Permaculture

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The solutions-based design framework of permaculture exhibits transformative potential, working to holistically integrate natural and human systems toward a more just society. The term can be defined and applied in a breadth of ways, contributing to both strengths and weaknesses for its capacity toward change. We find that permaculture casts a wide net that participants grapple with in their own work. They engaged in a negotiation process of how they associate or disassociate themselves with the term, recognizing that it can be both unifying and polarizing. Further, there was noted concern of permaculture's failure to cite and acknowledge its rootedness in Indigenous knowledge, as well as distinguish itself from Indigenous alternatives. We contextualize these findings within the resounding call for a decolonization of modern ways of living and the science of sustainability, of which permaculture can be critically part of.

 $Keywords: permaculture \ ; \ definition \ ; \ commodification \ ; \ regenerative \ ; \ Indigenous \ ; \ reconciliation$

1. Introduction

Sustainability is broadly accepted as the capacity to "meet the needs of the present without compromising the ability of future generations to meet their own needs" [1][2]. As a concept and transdisciplinary framework, sustainability emerged in response to concerns about the broad societal and environmental impacts of a global industrialized society, including climate change, widening socioeconomic inequities, and spiraling resource consumption [3][4][5]. Permaculture is an international network with a solutions-oriented approach to sustainability that aims to "design and develop sustainable communities in harmony with natural ecosystems" ([6], p. 720).

Founded in 1975 in Australia, permaculture has experienced an increasing, broadly distributed international presence in recent decades $^{[Z]}$. One of the most distinctive aspects of the permaculture network is its organization around the design system after which it is named. Permaculture design is a framework converging on notions of (1) using nature as a guide, (2) thinking holistically, (3) being a solutions-based cooperative design system, and (4) creating abundance and harmony $^{[\underline{a}]}$. Practitioners and scholars have described it as a catalyst toward promoting transformative pedagogy for education $^{[\underline{a}]}$, fostering learning communities of grassroots practitioners $^{[\underline{10}]}$, and offering a holistic integration of the natural world and its relationships into modern ways of life and thought $^{[\underline{11}][\underline{12}]}$. Especially in contexts beyond the United States (US), permaculture thought and practice contribute to the development of alternative agri-food networks $^{[\underline{a}][\underline{13}][\underline{14}][\underline{15}]}$, enabled by its emphasis on community knowledge, inclusion of Indigenous practices, and avoidance of one-size-fits-all approaches. As a note, we use the term "Indigenous" throughout the paper as a broad placeholder term for "place-based human ethnic cultures that have not migrated from their homeland" $^{[\underline{16}]}$ and as a way of distinguishing these nations, peoples, and communities from settlers and colonizers $^{[\underline{17}]}$.

Yet, due in part due to its broad range of application, permaculture resists concise definitions, making communication of core ideas difficult. As Macnamara (2019) states, "There are as many permaculture definitions as there are permaculturists. Each person has developed their own ways of using permaculture and their relationship to it" ($^{[8]}$, p. 1). Conceptual definitions have long been obscured by the proliferation of multiple, divergent meanings, creating confusion over measurement and application $^{[18]}$. Akin to critiques of the term agroecology $^{[19][20]}$, this ambiguity over what the term means presents confusion and complexity on how to use it.

The conceptual and practical breadth of permaculture has been highlighted as both a weakness and a strength. Permaculture concepts bridge localized experience with broader sociopolitical philosophies in ways that allow practitioners to imagine alternatives to the conventional human-nature relationships of the modern era [21]. Each of its divergent definitions can serve a specific and meaningful purpose toward re-thinking and re-imagining how we live within, perceive, and emulate our natural worlds [11]. Nonetheless, resistance to succinct definitions can obscure its purpose and create a sense of exclusivity, leading some to argue that the permaculture movement should stick to practical matters of land use rather than "spread itself too thin" [22]. Furthermore, broad conceptualizations of permaculture may gloss over the differences in scale and impact between individual lifestyle practices and social movements; while it can inspire people to

enact sustainable changes in their daily lives, the importance of these actions may be detached from a larger political context or goal [23]. The low level of institutionalization and organization in the permaculture network contrasts with other grassroots movements that include a focus on human–nature relationships and practices, such as the international peasants' agroecological movement, La Via Campesina [23].

2. A Need for Reconciliation

Permaculture teachers and practitioners are struggling with the lack of acknowledgment and citation of Indigenous practices and knowledge in permaculture, a concern that has been echoed throughout the sustainability movement more broadly. Sustainability and sustainable development have failed to center Indigenous Peoples and knowledge, resulting in the potential for appropriation of their ways of life. As a result of pushing Indigenous knowledge to the side or unjustly plagiarizing it, land is largely considered as a political and economic tool [24], multiple, contextualized definitions of the term 'sustainable' are not equally valued $\frac{[25]}{}$, and nature is often viewed as a controllable "machine" $\frac{[26]}{}$. Permaculture has faced similar criticisms, and the movement internationally has experienced issues with diversity and inclusion of its participants, being largely represented by a white supermajority [27]. Given that Western permaculture theory is grounded in Western scientific knowledge and research, there are important differences between the theory and practice of permaculture and Indigenous biocultural practices that are embedded in their own histories, knowledge, and spirituality, such as the chacra of the Kichwa-Lamistas of Amazonian Peru [28]. Thus, it is not appropriate to label these Indigenous practices as permaculture, whereby "one can see native peoples as sustainable, beautiful, and worthy of emulation without viewing them as engaged in permaculture-before-permaculture" ($\frac{[28]}{}$, p. 21). As permaculture garners attention and financial support, it may systematically undervalue these existing Indigenous alternatives that lay outside its purview and reinforce the coloniality of ecological knowledge [28]. While the urgency of widespread socioenvironmental degradation can stimulate imaginative and regenerative common ground [29], rebranding Indigenous practices and knowledge as "permaculture" without proper acknowledgment and reconciliation limits our ability to move toward regenerative design—a design that not only inflicts less harm but fosters positive change [30].

Permaculture's potential for commodification is a growing concern. The breadth of permaculture thought and practice can help create an inclusive and dynamic environment for the development of and engagement with sustainable solutions. The same breadth also leaves room for contradictory opinions and applications that leave permaculture vulnerable to enabling shallow engagement and false solutions. The commodification of terms such as permaculture may have detrimental effects on the practical impacts of the movement. Sustainability, as a term and a framework, provides a sobering case study in the effects of commoditization through industrialization and marketing. The "sustainable" palm oil industry serves as an example of the failure of an industry to foster environmental stewardship and biodiversity conservation despite its globally recognized certification program [31][32][33]. Nature being seen and used as a political and economic tool (i.e., "green-grabbing") may also reinforce patterns of colonial land dispossession and inequitable wealth accumulation [29]. The concern for permaculture to follow a similar trajectory is grounded in, what these participants perceive as, a growing lack of authenticity and commitment to actually practicing permaculture.

3. Conclusions

By exploring the strengths and weaknesses of permaculture's breadth of definitions and applications, we show that permaculture, albeit fraught with concerns, exhibits potential for transformative change. Ensuring permaculture contributes to such change through a decolonizing lens depends on clearly defining what permaculture is and is not, particularly in relation to alternative Indigenous knowledge and beliefs. Conceptual semantics matter: they shape and are shaped by the perspectives, actions, and discourses that they encompass [34][35] and help make communication for ecological change more effective [36]. The processes of (re-)defining permaculture are embedded and embodied in the daily actions and landscapes by which it is grounded [25][30]. Through these participant interviews and research findings, we recommend the following best practices in (re-)defining permaculture:

- Regardless of its application, permaculture requires a systems-level and historically grounded worldview lens.
- Permaculture is not a stagnant set of rules; it is a potential-creating design framework based on ethics and operationalized by principles.
- Social and economic justice must be central to the practice of permaculture.
- Humans rely upon nature, actions do matter toward enacting positive social and ecological change, and permaculture can help prioritize such actions.

Permaculture design and practice draw heavily on Indigenous ecological knowledge but are not always or necessarily
equivalent to them; the differences (and similarities) should be respected and explicitly acknowledged.

Moving forward, there is an urgent need to use these principles to push permaculture, and sustainability more broadly, toward the work that positively demonstrates healthy and just living systems and away from that which bolsters and sustains injustice. This starts with permaculture practitioners grounding their work and perspectives in a critical (re-)defining process as an ongoing opportunity for such reflection and reconciliation.

References

- 1. WCED Our Common Future; World Commission on Environment and Development: Oslo, Norway, 1987; p. 300.
- 2. Little, D.L. Defining Sustainability in Meaningful Ways for Educators. J. Sustain. Educ. 2014, 7, 19.
- 3. Tol, R.S.J. The Economic Effects of Climate Change. J. Econ. Perspect. 2009, 23, 29-51.
- 4. Levy, B.S.; Patz, J.A. Climate Change, Human Rights, and Social Justice. Ann. Glob. Health 2015, 81, 310-322.
- 5. Ruban, D.A.; Yashalova, N.N.; Cherednichenko, O.A.; Dovgot'ko, N.A. Climate Change, Agriculture, and Energy Transition: What Do the Thirty Most-Cited Articles Tell Us? Sustainability 2020, 12, 8015.
- 6. Fadaee, S. The permaculture movement in India: A social movement with Southern characteristics. Soc. Mov. Stud. 2019, 18, 720–734.
- 7. Ferguson, R.S.; Lovell, S.T. Permaculture for agroecology: Design, movement, practice, and worldview. A review. Agron. Sustain. Dev. 2014, 34, 251–274.
- 8. Macnamara, L. People & Permaculture: Designing Personal, Collective and Planetary Well-Being, 2nd ed.; Permanent Publications: Hampshire, UK, 2019.
- 9. Luna, J.M.; Dávila, E.R.; Reynoso-Morris, A. Pedagogy of Permaculture and Food Justice. J. Educ. Found. 2018, 31, 57–85.
- 10. Ulbrich, R.; Pahl-Wostl, C. The German Permaculture Community from a Community of Practice Perspective. Sustainability 2019, 11, 1241.
- 11. Aiken, G.T. Permaculture and the social design of nature. Geogr. Ann. Ser. B Hum. Geogr. 2017, 99, 172-191.
- 12. Lapoutte, A. The problem is the solution: Can permaculture management regenerate social economy enterprises? Ann. Public Coop. Econ. 2020, 91, 479–492.
- 13. Millner, N. Food Sovereignty, Permaculture and the Postcolonial Politics of Knowledge in El Salvador. In Postcolonialism, Indi-geneity and Struggles for Food Sovereignty: Alternative Food Networks in Subaltern Spaces; Wilson, M., Ed.; Taylor and Francis Group: London, UK, 2016; p. 22.
- 14. Williams, J.M. Building Community Capacity for Food and Agricultural Justice: Lessons from the Cuban Permaculture Movement. In Food Justice in US and Global Contexts; Werkheiser, I., Piso, Z., Eds.; The International Library of Environmental, Agricultural and Food Ethics; Springer International Publishing: Cham, Switzerland, 2017; Volume 24, pp. 31–49. ISBN 978-3-319-57173-7.
- 15. Didarali, Z.; Gambiza, J. Permaculture: Challenges and benefits in improving rural livelihoods in South Africa and Zimbabwe. Sustainability 2019, 11, 2219.
- 16. Stewart, G. What does 'indigenous' mean, for me? Educ. Philos. Theory 2018, 50, 740-743.
- 17. Dunbar-Ortiz, R. The First Decade of Indigenous Peoples at the United Nations. Peace Chang. 2006, 31, 58-74.
- 18. Podsakoff, P.M.; MacKenzie, S.B.; Podsakoff, N.P. Recommendations for Creating Better Concept Definitions in the Organizational, Behavioral, and Social Sciences. Organ. Res. Methods 2016, 19, 159–203.
- 19. Wezel, A.; Bellon, S.; Dore, T.; Francis, C.; Vallod, D.; De David, C. Agroecology as a science, a movement and a practice. A review. Agron. Sustain. Dev. 2009, 29, 503–515.
- 20. Brym, Z.T.; Reeve, J.R. Agroecological principles from a bibliographic analysis of the term agroecology. In Sustainable Agricul-ture Reviews; Lichtfouse, E., Ed.; Springer International Publishing: Cham, Switzerland, 2016; Volume 19, pp. 203–231. ISBN 978-3-319-26776-0.
- 21. Roux-Rosier, A.; Azambuja, R.; Islam, G. Alternative visions: Permaculture as imaginaries of the Anthropocene. Organization 2018, 25, 550–572.
- 22. Harper, P. Permaculture: The big rock candy mountain. The Land Magazine, 1 January 2013; 14-16.

- 23. Morel, K.; Léger, F.; Ferguson, R.S. Permaculture. In Encyclopedia of Ecology; Elsevier: Amsterdam, Netherlands, 2019; pp. 559–567.
- 24. Virtanen, P.K.; Siragusa, L.; Guttorm, H. Introduction: Toward more inclusive definitions of sustainability. Curr. Opin. Environ. Sustain. 2020, 43, 77–82.
- 25. Horlings, L.G.; Nieto-Romero, M.; Pisters, S.; Soini, K. Operationalising transformative sustainability science through place-based research: The role of researchers. Sustain. Sci. 2019, 15, 467–484.
- 26. Rout, M.; Reid, J. Embracing indigenous metaphors: A new/old way of thinking about sustainability. Sustain. Sci. 2020, 15, 945–954.
- 27. Ferguson, R.S.; Lovell, S.T. Grassroots engagement with transition to sustainability: Diversity and modes of participation in the international permaculture movement. Ecol. Soc. 2015, 20, 39.
- 28. CaraDonna, J.L.; Apffel-Marglin, F. The regenerated chacra of the Kichwa-Lamistas: An alternative to permaculture? Altern. Int. J. Indig. Peoples 2018, 14, 13–24.
- 29. Fairhead, J.; Leach, M.; Scoones, I. Green Grabbing: A new appropriation of nature? J. Peasant. Stud. 2012, 39, 237–261.
- 30. Mehmood, A.; Marsden, T.; Taherzadeh, A.; Axinte, L.F.; Rebelo, C. Transformative roles of people and places: Learning, experiencing, and regenerative action through social innovation. Sustain. Sci. 2020, 15, 455–466.
- 31. Richardson, B. Making a Market for Sustainability: The Commodification of Certified Palm Oil. New Political Econ. 2015, 20, 545–568.
- 32. Pye, O. Commodifying sustainability: Development, nature, and politics in the palm oil industry. World Dev. 2019, 121, 218–228.
- 33. Kalfagianni, A.; Partzsch, L.; Beulting, M. Governance for global stewardship: Can private certification move beyond commodification in fostering sustainability transformations? Agric. Hum. Values 2020, 37, 65–81.
- 34. Reiners, W.A.; Lockwood, J.A.; Prager, S.D.; Mulroy, J.C. Ecological Concepts: What Are They, What Is Their Value, And For Whom? Bull. Ecol. Soc. Am. 2015, 96, 64–69.
- 35. Eakin, H.; Connors, J.P.; Wharton, C.; Bertmann, F.; Xiong, A.; Stoltzfus, J. Identifying attributes of food system sustainability: Emerging themes and consensus. Agric. Hum. Values 2017, 34, 757–773.
- 36. Nelson, M. Our Modern Challenge: Exploring Alternatives through Dialogue and Ecological Responsibility. Trumpeter J. Ecosophy 1993, 10, 6.

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