

The most hopeful path towards an ecologically intact and just future is necessarily a decolonial one.

- Indigenous Peoples make up only 5% of the global population, but are responsible for stewarding and safeguarding about 80% of the world's remaining biodiversity – despite exercising tenure and governance over only about 25% of the world's land [1,2].
- These incredibly bioculturally diverse Indigenous territories of life are under clear and accelerating threat as a result of external impositions such as resource extraction, mining, logging, sea dredging, and other environmentally destructive activities – often activities undertaken on their territories without their consent [3].
 - About half of all mineral resources targeted globally by multinational mining companies lie within Indigenous territories [4].
- Recent evidence shows that secure land tenure, including recognizing Indigenous customary land tenure and governance systems, is vital to mitigating and adapting to the effects of climate change [5, 6].
- Many dominant conservation approaches, such as but not limited to 'fortress conservation' through Protected Area designation and carbon markets resulting in 'green grabbing', are not only insufficient in addressing the many environmental crises facing our world today, but actively cause harm by undermining livelihoods, damaging ecosystem stewardship, and violating human rights [7,8,9].
 - Case Study: In Conceição de Barra, Brazil, a large-scale cellulose company, Suzano Cellulose, was enabled to develop environmentally destructive eucalyptus monocultures on the traditional lands of the Quilombola people, which they have relied on for centuries, in part because the monoculture plantations were certified as 'forests' by the Forest Stewardship Council. This allowed the company to purport that their actions were actually beneficial to the environment, painting it as a 'reforestation project,' ignoring the clear scientific evidence against monocultures as well as the unjust displacement of the Quilombola people and the contamination of their natural resources. This is but one example of the inadequacy and outright harm the dominant conservation paradigm currently enables [10].
- Current international climate negotiations have proven to be overwhelmingly insufficient to address the magnitude of the environmental crises the world is facing [11, 12].

The root of the problem is the domination paradigm, which is fundamental to Western ways of life, ontologies and epistemologies.

- Western society as it exists today is predicated on colonial pillaging and capitalist accumulation in pursuit of infinite economic growth, development and 'progress' [13, 14, 15]. The logic underpinning this is one of domination: the Western world has understood itself to be the 'masters' over the earth and its resources, as well as over specific groups of people, like Indigenous peoples and communities in the global South [16]. Today, in the context of industrial capitalist society and the fossil fuel economy, this logic of domination can be seen clearly through extractivism: "Extractivism is a nonreciprocal, dominance-based relationship with the earth, one purely of taking" [17]. This logic has proven to be not only incredibly unjust, but unsustainable and fundamentally at odds with the survival of the world as we know it.
- Indigenous worldviews, ontologies and epistemologies are most often not based on this logic of domination, but rather on the logic of positive reciprocity, relationality, and respect for the natural world [18]. Instead of seeing humans as 'masters' over the rest of the living world, humans are positioned in a complex and interconnected web of relationships with all other living beings [19]; in the words of an Amazonian shaman, "everything that lives, lives by consent of everything else" [20]. Positive reciprocity, and the relationships it gives rise to, are better aligned with the dynamics and uncertainties of the world and will better enable the long-term cooperation and survival of all life [21, 22].

Note: specific understandings, practices and worldviews differ widely and are inseparable from their context. Indigenous Peoples harbor an incredible wealth of diversity, and the above statement does not intend to pan-indigenize peoples, but point out an underlying similarity in their worldviews.

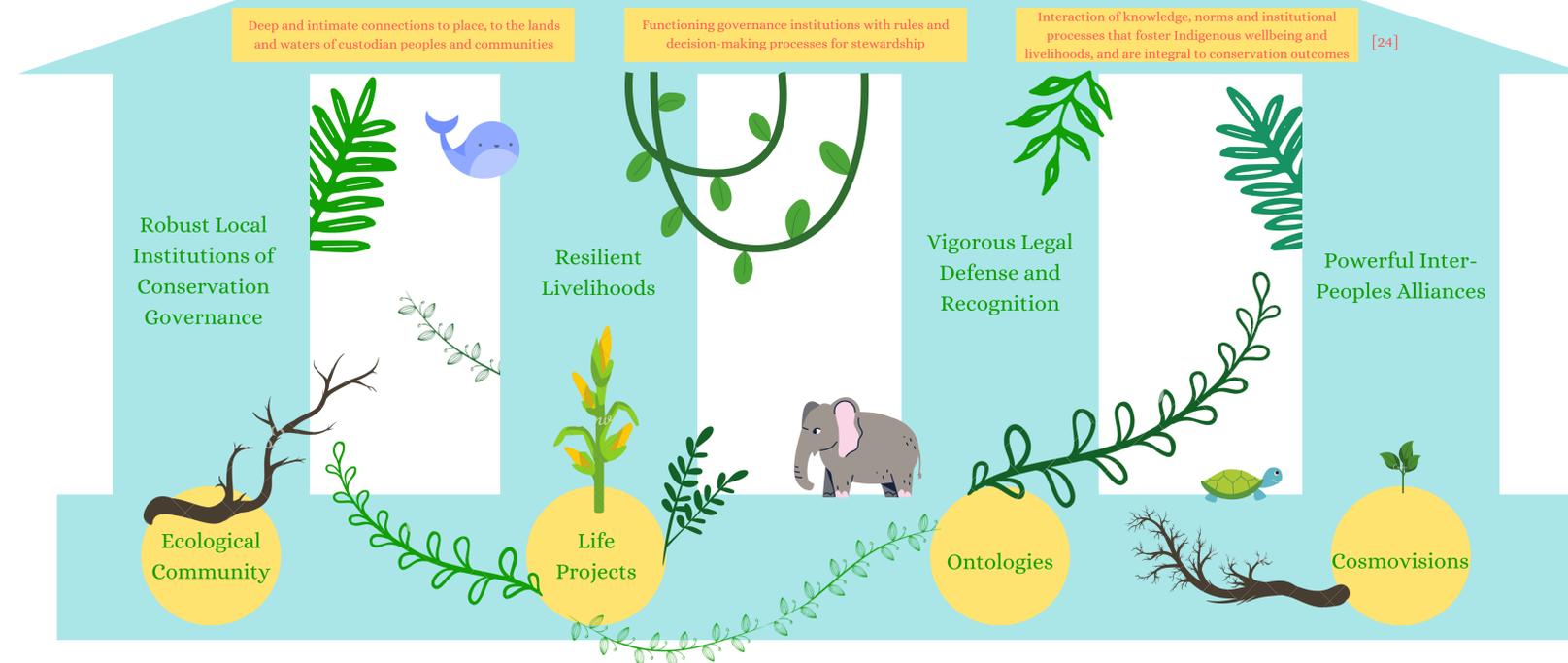
- Often, the climate crisis and other environmental crises of the current day are attributed to 'humankind,' or 'human nature,' - as the term 'anthropogenic' climate change suggests. But this is erasure. The fact is that many humans are *not* responsible for these crises, as the above statements suggest. In fact many peoples have been subjugated to the logic of domination in order to enable the creation of these crises. In other words, it is not true that *all* of humanity is to blame for this crisis, but just particular segments of it [23].

Given the above, it is clear that protecting and strengthening territories of life – a decolonial endeavour – is critical to mitigating and adapting to climate change and conserving vital biodiversity.



Territories of Life

(territories governed and conserved by Indigenous peoples and other local communities)



How can Territories of Life be defended and strengthened?

Counter-Mapping

Maps of territories have been historically wielded as a colonial tool to claim sovereignty over lands traditionally stewarded and lived upon by Indigenous peoples. Most Indigenous Peoples have not recorded their histories on paper, but pass on their knowledge and histories orally through storytelling, songs, place names with historical ties, and so on. Several case studies [25, 26, 27] have found that participatory community mapping projects within Indigenous communities have proven to be a powerful tool to reclaim their territories. These mapping projects offer an opportunity to bridge Western and Indigenous ways of knowing, by using Western tools like GPS combined with Indigenous knowledge forms, like stories and dreams. The resulting counter-map of the traditional territory then shows proof of the long history the peoples have in this place. It is particularly compelling to State governments, because it communicates their claims in a widely accepted scientific medium (though there are of course issues with having to bend to Western science, it provides a starting point to legitimate Indigenous claims to their territory). It also offers an opportunity to revitalize Indigenous knowledge traditions through the process of map creation, enabling the intergenerational transfer of knowledge as well as political mobilization.

Legal Defense

Territories of life are in need of defense because they are being attacked, in a variety of ways. 'Attacks' on territories of life today most often look like the imposition of environmentally destructive practices on traditional Indigenous lands, without their consent (or with manufactured consent, which is no better). Further, land and water defenders who try to stop these things from happening are criminalized and in some cases killed – just for standing up for their rights [28]. In order to strengthen territories of life, vigorous legal defense in the respects mentioned above, as well as the full implementation of UNDRIP, the recognition of free, prior and informed consent, and the legitimization of Indigenous governance institutions is needed.

Gender Equity

Pre-colonization, many Indigenous societies did not have patriarchal dynamics present in their relationships. Varying depending on the specific Indigenous community, women often more respected than they are in Western societies – and at least in Canada with the Indian Act, patriarchy was imposed through colonization [Leanne Simpson]. However, women's roles in Indigenous societies as caretakers, knowledge holders and transmitters of culture, and defenders make are extremely important and vital to the survival of the community – and have proven in reality to be vital the mobilization and defense of territories of life still today [33]. Thus an integral part of both decolonization and the defense and strengthening of territories of life is to defend and/or restore the rights of women and other gendered identities in their communities.

Funding and Partnerships

Taking actions to strengthen territories of life, as with all projects, inevitably requires material support. Part of my research was to identify potential funders and partners who would be willing to fund such a paradigm-shifting project. The decolonial approach to conservation that appears to be the most hopeful in terms of mitigating and learning to adapt to the changing environment is also the least popular in mainstream conservation discourse, likely because it challenges many of the power structures that existing foundations and organisations are entrenched in. In fact, there are many cases where conservation organisations (and their funders) engage in actions and approaches that truthfully undermine conservation, such as the case study mentioned in red on the upper left of this poster, as well as other situations where conservation organisations have enabled environmental destruction in the name of conservation [seagle]. Thus identifying and connecting with funders and partners who share in this revolutionary and world-changing approach is vital to the success of these endeavours, and in a broader perspective, may lead to a building of momentum to shift the mainstream conservation discourse before it is too late.

Knowledge Co-Production

The co-production of knowledge, and sharing of existing knowledge, is an opportunity to bridge gaps in both Western knowledge and traditional Indigenous knowledge for the benefit of all peoples in learning to adapt to climate changes. However, there is ample opportunity for this process to reproduce colonial relationships if it is not done in a way which respects the differences and customs of traditional Indigenous knowledge [29, 30, 31]. In other words, this process must respect the autonomy and rights of Indigenous peoples, must be consensual, there must be a commitment to reflexivity, and as well to decolonization. When done in this way, Indigenous knowledge can offer much wisdom and guidance in adaptation measures. The respect for their knowledge will challenge existing colonial knowledge structures, and may enable a better, sustainable way life.

[1] World Bank, "Indigenous Peoples," The World Bank, September 24, 2019. [2] Stephen T. Garnett et al. "A Spatial Overview of the Global Importance of Indigenous Lands for Conservation," *Nature Sustainability* 1 (July 16, 2018) 369-374. <https://doi.org/10.1038/s41893-018-0100-6>. [3] Borrini-Feyerabend, Grazia with Barbara Lassen, Stan Stevens, Gary Martin, Juan Carlos Riascos de la Pena, Ernesto F. Racz Luna and M. Tughi Farvar (2010), *Bio-Cultural Diversity Conserved by Indigenous Peoples and Local Communities: Examples and Analysis*. Tehran: ICCA Consortium and CENESTA. [4] Al Oetliks, "Transnational Mining Corporations, the Environment, and Indigenous Communities," *The Brown Journal of World Affairs* 22, no. 1 (Fall/Winter 2013): 129-152. <http://bjwa.brown.edu/22-1/transnational-mining-corporations-the-environment-and-indigenous-communities/>. [5] Pp. 31-32 of V. Masson-Delmotte et al. (eds.) "Summary for Policymakers," in *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* (Intergovernmental Panel on Climate Change [IPCC], 2019). <https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/>. [6] Klein, Naomi. "You and What Army?: Indigenous Rights and the Power of Keeping Our Word." In *This Changes Everything: Capitalism vs. The Climate*, 367-87. New York: Simon & Schuster Paperbacks, 2015. [7] McAfee, Kathleen. "Green Economy and Carbon Markets for Conservation and Development: A Critical View." *International Environmental Agreements: Politics, Law and Economics* 16, no. 3 (June 2016): 333-53. <https://doi.org/10.1007/s10764-015-9295-4>. [8] Stan Stevens, "The Legacy of Yellowstone," in *Conservation through Cultural Survival: Indigenous Peoples and Protected Areas*, eds. Stan Stevens and Terry de Lacy, (Washington, DC: Island Press, 1997), 14-31. [9] James Fairhead, Melissa Leach and Ian Scoones, "Green Grabbing: A New Appropriation of Nature?," *Journal of Peasant Studies* 39, no. 2 (April 2012): 237-61. <https://doi.org/10.1080/03066150.2012.671770>. [10] Marcelo Calazans, "Petroleum and Eucalyptus Monoculture in Brazil: The Vicious Cycle of Climate Change," in *Climate Justice and Community Renewal: Resistance and Grassroots Solidarity*, eds. Brian Tokar and Tammi Gilbertson, (London and New York: Routledge, 2020), 39-50. [11] T. Jayaraman and Tejal Kanitkar, "The Paris Agreement: Deepening the Climate Crisis," *Economic and Political Weekly* 51, no. 3: January 16, 2016. [12] Dimitrov, Radoslav S. "Inside Copenhagen: The State of Climate Governance." *Global Environmental Politics* 10, no. 2 (May 2010): 18-24. <https://doi.org/10.1162/glep.2010.10.2.18>. [13] Vimalassery, Manu. "The Wealth of the Natives: Toward a Critique of Settler Colonial Political Economy." *Settler Colonial Studies* 3, no. 3-04 (November 2013): 295-310. <https://doi.org/10.1080/2201478X.2013.810701>. [14] Foster, John Bellamy, and Brett Clark. "Ecological Imperialism: The Curse of Capitalism." *Socialist Register*, vol. 40, 2004. <https://socialistregister.com/index.php/srv/article/view/1817>. [15] Clement, Vincent. "Beyond the Sham of the Emancipatory Enlightenment: Rethinking the Relationship of Indigenous Epistemologies, Knowledge, and Geography through Decolonizing Paths." *Progress in Human Geography* 43, no. 2 (April 2019): 276-94. <https://doi.org/10.1177/030913217747315>. [16] Walsh, Catherine. "Development as Buen Vivir: Institutional Arrangements and (de)Colonial Entanglements." *Development*, vol. 53, no. 1, Mar. 2010, pp. 15-21. DOI.org (Crossref), doi:10.1080/dev.2009.93. [17] Pp 169 of Klein, Naomi. "Beyond Extractivism: Confronting the Climate Denier Within," in *This Changes Everything: Capitalism vs. The Climate*, Simon & Schuster Paperbacks, 2015, pp. 161-187. [18] Simpson, Leanne Betasamosake. "Nishnaabeg Antipatriarchalism," in *As We Have Always Done: Indigenous Freedom through Radical Resistance*, University of Minnesota Press, 2017, pp. 71-82. [19] Goldtooth, Tom. "Protecting the Web of Life: Indigenous Knowledge and Bioculture." In *Original Instructions: Indigenous Teachings for a Sustainable Future*, edited by Melissa K. Nelson, 220-28. Rochester, VT: Bear & Company, 2008. [20] David Maybury-Lewis, "An Ecology of Mind - Millennium: Tribal Wisdom and the Modern World," 1992. PBS Video, 57:14. https://www.youtube.com/watch?v=2_ND2qioagE&list=PL1bPqxr-6ls6G-Gjhtvrv0E5RHU6ME&index=5&t=08. [21] Whyte, Kyle (2018). "Settler Colonialism, Ecology, and Environmental Injustice." *Environment and Society: Advances in Research* 9, 125-144. [22] Colin Scott, "Ontology and Ethics in Cree Hunting: Animism, Totemism and Practical Knowledge," in *The Handbook of Contemporary Animism*, ed. Graham Harvey, (Durham [UK]: Acumen Publishing, 2013), 159-166. [23] Pp. 5 of Giulia Sajeve, Grazia Borrini-Feyerabend and Thomas Niederberger, *Meanings and More... Policy Brief of the ICCA Consortium No. 7*, (ICCA Consortium and CENESTA, 2019). <https://www.iccaconsortium.org/wp-content/uploads/2019/11/ICCA-Briefing-Note-7-Final-for-websites.pdf>. [24] Gilmore, Michael P., and Jason C. Young. "The Use of Participatory Mapping in Ethnobiological Research, Biocultural Conservation, and Community Empowerment: A Case Study From the Peruvian Amazon." *Journal of Ethnobiology* 32, no. 1 (July 2012): 6-29. <https://doi.org/10.2993/0278-0771-32.1.6>. [26] Hirt, Irene. "Mapping Dreams/Dreaming Maps: Bridging Indigenous and Western Geographical Knowledge." *Cartographic: The International Journal for Geographic Information and Geovisualization* 47, no. 2 (June 2012): 105-20. <https://doi.org/10.3138/carte-47.2.105>. [27] Nietschmann, Bernard. 1995. "Defending the Miskito Reefs with maps and GPS." *Cultural Survival Quarterly* 18 (4): 34-37. [28] United Nations Human Rights Council, *Report of the Special Rapporteur on the Rights of Indigenous Peoples: Attacks and Criminalization of Indigenous Human Rights Defenders* (UN Human Rights Council, 2018). <https://www.ohchr.org/Documents/Issues/IPeoples/SR/A.HRC.39.17.pdf>. [29] Jaskiran Dhillon, "Indigenous Resurgence, Decolonization, and Movements for Environmental Justice." *Environment and Society* 9, no. 1 (September 1, 2018): 1-5. <https://doi.org/10.3167/ares.2018.090101>. [30] Clement, Vincent. "Beyond the Sham of the Emancipatory Enlightenment: Rethinking the Relationship of Indigenous Epistemologies, Knowledge, and Geography through Decolonizing Paths." *Progress in Human Geography* 43, no. 2 (April 2019): 276-94. <https://doi.org/10.1177/030913217747315>. [31] Terry Williams and Preston Hardison, "Culture, Law, Risk and Governance: Contexts of Traditional Knowledge in Climate Change Adaptation," *Climatic Change* 120, no. 3 (2013). [32] Simpson, Leanne Betasamosake, "Indigenous Queer Normativity," in *As We Have Always Done: Indigenous Freedom through Radical Resistance*, (Minneapolis: University of Minnesota Press, 2017), 119-144. [33] Sarah Harper et al. "Indigenous Women Respond to Fisheries Conflict and Catalyze Change in Governance on Canada's Pacific Coast," *Maritime Studies* 17, no. 2 (August 29, 2018): 189-98. <https://doi.org/10.1007/s40152-018-0101-0>.