prophet's Sunnah, and *mu'tabarah*[8] guides, and must not be contrary to the common good. Paragraph 2 stipulates: in the event that those bases are not contained in the Quran and Sunnah as defined in paragraph 1 of Article 2, the fatwa decided should not conflict with *ijmā', mu'tabar, qiyas (analogy)*, and other legal guides, such as *istiḥsān, Maslaḥah, Mursalah*, and *Sadd al-Dhari'ah*. Paragraph 3 states: before stipulating a fatwa, the opinions of the previous imams of the madhhab should be reviewed, both related to the legal guides and related to the guides used by those with dissenting opinions. Paragraph 4 states: the views of the relevant experts are to be considered when stipulating a fatwa.

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7   MUI. 1997. *Pedoman Penetapan Fatwa Majelis Ulama Indonesia*. Nomor: U-596/MUI/X/1997.
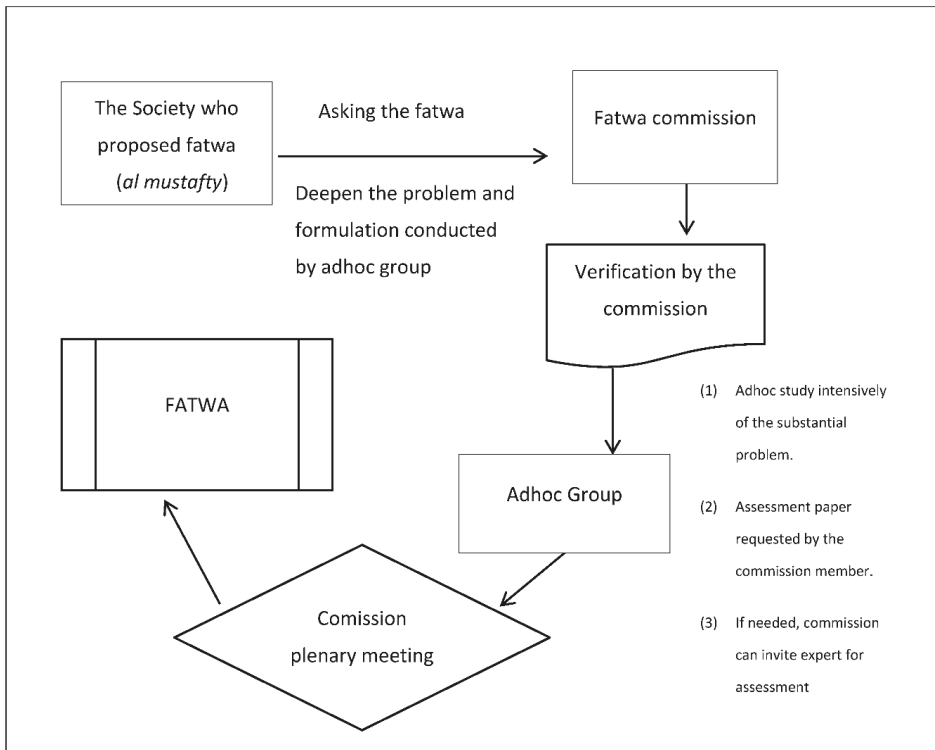8   MUI ibid.

Figure 1. The fatwa process, beginning with the asking and questioning of the Fatwa Commission, substantial study and assessment and the fatwa release.[9]

4. Fatwa on the Conservation of Biodiversity

The Fatwa on endangered wildlife is an interesting example of a case involving religious teachings. Indonesia is known as a majority Muslim country which has a high wealth of flora and fauna. But more often these days, fears about the use of these resources such as the hunting and handling of wild animals have grown. Although Indonesia has more than 54 national parks, and various types of protected areas with various types of protected benefits, many protected animals are located outside conservation areas, for example 78% of the orangutan population are outside the area, and 60% protected species outside the area (Wich et al. 2012). So, the existence of a conservation area does not guarantee the safety of certain species in their natural habitat because they are hunted or traded. Also, the conversion of natural habitats into plantations is also very extensive, such as land clearing for palm oil, cocoa, coffee and other commodities.

The emergence of Fatwa No. 4/2014, on the protection of endangered wildlife for the balance of the ecosystem is an attempt to find answers in overcoming the rampant illegal trade in protected animals and seeks to give empathy to every creature created by God, so that these creatures will not become extinct in nature and can carry out their function in protecting ecosystems for the benefit of humans.

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[9] PLHSDA-Majelis Ulama Indonesia [MUI]. 2013. Procedures for Determining and Applying Fatwas about the Environment and Management of Natural Resources. PLHSDA-Majelis Ulama Indonesia. Paper prepared by PLHSDA MUI for FGD on Identification of problems and formulation of challenges in protecting tigers 16-Okt 2013 October 2013 (unpublished paper).

This is an effort to actually find answers from the viewpoint of Islamic teachings, especially in responding to problems that may not have occurred in the centuries when Islamic Shari'a and Jurisprudence were applied. Islamic teachings provide a very important inheritance that has a positive impact on various types of endangered species that are protected, such as tigers, species of birds, reptiles, amphibians and primates, which are prohibited for consumption in Islamic teachings (Al Banjari 1882). The ban has an impact on hunting because the community has no interest in eating these species (Mangunjaya 2019). However, the complexity of the modern world, brings a new challenge, that the purpose of hunting now is not only for consumption, but the results can also be sold.

So the question arises: Is hunting animals that are forbidden as food also prohibited for sale? Because it is evident that many Muslims in the field hunt forbidden animals that are forbidden to eat, such as orangutans and tigers, but they sell them and get income from them. Requests have been submitted to the MUI, to consider the results of the MUI team's activities in the field and several discussions and seminars to get clarity on the need for the Indonesian Ulema Council (MUI) Fatwa regarding: Protection and Preservation of tigers, rhinos, elephants, orangutans and other endangered species, especially in the effort to raise the awareness of Muslim communities where the pockets of habitat of endangered animals that have been damaged and threatened with extinction.

The crisis that threatens the existence of these species has become a concern of environmental experts, because in Indonesia, in particular, the exploitation of wild animals is increasing, due to the hobby (for example) by keeping birds in a cage, and many are also driven by economic needs. Hunting is also triggered by cultural factors in certain ethnic groups in Indonesia, due to the rampant trade in animals driven by economic activity (Jepson and Ladle 2005). This crisis has caused scarcity in nature: certain species for example helmet hornbills, that had been ranked endangered, have now become critically endangered (IUCN 2018).

In the country with the largest Muslim population in the world, then, the hope to provide awareness through Islamic teachings is an important effort. This was done considering the effectiveness of the movement that had been carried out by the previous government, in involving scholars through the Indonesian Ulema Council (MUI):

Recognizing the importance of the role of ulama and its influence in guiding religious life that can be one of the keys to behavioral change in Indonesia, environmental activists made proposals to obtain a fatwa on the hunting and trading status of protected endangered species. This petition initiative was carried out by four institutions, namely: (1) Ministry of Environment and Forestry, (2) WWF Indonesia, (3) Fauna and Flora Internasional (FFI), (4) Forum Harimau Kita and (5) Center for Islamic Studies, Universitas Nasional (PPI-UNAS).

Starting with holding a dialogue and facilitation event organized by NGOs and PPI UNAS, in consultation with MUI PLH-SDA (MUI 2016), the dialogue and meeting narrowed to the desire to obtain an MUI fatwa on animals—especially those that were protected and then traded. The letter was signed by the five institutions. In detail, the submission scheme can be seen in Figure 1.

The Fatwa Commission then discusses and makes arguments based on the principles of fiqh and Islamic Sharia law on the subject in question. The Fatwa Commission in the MUI consists of 48 scholars who can gather to agree on the fatwa concept after going through debates and making important arguments and counter-arguments. In the process of making fatwas, especially in discussing contemporary issues, the MUI always consults with experts. They present experts to gain knowledge input in identifying problems. After there is identification and understanding of the problem, the muftis will look for the answers in the Qur'an. If there is an answer, it will be answered following what is in the verse in the Qur'an. If it is not in the Qur'an, it is sought in the Prophetic Sunnah (hadith), if it is not in the Sunnah, then the opinions of the ulama will be sought. Usually if it is included in the opinion of the ulema, then this is included in the area of conducting ijtihād (Al Ayub 2019).

At a meeting to explore and identify the fatwa of protected endangered species. MUI presented several meetings with conservation experts, and dialogue was also held with the government and researchers. The MUI conducted field visits to ask the community about their conflict with wildlife,

and what they really expect. The dialogue process for validating and deciding Fatwa No. 4/2014 took almost 10 months, was carried out from March 2013, and finalization and an official announcement were made in 2014.

The fatwa was written in a white paper with a supporting letter, totaling 15 pages, consisting of: remembering, weighing, paying attention and stipulating, containing a comprehensive discussion of Islamic principles towards all God's creatures. The Fatwa for the Protection of Endangered Species for the Balance of Ecosystems No. 4/2014, provides important clauses:

- Killing, harming, assaulting, hunting and/or engaging in other activities which threaten endangered species with extinction are forbidden, except for cases allowed under shariah, such as self-defense;
- Illegal hunting and/or illegal trading of endangered species are *haram* (forbidden).

Besides, Fatwa No. 4. 2014 provides advice to other stakeholders to enforce this advice. The fatwa specifically mentions the importance of government involvement, parliament, businesses as well as religious and community leaders. For community leaders, for example, the fatwa message is to spread religious understanding on the need to maintain balanced ecosystems, especially by protecting endangered species; and to encourage creation of religious guidelines and the formation of "Environment Preachers" to establish public awareness on the need for environmental protection and conservation of endangered species.

According to the fatwa, every living organism has the right to sustain its life and may be used for human well-being. Hence, treating endangered species well by protecting and conserving them in order to ensure their well-being is mandatory.

The Islamic scholars emphasize that protecting and conserving endangered species shall occur by, among other things:[10]

- Guaranteeing their primal needs, including food, shelter and the need to reproduce;
- Not burdening them with loads (weight) beyond their capacities;
- Not placing them in the vicinity of other animals which may harm them;
- Conserving their habitats;
- Preventing illegal hunting and the illegal wildlife trade;
- Preventing human-wildlife conflict;
- Maintaining animal welfare.

This fatwa was then disseminated in order to strengthen the activities of the protection of endangered species. Some conservation NGOs, in general, convey this fatwa to the Muslim communities on the sites where they work, both formally and informally. Eventually USAID documents related to the Biodiversity Handbook (USAID 2015), appreciated MUI's move to provide a fatwa on animal protection and said that the step represented the most advanced view in the Muslim world.

The issuance of this fatwa was enthusiastically welcomed by non-governmental organizations engaged in conservation. They also helped disseminate this fatwa, inviting imams and clerics to join together to campaign for the fatwa. The National University Center for Islamic Studies together with several NGOs and NGO partners implemented in the field, such as the World Wide Fund for Nature (WWF) in Sumatra and Java, Fauna and Flora International (FFI) in Aceh, the Zoological Society of London (ZSL) in South Sumatra, International Animal Rescue Indonesia (IARI) in West Kalimantan etc.

The issuance of this fatwa later became a guideline for all scholars in the regions, especially those related to efforts to sensitize the public. With the existence of this fatwa, people increasingly now recognize that efforts to protect and preserve wildlife are part of Islamic teachings. Before that there was no straightforward explanation as to why animals were preserved, and why Muslims were encouraged to preserve them. "With this fatwa, our activities in the community in voicing about nature

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10 Fatwa MUI No. 4/2014, The Protection of Endangered Species for the Balance of Ecosystem.

conservation including flora and fauna are getting louder. With our preachers, we implement the Islamic vision and mission for protection of the species, and community are aware to follow this"[11]. Through the conservation preachers, we believe it will be easy to increase community understanding[12].

Fatwas are also expected to function as pre-emptive efforts in overcoming conflicts between animals and humans (St. John et al. 2018). Non-governmental organizations and government activities are increasingly helped by the existence of this fatwa, especially in providing an understanding of the Islamic perspective on protected animals, also felt by Ujung Kulon National Park, which carries out activities by involving the preachers, by visiting village mosques especially during Ramadan. The national park staff conducted a get-together with the clerics conducting Ramadhan prayer (*tarawih*) by traveling from mosque to mosque in the villages near Ujung Kulon National Park. By this means, hopefully the community surrounding the national park will be more aware of the importance of protecting its ecosystem. Tjamin et al. (2017) and Mangunjaya et al. (2018) observed there are increasing awareness among Muslims in Indonesia on their conservation intention for action after MUI released their edict. However, more effort should be conducted in the site particularly at the vicinity of conservation areas, particularly to involve their religious leaders.

5. The Fatwa on Burning Forest and Land

Forest fires are events that often occur in Indonesia. The cause of forest and land fires in Indonesia, was the work of several persons who were intentionally looking for profit. The biggest fire area in Sumatra is the Forest Production Area 51% and plantation 30%. So around 80% of the fires occur in the concession, and if this can be handled then the fire problem can be overcome.

In 2015, there were severe fires that hit Indonesia's forests, especially on the islands of Kalimantan and Sumatra. The total area of forest and land fires reached 2.7 million ha with a total economic loss of 16.2 billion USD or 242 trillion rupiah. Losses incurred that can be assessed economically affected include flight activities, economic activities that were stopped due to fire and crop loss. On the other hand the number of victims of the Indonesian people who were exposed to smoke reached 40 million and 500 thousand developed acute respiratory infections (ISPA), which caused 19 deaths and more than 100,000 premature deaths (The Guardian 2015). The impact of the haze also reached neighboring countries such as Malaysia, Singapore and Thailand. Emergency status was declared by the government for six provinces, namely: Riau, Jambi, South Sumatra, Central Kalimantan, West Kalimantan and South Kalimantan.

As a result of these fires, according to Global Fire Emissions Database (GFED) records, Indonesia's CO_2 emissions increased to one billion tons, exceeding the annual emissions of Germany. During forest fires, Indonesia emits carbon emissions and pollutes the atmosphere with an average of 15–20 million tons of carbon per day, which exceeds 14 million tons of US daily emissions in support of factories and cars to run the economy (Huijnen et al. 2016). The World Bank (2016), reported that Indonesia had an estimated loss of IDR 221 trillion, caused by the fire occurring from June to November that burned 2.6 million hectares of land and resulted in thick smoke and haze. These figures have not taken into account the losses in health and education. 37% of the 2.6 million hectares of land burned in 2015 was peatland. In fact, Peatland serves as a reservoir that can contain a huge amount of carbon.

The year 2015, indeed, was in the five-year cycle of El Niño, a regularly occurring weather anomaly, and because of complex series of climatic changes affecting the equatorial Pacific region including Indonesia, the El Niño in 2015, which according to experts was equal to the El Niño in 1998, it caused some months of drought, causing the forests in Kalimantan and Sumatra to be highly flammable. Fire could spread quickly and because there was also an interest in immediately clearing large tracts of plantations, by burning.

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[11] Muttaqin, Zaenal. 2019. *Chairman of MUI Sub District Cimanggu, Ujung Kulon, Banten*, May 20.
[12] Jazuli. 2019. Ujung Kulon National Park, June 2.

To tackle the disaster at the beginning of the fire of 2015, which was seen to be very severe, MUI issued *Tadzkirah* or religious memorandum. This memorandum is a short letter, a circular disseminated to the public and says among other things:

> First, the MUI called on people to repent and ask God for forgiveness from all kinds of immorality, abandon unjust behaviour, increase charity, and renounce hostility. Because of the prolonged drought that has hit this country could be a warning from Allah for our actions. Secondly, the MUI urges Muslims to perform Istisqa prayers (prayers for rain), preceded by fasting for 3 days, seeking for forgiveness (istighfar), polite behaviour and simple life. The Muslims were also asked to ask for prayer to be more pious, according to the Prophet Muhammad and his companions. And third, the MUI calls on the government to adopt a policy of strict and strategic measures that have implications for stopping or reducing damaging behaviour, given the adverse effects of a long drought, among others by enforcing laws that bind every arsonist and landowner that causes the danger of smoke, ... [13]

This memorandum was then followed up by the Muslims at the society, who conducted the *Istisqa* prayer in the villages, where there was a long drought. In practice, people go out into the open to pray and pray *istisqa*. Many areas conducted this prayer and eventually the raining was coming directly during they conducted prayer after months of drought and not raining.[14]

Because of the severity of the fires in 2015, which caused huge losses, the government of President Jokowi realized the importance of direct handling of the source of the problem of peat forest fires. Peat forest fires have repeatedly caused haze disasters, leading to protests from neighboring countries. Thus, at the beginning of his administration, President Joko Widodo established the Peat Restoration Agency with the ambition of restoring 2 million hectares of peatland in seven provinces, mainly those affected by peat forest fires. (United Nation Development Program [UNDP] 2016). The Peatland Restoration Agency (BRG) was established by virtue of the Presidential Regulation No. 1 of 2016, signed by President Joko Widodo on 6 January 2016. BRG operates under and reports to the President. BRG is responsible for coordinating and facilitating, reporting to the President. It operates in seven priority provinces, namely Riau, Jambi, South Sumatra, West Kalimantan, Central Kalimantan, South Kalimantan, and Papua. BRG's target of peatland restoration is set to two million hectares, which must be accomplished within the working period, starting from 6 January 2016 to 31 December 2020 (Badan Restorasi Gambut [BRG] 2019).

In its program, BRG takes comprehensive action in collaboration with various stakeholders. According to BRG, their institutions collaborate with seven regional governments, including the governments in Riau, Jambi, South Sumatra, West Kalimantan, Central Kalimantan, South Kalimantan, and Papua provinces in completing the peatland restoration programs. The seven provinces are BRG's priorities for the period of 2016–2020. Additionally, collaboration with 57 district or municipal governments in the seven provinces is also established. BRG, along with its partners, has facilitated 262 villages. The other efforts by BRG also strengthened the community group, up to 2018, they have engaged with 291 community groups to have organized freshwater fisheries, livestock farming, beekeeping, etc.

In 2016, the effort to prevent the burning the forest and land was requested in a letter by the Director General of the Ministry of Environment and Forestry (KLHK), San Afri Awang, on 6 January 2016, who specifically requested a fatwa on the effort to prevent forest fires The Ministry of Environment and Forestry requested support to give endorsement that all Indonesian people carry out activities to prevent land and forest fires in Indonesia: because forest fires damage public health in a broad and uncontrolled way, and because forest fires place economic and social burdens on every affected person.

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[13] Tazkirah MUI, TAD-468/MUI/X/2015.
[14] Hujan turun di tengah khusyuknya salat Istisqa di Riau, Rabu. 28 Oktober 2015. Available online: https://www.merdeka.com/peristiwa/hujan-turun-di-tengah-khusyuknya-salat-istisqa-di-riau.html (accessed on 31 August 2019).

The next consideration requested was due to repeated land and forest fires every year that disrespected the right to healthy living for everyone. After a series of many meetings, MUI issued Fatwa No. 30/2016, concerning the Law on Forest and Land Burning (Majelis Ulama Indonesia [MUI] 2016):

- The burning of forests and land that can cause damage, pollution, harm to other persons, adverse health effects, and other harmful effects, is religiously forbidden (*haram*).
- Facilitating, allowing, and/or deriving benefits from the burning of forests and land as referred to in item 1 is religiously forbidden (*haram*).

The issuance of this fatwa becomes an important motivation, that attempts to preserve the environment and as such has received wide attention. The Ministry of Environment and Forestry believes that efforts made by the Ministry of Environment and Forestry, such as material law enforcement alone, are not enough and this Fatwa will bring important pressure from the moral side. Thus, the integration of approaches using religious fatwas can be an important part of efforts to tackle forest fires. This effort is also important because religious leaders are those who are respected in the community at the grassroots level (Mangunjaya et al. 2018). Therefore, learning from the huge losses and fires, the government is making every effort to be proactive in efforts to prevent forest fires. However the effort to disseminate this fatwa becomes a challenge.

Socialization efforts were then carried out in several regions, and also partially carried out by the MUI together with related agencies. In addition, dissemination of the fatwa was carried out by the UNAS Center for Islamic Studies with BRG and MUI. The existence of the fatwa also encourages Muslims in particular to be more confident that they are carrying out land conservation as part of efforts to implement fatwas on the ground.

Although there has been no validation or research on whether this fatwa has an impact on reducing forest fires, at least the record of forest fires during the last three years after 2016 and efforts to implement this fatwa has been carried out, which has helped the community understand the prevention of burning land and forests. Abdul Rahim[15], a cleric who took part in this training in July 2018, stated that after his training, he spread the word regarding the fatwa through the mosque and the Muslim congregation (pengajian) to make " . . . the fatwa more informative to the villages that burning the land is prohibited by religion (haram) and to guard it are an obligation (wajib)."

Some research after 2015 shows a decrease in fire hotspots that occurred in Indonesia. Of course, this compliance effort is the result of integrated actions and policies, because dealing with forest fires is a complex problem and must be carried out with a multidisciplinary approach. No less important, in the face of forest and land fires, the government has acted more decisively. President Jokowi, gave the command so that the Commander-in-Chief (regional commander) deployed military troops, so that no fire could occur. In addition, the president will order the Chief of Police and Armed Forces Commander to move in his troops if they fail to put out fires in their area (The Jakarta Post 2019).

In early August of 2019, when there were indications of a long dry season, President Jokowi gave instructions and gathered police chiefs and TNI commanders and instructed the Chief of Regional Police (Kapolda), Commander of the Kodam (Pangdam), Commander of Military Resort (Danrem), Commander of Kodim (Dandim) and the Head of the Resort Police (Kapolres) to work to help the Governor, Regent/Mayor and collaborate with the central government. To the Commander of the TNI, National Police Chief, BNPB, and BPB, Jokowi emphasized not to let the events get worse. The slightest fire must immediately be extinguished (Ministry of Environment and Forestry [MOEF] 2019).

In this case, the moral support of the ulama in their efforts to prevent forest fires is very important and they are willing to help the government[16]. In other words, this fatwa can be complementary to state regulations because it is increasingly clear that the legal status of forest burners is damaging and causing harm to humanity.

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[15] Abdul Rahim, 2019. Desa Buantan Letari, West Kalimantan, September 9.
[16] Zamroni, Hasan. 2018. Kubu Raya West Kalimantan, April 27.

Panjaitan (2018) noted a decrease in hotspots occurred during 2015–2017. Hotspots in 2015: 21,929 hotspots, to 2016: 3915 hotspots and in 2017: 2567 hotspots. In 2017, they were reduced (97%), the challenge then increased in 2018, to 4613.

Although it is clear that if the sentence is upheld, the sanctions stipulated by Law No. 41 of 1999 also Forestry (Article 78 paragraph 3) mean that perpetrators of forest fires are subject to 15 years of imprisonment and a maximum fine of Rp 5 billion. However, law enforcement is complex and expensive to implement. This paper is an illustration of the importance of involving Islamic religious leaders in participating in overcoming environmental challenges.

6. Conclusions

Islam still exists as an ongoing faith, because Muslims believe that the teachings of Islam must not only apply in the world but will be asked about in the hereafter. This belief is driving environmental action in Indonesia, and can be an entry into actions that are believed to change perceptions and behavior at the grassroots level. Nevertheless, religious elements are not the only element that can encourage the prevention of environmental damage; religious teachings such as this fatwa can be complementary to actions that are more environmentally friendly and care for nature, because changes and worldviews based on beliefs are the basis for changing behavior.

Substantially, there is no separation between aspects of religious beliefs and environmental care practices because Islam is inherently an environmental religion, e.g., the need for clean and good nature, such as uncontaminated ablution water for the legal (acceptance) of worship. There are indications when on the field that the fatwa can bring the Muslim community to a better understanding regarding the importance of nature conservation. Therefore, the approach through religion can be one of the important entries in making Muslim communities aware of environmental conservation.

Fatwas issued by MUI, as an institution that has the authority to provide answers to religious teachings to Muslims, especially in Indonesia, may become a model for other Muslims elsewhere who want the response of religious teachings to become guidelines on aspects of morality common to people and nations still also affected by the care of nature and its contents.

References

Al Ayub, Sholahudin. 2019. Sholahudin Al Ayub, Beberkan Proses Pembuatan Fatwa MUI. Youtube. Binus Channel. Available online: https://www.youtube.com/watch?v=-3Sj0ma5M3E (accessed on 12 August 2019).

Al Banjari, Muhammad Arsyad. 1882. *Sabil al Muhtadin li tafaqahu fi Amir al-din*. (Transkiped into Bahasa Indonesia by A. Syukur. Surabaya: Bina Ilmu). Makkah: Al Haramain.

Azra, Azyumardi. 1998. *Jaringan Ulama Timur Tengah dan Kepulauan Nusantara Abad XVII dan XVIII, Melacak Akar-akar Pembaharuan Pemikiran Islam di Indonesia*. Bandung: Mizan.

Badan Restorasi Gambut [BRG]. 2019. *Three Years Peatland Restoration in Indonesia*. Jakarta: BRG.

Bhagwat, Shonil A., Nigel Dudley, and Stuart R. Harrop. 2011. Religious following in biodiversity hotspots: Challenges and opportunities for conservation and development. *Conservation Letters* 4: 234–40. [CrossRef]

Foltz, Rhichard C., Frederich M. Denny, and Azizan H. Baharuddin. 2003. *Islam and Ecology: Bestowed Trust*. Cambridge: Harvard University Press.

Gade, Anna M. 2015. Islamic Law and the Environment in Indonesia: *Fatwa* and *Da'wa*. *Worldviews* 19: 161–83. [CrossRef]

Huijnen, V., Martin J. Wooster, Johannes W. Kaiser, David L. A. Gaveau, Johannes Flemming, Mark Parrington, Antje Inness, Daniel Murdiyarso, B. Main, and M. Van Weele. 2016. Fire carbon emissions over maritime Southeast Asia in 2015 largest since 1997. *Nature* 6: 26886. [CrossRef] [PubMed]

Indrayana, Denny. 2016. Fatwa MUI, Hukum Positif, dan Hukum Aspiratif. Available online: https://nasional.kompas.com/read/2016/12/22/17262341/fatwa-mui-hukum-positif-dan-hukum-aspiratif.Kompas.com (accessed on 2 February 2019).

IUCN. 2018. Helmeted Hornbill (*Rhinoplax vigil*) Critically Endangered Species. Available online: https://www.iucnredlist.org/species/22682464/134206677 (accessed on 22 August 2019).

Jamaa, La. 2018. Fatwas of the Indonesian council of ulama and its contributions to the development of contemporary Islamic law in Indonesia. *Journal of Islam and Muslim Societies* 8: 29–56. [CrossRef]

Jepson, Paul, and Richard J. Ladle. 2005. Bird-keeping in Indonesia: Conservation impacts and the potential for substitution-based conservation responses. *Oryx* 39: 442–48. [CrossRef]

Majelis Ulama Indonesia [MUI]. 2011. *Himpunan Fatwa MUI Sejak 1975*. Jakarta: Penertbit Airlanga, 962p.

Majelis Ulama Indonesia [MUI]. 2014. Fatwa Pelestarian Satwa Langka untuk Menjaga Keseimbangan Ekosistem. Available online: http://www.arcworld.org/downloads/February-2014-Indonesian-Fatwa-Bahasa.pdf (accessed on 21 July 2019).

Majelis Ulama Indonesia [MUI]. 2016. Fatwa Hukum Pembakaran Hutan dan Lahan. The Law on Burning Land and Forest. Fatwa MUI No. 30/2016. Available online: http://ppi.unas.ac.id/wp-content/uploads/2017/05/FATWA-KARHUTLA-English.pdf (accessed on 20 August 2019).

Mangunjaya, Fachruddin M. 2011. Developing Environmental Awareness and Conservation through Islamic Teaching. *Journal of Islamic Studies* 22: 36–49. [CrossRef]

Mangunjaya, Fachruddin. M. 2019. *Konservasi Alam dalam Islam*. Jakarta: Yayasan Obor Indonesia.

Mangunjaya, Fachruddin M., Chantal Elkin, Gugah Praharawati, Imran S. L. Tobing, and Yeremiah R. Tjamin. 2018. Protecting of Tigers with a Fatwa: Lesson learn on faith base approach for conservation. *Asian Journal of Conservation Biology* 7: 78–81.

Ministry of Environment and Forestry [MOEF]. 2019. Amanat President Jokowi Pada Rapat Koordinasi Nasional Pengendalian Kebakaran Hutan dan Lahan. Available online: http://ditjenppi.menlhk.go.id/berita-ppi/3436-amanat-presiden-jokowi-pada-rapat-koordinasi-nasional-pengendalian-kebakaran-hutan-dan-lahan-tahun-2019.html (accessed on 25 August 2019).

Mittermeier, Russell A., and Christina G. Mittermeier. 1997. *Megadiversity: Earth's Biologically Wealthiest Nations*. Garza Garcia N.L.: CEMEX.

Mittermeier, Russell. A., Norman Meyers, Particio Gil Robles, and Christina G. Mittermeier. 1999. *Hotspots*. Garza Garcia N.L.: CEMEX.

MUI. Lembaga Pemuliaan Lingkungan Hidup dan Sumber Daya Alam (PLH-SDA) MUI. 2016. *Pedoman Pengajian Permohonan Fatwa*. Jakarta: PLH-SDA MUI.

Myers, Norman, Russell A. Mittermeier, Cristina G. Mittermeier, Gustavo A. B. Da Fonseca, and Jennifer Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403: 853–58. [CrossRef] [PubMed]

Panjaitan, Charles. 2018. Lessons Learned and Commitment of Forest and Land Fire on Peatland Fire Management in Indonesia. Slide Presentation. Available online: https://www.slideshare.net/CIFOR/lessons-learned-and-commitment-of-forest-and-land-fire-on-peatland-fire-management-in-indonesia (accessed on 26 August 2019).

Pulungan, H. Suyuti. 2019. *Sejarah Peradaban Islam di Indonesia*. Jakarta: Penerbit Amzah, 362p.

St. John, Freya A. V., Matthew Linkie, Debbie J. Martyr, Betty Milliyanawati, Jane E. McKay, Fachruddin M. Mangunjaya, Nigel Leader-Williams, and Mathew J. Struebigg. 2018. Intentions to kill: Tolerance and illegal persecution of Sumatran tiger and sympatric species. *Conservation Letter* 11: e12451. [CrossRef]

Suhartono, S. 2018. Eksistensi Fatwa Majelis Ulama Indonesia Dalam Negara Pancasila. *AL-IHKAM: Jurnal Hukum & Pranata Sosial* 12: 449–65.

The Guardian. 2015. Available online: https://www.theguardian.com/sustainable-business/2015/nov/11/indonesia-forest-fires-explained-haze-palm-oil-timber-burning (accessed on 11 November 2015).

The Jakarta Post. 2019. Indonesia President to Sack Fire Fighters If Forest Blazes Not Tackled. Available online: https://nationalpost.com/pmn/environment-pmn/indonesia-president-threatens-to-sack-fire-fighters-if-forest-blazes-not-tackled (accessed on 16 August 2019).

Tjamin, Yeremiah R., Fachruddin Majeri Mangunjaya, Imran S. L. Tobing, and Gugah Praharawati. 2017. The Attitude, Norm and Perception of Communities towards Sumatran Tiger Conservation Initiatives in Aceh. *Journal of Indonesian Natural History* 5: 10–15.

United Nation Development Program [UNDP]. 2016. Work of the Indonesia Peatland Restoration Agency Gains Momentum. Available online: http://www.id.undp.org/content/indonesia/en/home/presscenter/articles/2016/09/01/work-of-the-indonesia-peatland-restoration-agency-gains-momentum.html (accessed on 1 July 2019).

USAID. 2015. *Biodiversity and Development Handbook 2015*. Washington, DC: U.S. Agency for International Development.

Warwick, Donald P. 1986. The Indonesian Family Planning Program: Government Influence and Client Choice. *Population and Development Review* 12: 453–90. [CrossRef]

Wich, Serge, David Gaveau, Nicola Abram, Marc Ancrenaz, Alessandro Baccini, Stephen Brend, Lisa Curran, Roberto A. Delgado, Andi Erman, Gabriella M. Fredriksson, and et al. 2012. Understanding the Impacts of Land-Use Policies on a Threatened Species: Is There a Future for the Bornean Orang-utan? *PLoS ONE* 7: e49142. [CrossRef] [PubMed]

World Bank. 2016. *The Cost of Fire: An Economic Analysis of Indonesia's 2015 Fire Crisis. Indonesia Sustainable Landscapes Knowledge Note 1*. Jakarta: World Bank.

Yasa, Ahmad. 2015. Al qanun al'Islami watatawuruh fi 'indunisia (the Development of Indonesian Islamic law): A Historical Overview. *Journal of Indonesian Islam* 9: 101–22. [CrossRef]

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