

Climate Change as a Cultural Problem: Transdisciplinary Environmental Humanities and Latin American Studies

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Climate change and environmental destruction can be attributed not only to modern economies but also to the philosophies of life that inspired and justified modern economic development; in other words, the humanities are not blameless. Gerardo Otero's question from the fall *LASA Forum*, "Can Latin America transcend extractivism?," will be rephrased here to ask if and how Latin American studies can transcend the philosophies and narratives that are instrumental in building extractive economies. Various conceptual frameworks used today in research practices and classrooms have been subservient to colonization, helped establish racist hierarchies, and justified extractive practices. There is growing awareness that these frameworks need revision.

Environmental humanities is an interdisciplinary platform of research focused on socio-environmental problems and the process of knowledge construction that led to these problems. Environmental humanities scholars build connections among humanities, social sciences, natural sciences, and other nonacademic knowledges, particularly Indigenous forms, because socio-environmental problems never lie entirely in one disciplinary field or cultural perspective. The focus on real problems with an outlook toward solutions defines transdisciplinary approaches.

Latin American studies emerged as a "transdiscipline" in the 1960s, under the influence of British cultural studies (Pakkasvirta 2011). Early scholarship in the field focused on the

understanding of poverty and its projected solution, development. In the 1960s and 1970s, dependency theory traced flows of resources from the periphery to the centers of consumption and analyzed this dynamic as a function of colonization. Around the same time, liberation theology surfaced to condemn this dynamic as unethical. It produced rebellious political pedagogy and consciousness that became an important part of Latin American culture (Stenberg 2006). It was reflected in Eduardo Galeano's *Las venas abiertas de América Latina* (1970), the most widely read book of economic history in the Americas, which transformed the concept of poverty into "impoverishment," and questioned development as imported and foreign to Latin American realities (Norget 2007). These disputes linger in today's socio-environmental thought, which reacts to the intensification of extractivism and the resulting impoverishment of many regions of Latin America in these times of globalization.

The Peruvian sociologist Aníbal Quijano argues that "the model of power that is globally hegemonic today presupposes an element of coloniality" (2000, 533). In turn, for the Colombian anthropologist Arturo Escobar, "development amounted to little more than the West's convenient 'discovery' of poverty in the Third World for the purposes of reasserting its moral and cultural superiority in supposedly post-colonial times" (Reid-Henry 2012). This means that the idea of development was used to impose often-extractive strategies and amounted to neocolonial domination. According to the

Ecuadorian economist Alberto Acosta (2013), the extractivism that accompanied development produced poverty by destroying environments that constituted people's livelihoods, and exacerbated wealth inequality. Climate change, an externality of development, has pushed these and many other intellectuals to explore alternatives to the status quo. In doing so, they have asked how the meaning of poverty and development should be rethought, taking into consideration cultural values and the well-being of local and global ecosystems.

When climate change claimed its first victims in the twenty-first century and environmental humanities was born, its scholarship fit well into the structures shaped by past Latin American studies legacies: engaged transdisciplinary thought; criticism of development and globalization; participation in transformative praxis; and deep epistemological exploration. The Australian historian Libby Robin (2018) defined environmental humanities as an effort to understand humans through a geological lens, and other life forms through ethics. This bridge between the human realms of culture and politics, on the one hand, and the nonhuman realm of the natural sciences, on the other, emerged from the recognition that this modern distinction had been artificially constructed. As Bruno Latour (2012) has argued, reality has never corresponded to the conceptual separation between nature and culture. While humans are animals and, as such, are part of nature, in today's world it is hard to find any nature not transformed by human actions. It could be argued, however, that the separation between culture and nature was subservient to economic expansion. The imagination of nature as "out there," separate from the city, allowed the collapsing of nature into a set of discrete, exploitable resources. Exploitation and contamination proceeded as if these processes were never to affect the human realm (Williams 1975). In *The Climate of History*, the Indian historian Dipesh Chakrabarty (2009) noted that climate change forces humanity to revise the vision of human emancipation from nature and called for humanity's thought to return to Earth. Soon after that, yet another thinker of

environmental humanities, Stephanie LeMenager (2019), stated that "we teach climate change in humanities classes because climate change is a cultural problem in addition to being a political and physical one."

Environmental humanities scholars argue that climate change as a cultural problem derives from a series of conceptual errors, such as the illusion of unlimited future technological progress. This illusion provides the hubris that emerges from belief in human superiority over other life forms, and the blindness to the embedded character of human existence in the environment (Riechmann 2018). Attempts to correct these errors gave rise to new conceptual frameworks that intend to transform humanities. The American literature scholar Stacy Alaimo (2010) explained that we are defined by "trascorporeality," because air and water carry minerals, viruses, bacteria, fungi, and toxins that flow through countless animal and plant bodies and eventually become part of humans as well. In her vision, the world leaks into porous human flesh from all directions.

Insofar as Alaimo saw humans as an extension of their environment, she came close to various Indigenous conceptualizations. When the political theorist Jane Bennett coined the idea that inanimate matter can possess political agency, her ideas reminded many of pre-Columbian politics in which mountains and water bodies were consulted in social affairs (Wilkinson 2013; Faust 2001). The strength of Latin American environmental humanities lies in the field's deep awareness of the significance of Indigenous knowledges for constructing new frameworks of thought that would be decolonizing and sustainable. Boaventura de Sousa Santos calls these Indigenous knowledges and other Latin American knowledges inspired by them "epistemologies of the South." His 2015 book *Epistemologies of the South: Justice against Epistemicide* goes beyond explaining the inequality by analyzing flows of capital and resources. De Sousa Santos notices that at the origins of economic injustices, there lies

“epistemological injustice,” that is, the practice of privileging some knowledges and concepts over others.

Three examples of Latin American works of environmental humanities that attempt to repair that injustice by deeply investigating Indigenous epistemologies are Marisol de la Cadena’s book *Earth Beings: Ecologies of Practice across Andean Worlds* (2015), Eduardo Kohn’s *How Forests Think* (2013), and Eduardo Viveiros de Castro’s *Cannibal Metaphysics*. De la Cadena undertook the translation of Andean people’s relationships with their mountains in ways that did not merely speak of the diversity of cultural conceptualizations of human relations with nature, but also gave voice to the mountains themselves. She made her readers aware that mountains are indeed relevant in Andean politics. Similarly, Kohn pushed his readers to consider “thought beyond the human” by conveying how Quechua people of the Ecuadorean Amazon understand their rainforest as a thinking ecosystem. Castro (2015, 188) claimed that his work was not just about “the objects of indigenous thought” but also about “the possible worlds created by its concepts.” These three books, and various others, contributed not only to anthropological research but also presented the humanities at large with new philosophical propositions.

Consider the possibility that there are no subjects and objects but that everything, including animals, plants, and even stones, are subjects equipped with some sort of agency and thought, which are not uniquely human attributes. This is how various Indigenous philosophies view the world.¹ This consideration depends on how we understand and define the concepts of subjectivity, agency, and thought. If we doubt the idea of thought belonging to nonhuman subjects, it is because we understand thought as based on language and its relation to the world. Kohn explains the “thought” of the forest as a series of developing relations through which the life of the forest ecosystem evolves without

losing its equilibrium. If mountains and forests are thinking subjects, and thinking subjects deserve political recognition, it becomes plausible that they have interests that should be protected in the same way as those of their human inhabitants. The curiosity about the thoughts and desires of mountains and forests awakens a new kind of nature-inspired spirituality that brings us closer to the Indigenous imagination.

But this is not just an Indigenous idea. Similar sensitivity has been present in all cultures. The legendary Wisconsin conservationist Aldo Leopold defined “thinking like a mountain” as an ecological exercise leading to the discovery of one’s place in the ecosystem rather than continued existence as an isolated individual (Leopold 1949). The contemporary ecologists Suzanne Simard and Peter Wohlleben explain that in the forest, trees communicate and process information through fungi that connect their roots, passing signals and nutrients in slow motion so that large tree-mothers can take care of the new seedlings (Simard 2012; Wohlleben 2016). According to the plant philosopher Michael Marder, vegetal beings, while devoid of consciousness, nonetheless possess memories. This imageless memory is an inscription of the diverse stimuli of the environment on the cells of the plant (Marder 2013). Nonhumans have been on the planet longer, their wisdom is older, and humans have always learned from them. For example, the Mayan people believe that their ancestors learned from their *Melipona* bees to build pyramids and to use healing plants. Most importantly, the bees taught them to be a strong and caring community that lives in symbiosis with its surrounding nature (Suryanarayanan and Beilin 2020). The contemporary cutting-edge technology of biomimicry similarly uses nature’s wisdom to solve problems that nature has already managed to solve: think the bullet train or solar batteries. Oftentimes, however, hunting for technological patents and sustainable solutions has led to the appropriation of Indigenous people’s knowledges while neglecting their needs, voices, and overarching philosophies. The

¹ Pedro Pablo Chim Bacab, interview with Kata Beilin, Mérida, July 31, 2019.

manifesto of Indigenous women and youth in this volume expresses bitterness of “Defenders of Earth” who believe that they are “the living solution to climate change” but who, upon their return from COP26, feel they have not been heard.

The literary and film scholars among us have read and seen too many stories of tragic collisions of Indigenous worlds with white colonizers. From the emblematic work of Brazilian modernism, Mario de Andrade’s *Macunaima* (1928), to contemporary fiction films like *El abrazo de la serpiente* (2015) and documentaries like *El choque de dos mundos* (2016) and *¿Qué les pasó a las abejas?* (2019), intercultural contact often brings destruction to the native worlds.² Today’s decolonial studies question the possibility of healthy intercultural collaborations. Even well-intentioned academic exchanges may turn, once again, into extractive appropriation of Indigenous knowledges, biopiracy, or geopiracy, like in the infamous Herlihy’s mapping expedition to Oaxaca (Voosen 2016). On the other hand, however, environmentally minded Indigenous researchers envision intercultural collaborations as necessary to institute policies protecting their ancestral land (see Rosado-May 2015; see also Tania Martínez-Cruz in this volume). Like the old Karamatake, the protagonist of *El abrazo de la serpiente*, various Indigenous intellectuals believe in the need to educate white people to save planetary environments.

The philosophy of *buen vivir* constitutes an intercultural platform for such learning, which like environmental humanities is deeply transdisciplinary and biocentric. *Buen vivir* thought emerged as a critical reaction to the strategies of development that displayed neocolonial approaches and damaging socio-environmental effects. The alternatives to development that this platform proposes begin with revisions to the concepts of development, poverty, and human and nonhuman nature, among others. This goes hand in hand with

practical engagement, thus generating a deeper change in knowledge. *Buen vivir* is based on the Indigenous vision of life in a community that includes nonhuman forms of life and land. Mountains, forests, animals, and plants belonging to one’s environment are considered kin rather than resources. But *buen vivir* also includes certain “Western” concepts such as “rights” and “quality of life” (Gudynas 2011). While the biocentric framework of *buen vivir* overcomes the separation of culture and nature characteristic of modern thought, quality of life is redefined there in relation to the environment. For this reason, the platform of rights is often extended to protect the natural realm.

The biocentric focus transforms the meaning of life, as well as its goals and values. In *buen vivir*, human success, health, and happiness are not possible without the well-being of animals, plants, forests, and other elements of ecosystems that humans inhabit. The idea that one cannot be healthy in a sick world and happy amid dying nature once again connects *buen vivir* with various trends of alternative Western thought and healing practices. Even if some of its postulates are idealistic, *buen vivir* should not be seen as a utopic vision but rather as a methodologic and pedagogic approach for building understanding, which would transform purely economic thinking. To an extent, this has already happened: numerous intellectuals and social movements supported the ideas of *buen vivir*, and these movements brought critical political changes in Ecuador and Bolivia, including the codification of rights of nature in national constitutions.

In dialogue with the environmental humanities, and in parallel to *buen vivir*, various allied platforms where humanities, social sciences, natural sciences, and nonacademic knowledges merge have appeared in recent years. Ecological economics presents itself as a “transdisciplinary science” and manifests that “real problems in complex systems do not respect academic boundaries.” Herman Daly and Joshua Farley

² *El abrazo de la serpiente* (dir. Ciro Guerra, Colombia, 2015); *El choque de dos mundos* (dir. Mathew Orzel and Heidi Brandenburg, Peru, 2016); *¿Qué les pasó a las abejas?* (dir. Adriana Otero and Robin Canul, Mexico, 2019).

(2004, xxiii) argue that “effective problem solving requires the insights and toolsets of a variety of disciplines, defining the goals toward which we should strive would benefit from open discussion of the value sets of different ideologies.” Feminist criticism postulates rethinking economics from the perspective of vulnerability and interdependence of life (Orozco 2014). Similar to *buen vivir*, ecological and feminist economics is biocentric. Both trends of thought search for alternatives for economic development in its meaning of growth (Herrero 2016). They argue that happiness and human flourishing do not derive from consumption, but rather from learning, engagement, relationships, and appreciation of nature.

Biocentrism emerges in environmental cultural studies, animal studies, and multispecies and interspecies studies that trace relationships between human cultures and different forms of life as they build their worlds together. Forest, water, seeds, soil, turtles, bees, and other nonhumans are the foci of research in these new visions. In hydrohumanities, the conceptualization of water is transformed from a raw resource into a life-building substance that manifests varying degrees of liveliness as it defies human attempts to contain and regulate it. Chemo-ethnographies, influenced by science and technology studies (STS), traces how chemical substances are conceived of, how we justify their use, and later also how these substances travel through soil, water, and air to human, animal, and plant tissues, often sickening them. This list of new transdisciplinary frameworks and methodologies focused on materiality and life from a biocentric perspective is obviously incomplete. The articles by Ruth Goldstein, Ignacio López-Calvo, Óscar Pérez, and Jorge Marcone in this volume constitute good examples of these new approaches.

In the first paragraph of this essay, I stated that humanities are co-responsible for environmental destruction and that it is necessary to transform concepts such as “development,” “poverty,” “nature,” “culture” and various others if we want to change economic patterns and institutions. I now need to admit that the efforts of the

pedagogies that attempt to change the way we think must be placed in the framework of global economic exchanges. As Adrian Hearn explains in his article in the summer *LASA Forum*, the importance of pork in Chinese cuisine makes for the rapid expansion of soy plantations in Brazil at the expense of the Amazon rainforest and community multicrop farming. A similar connection could be made with the American and European cultures’ love of meat. In the winter 2022 *LASA Forum*, Birgit Müller and other writers stressed the power imbalance created by globalization. The demand for pork and beef may have a more substantial impact than the desire to defend Latin American forests.

The problems created by globalization need to be solved simultaneously at the local and global levels. International and interdisciplinary conversations such as the one that our conference undertakes must bring more understanding about priorities, meanings, and values, and define development in the context of our relationships with the natural environment. It is obvious that millions of people around the planet are forced to give priority to their daily sustenance over the long-term well-being of the planet. It would be a great success, however, if we managed to achieve a common understanding among international leaders and teachers that no one will be healthy in a sick environment, and that our defense of forests, mountains, and oceans is self-defense.

References

- Acosta, Alberto. 2013. “Extractivism and Neoextractivism: Two Sides of the Same Curse.” In *Beyond Development: Alternative Visions from Latin America*, edited by Miriam Lang and Dunia Mokrani, 61–86. Amsterdam: Transnational Institute.
- Alaimo, Stacy. 2010. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press.
- Andrade, Mário de. (1928) 1988. *Macunaíma: O herói sem nenhum caráter*. 1928; reprint, Madrid: Editorial CSIC, 1988.
- Castro, Eduardo Viveiros de. 2015. *Cannibal Metaphysics: For a Post-structural Anthropology*. Translated by Peter Skafish. Minneapolis: University of Minnesota Press.
- Chakrabarty, Dipesh. 2009. “The Climate of History: Four Theses.” *Critical Inquiry* 35 (2): 197–222. <https://doi.org/10.1086/596640>.
- Daly, Herman E., and Joshua Farley. 2004. *Ecological Economics: Principles and Applications*. Washington, DC: Island Press.

- De la Cadena, Marisol. 2015. *Earth Beings: Ecologies of Practice across Andean Worlds*. Durham, NC: Duke University Press.
- Faust, Betty Bernice. 2001. "Maya Environmental Successes and Failures in the Yucatan Peninsula." *Environmental Science and Policy* 4 (4–5): 153–169. [https://doi.org/10.1016/S1462-9011\(01\)00026-0](https://doi.org/10.1016/S1462-9011(01)00026-0).
- Galeano, Eduardo. (1970) 2004. *Las venas abiertas de América Latina*. Buenos Aires: Siglo XXI.
- Gudynas, Eduardo. 2011. "Buen vivir: Germinando alternativas al desarrollo." *América Latina en Movimiento* 462: 1–20.
- Hearn, Adrian. 2021. "Building Sustainable Food Systems in the Asian Century: A Matter of Tradition." *LASA Forum* 52 (3): 53–57.
- Herrero, Yayo. 2016. "Economía feminista y economía ecológica, el diálogo necesario y urgente." *Revista de Economía Crítica* 22: 144–161.
- Kohn, Eduardo. 2013. *How Forests Think: Toward an Anthropology beyond the Human*. Oakland: University of California Press.
- Latour, Bruno. 2012. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.
- LeMenager, Stephanie. "What Are the Environmental Humanities? Q+A with Professor Stephanie LeMenager." Interview by Chicago Humanities Festival, May 4, 2019. <https://www.chicagohumanities.org/media/what-are-the-environmental-humanities/>.
- Leopold, Aldo. 1949. *A Sand County Almanac, and Sketches Here and There*. New York: Oxford University Press.
- Marder, Michael. 2013. *Plant-Thinking: A Philosophy of Vegetal Life*. New York: Columbia University Press.
- Müller, Birgit. 2022. "Don't Look Up: Political Ecology and the Denials of Environmental Governance." *LASA Forum* 53 (1): 3–8.
- Norget, Kristin. 2007. "Decolonization and the Politics of Syncretism: The Catholic Church, Indigenous Theology and Cultural Autonomy in Oaxaca, Mexico." *International Education* 37 (1): 78–96. <https://trace.tennessee.edu/internationaleducation/vol37/iss1/5>.
- Orozco, Amaia Pérez. 2014. *Subversión feminista de la economía: Aportes para un debate sobre el conflicto capital-vida*. Madrid: Traficantes de Sueños.
- Pakkasvirta, Jussi. 2011. "Interdisciplinary Perspectives on Latin American Studies." *Iberoamericana: Nordic Journal of Latin American Studies* 40 (1–2): 161–184.
- Quijano, Anibal. 2000. "Coloniality of Power, Eurocentrism, and Latin America." *Nepantla: Views from South* 1 (3): 533–580.
- Reid-Henry, Simon. 2012. "Arturo Escobar: A Post-development Thinker to Be Reckoned With." *Guardian*, November 5, 2012. <https://www.theguardian.com/global-development/2012/nov/05/arturo-escobar-post-development-thinker>.
- Riechmann, Jorge. 2018. *Autoconstrucción: La transformación cultural que necesitamos*. Madrid: Los Libros de la Catarata.
- Robin, Libby. 2018. "Environmental Humanities and Climate Change: Understanding Humans Geologically and Other Life Forms Ethically." *WIREs Climate Change* 9. <https://doi.org/10.1002/wcc.499>.
- Rosado-May, Francisco J. 2015. "The Intercultural Origin of Agroecology: Contributions from México." In *Agroecology: A Transdisciplinary, Participatory and Action-Oriented Approach*, edited by V. Ernesto Mendez, Christopher M. Bacon, Roseann Cohen, and Stephen R. Gliessman. Boca Raton, FL: CRC Press.
- Simard, Suzanne W., et al. 2012. "Mycorrhizal Networks: Mechanisms, Ecology and Modelling." *Fungal Biology Reviews* 26 (1): 39–60. <https://doi.org/10.1016/j.fbr.2012.01.001>.
- Sousa Santos, Boaventura, de. 2015. *Epistemologies of the South: Justice against Epistemicide*. Abingdon, UK: Routledge.
- Stenberg, Shari J. 2006. "Liberation Theology and Liberatory Pedagogies: Renewing the Dialogue." *College English* 68 (3): 271–290. <https://doi.org/25472152>.
- Suryanarayanan, Sainath, and Katarzyna Beilin. 2020. "Milpa-Melipona-Maya." *ACME: An International Journal for Critical Geographies* 19 (2): 469–500.
- Voosen, Paul. 2016. "The Oaxaca Incident." *Chronicle of Higher Education*, April 27, 2016. <https://www.chronicle.com/article/the-oaxaca-incident/>.
- Wilkinson, Darryl. 2013. "Politics, Infrastructure and Non-human Subjects: The Inka Occupation of the Amaybamba Cloud Forests." PhD diss., Columbia University. <https://anthropology.columbia.edu/content/politics-infrastructure-non-human-inka-peru>.
- Williams, Raymond. 1975. *The Country and the City*. New York: Oxford University Press.
- Wohlleben, Peter. 2016. *The Hidden Life of Trees: What They Feel, How They Communicate—Discoveries from a Secret World*. Vancouver: Greystone Books. //