

## THEORIES AND METHODOLOGIES

# Indigenous Literatures? The Anthropocene? Theoretical Equivocations and Conceptual Tangles

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The Spanish invasion marked the beginning of extractive capitalism in the Americas. The ensuing genocide resulted directly from the discovery of gold and silver. The genocide transformed *Abiayala* (the name Indigenous peoples give to Latin America)<sup>1</sup> into what Macarena Gómez-Barris labels “a region of plunder, discovery, raw resources, taming, classification, and racist adventure,” while “the extractive view rendered Native populations invisible” (3, 6). As Roxanne Dunbar-Ortiz points out, agriculture based on maize cultivation began in the Americas approximately ten thousand years ago; it required the design and construction of complex irrigation systems, in place at least two thousand years before Europeans even knew of the New World’s existence (15–16). Ingenuity, technological complexity, and long-term strategic planning created sophisticated cultures whose achievements often were superior to those of the Europeans. This was the case in mathematics and astronomy. Herbal medicine, surgery, and dentistry were also highly advanced (17).

However, the Spanish invasion not only produced racialized identities and a hierarchy whereby Europeans and their knowledge were considered superior, generating mechanisms of social domination that still exist, it also introduced material outcomes driven by the ethos of economic growth and linear, technoscientific progress that converted natural resources into global commodities. Afterward, there was no stopping extractive capitalism. This process is now exhausting the planet and threatening the survival of most forms of life. Its epistemological purview nevertheless remains anchored in the mega-extractive legacy of Eurocentric rationality. Alarmed by the human destruction of the planet, scientists coined the term *Anthropocene* to name this crisis. Yet, like other concepts (*Capitalocene*, *Chthulucene*,

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etc.), Anthropocene fails to consider racism and settler colonialism as the truly differentiating factors within humanity, instead focusing on the sources of global destruction. *Capitalocene* does name extractive capitalism. Yet much as the concept of indigeneity essentialized the nature of heterogeneous nations in Abiyala, Capitalocene, with its exclusive focus on transformations of capital, power, and nature in the European sixteenth century, ignores the voices of Indigenous peoples in Africa, the Americas, and elsewhere that address issues from a Global South perspective. The concept fails to mention colonialism, the construction of racialized bodies within geographies of difference, and systematic destruction through dispossession and enslavement.

This short essay explores how the multifaceted ecospace where native peoples coexisted with variable topographic features resulted from singular holistic ontological and epistemological relationships with their biotic spaces—geographies and the environment. This bond is rooted in the intimacy and mutuality between nature and culture. Indigenous writing since the Maya creation story, *Popol Wuj*, has foregrounded the relation between the natural world and language by representing the culture of maize. The retelling of that tale in Luis de Lión's *Time Commences in Xibalbá*, the first contemporary Maya novel,<sup>2</sup> lays bare the ways in which colonial violence disrupted that bond, reflecting on the implications of extractive technologies in the Americas.

It is a Western myth that no writing existed in the Americas before the Spaniards arrived. The oldest American writing sample found so far is by the Olmec people, dating from 2000 BCE (Gutiérrez Mendoza 80–100), and the oldest Maya glyphic writing is from 300 BCE (Arias 2: 54). These are complex scriptural systems by any definition. Manuel Medrano and Gary Urton have recently decoded Andean *khipus* (knotted-string recording devices), signaling another form of writing that departs from Eurocentric conceptions. Most languages in Abiyala have for millennia used prominent physiographic features of their natural landscape in forming toponyms. Thus, glyphs

designating place-names were composed of natural elements, or geographic substantives, with additional qualifiers, the elements that specified which mountain, cave, or other topographic element was referred to by a given glyph. This resulted from the intrinsic link that has always existed between writing and biotic spaces.

Since the 1980s, the number of literary publications in Indigenous languages has rapidly multiplied. These myriad aesthetic representations display a broad understanding of their space and history, and of their entanglements with governments or corporate powers. Contemporary Indigenous works embody seminal decolonial efforts to mark epistemological ruptures with the Western-centric civilizing teleology that led to the present crisis of neoliberal globalization. Indigenous literatures evoke their past to validate their existence, but they do so primarily to oppose the divide the West establishes between nature and culture. Their semantics have forced critics to embrace the importance of understanding Indigenous knowledges and to analyze their implications. Indigenous mobilizations have de facto become heterogeneous movements in Latin America / Abiyala, defending Indigenous territories in multi-directional forms and practices from extractive globalized corporations. They espouse sustainable ecological principles and denounce extraction agreements signed by governments with corporate entities as violent acts against Indigenous rights and sovereignty. By reconceptualizing the epistemic structures of ancestral Indigenous knowledges, ways of thinking, and spirituality, they have crafted alternatives better suited to solving many problems the planet now faces, to replenishing earthly resources according to parameters in their genealogies of thought. Concrete efforts to achieve these goals are already taking place.

Marisol de la Cadena documents how Quechuas from the Andean village of Pachanta prevented a mining corporation from destroying the Ausangate mountain. Villagers claimed the mountain had ties to their *ayllu*, a Quechua term for a network of families in a commonly held territory. Their biotic environment is jointly configured by human beings and the nonhuman elements in their vicinity: mountains,

rivers, and so on. These are considered living entities named “earth beings.” De la Cadena states that Quechuas consider the *ayllu* to be “other-than-human entities that are neither natural nor supernatural, but beings . . . that do not abide by the (Western) divisions between God, nature, and humanity” (206), thus providing cosmological views of a beingness common to both human subjects and the more-than-human world.<sup>3</sup> She shows how this understanding mobilized locals and how Western new-age practitioners were tactfully mobilized by villagers to prevent the construction of the mine.

In Chile, Mapuches reoccupied in 2017 the lands that had been legally theirs until the Chilean army occupied their territory in the late nineteenth century, after one of their leaders was murdered by security forces. Mapuches preserved their ancestral lands in southern Chile, named *Araucanía*, after the sixteenth-century Spanish invasion. In 1861, the Chilean army launched an invasion of the Mapuche territory labeled the “Pacification of Araucanía,” a brutal genocidal campaign that lasted twenty-two years; by 1883 the territories where Mapuches lived were fully occupied by the army. After his 1973 coup, Augusto Pinochet privatized the Mapuche lands, opening them to extractive industries, primarily logging, mining, hydroelectric plants, and salmon farming. After the country’s return to democracy in 1990, Mapuches began reclaiming their homeland. Simultaneously, their artistic visibility increased, as Mapuche writers, filmmakers, and musicians rose in esteem. Successive governments and the corporations extracting resources from Mapuche land refused to negotiate, extending the conflict. Radical mobilizations followed as security forces repressed Mapuches. Yet Mapuches’ struggles and values gained them the sympathy of the Chilean population. Recently, the Mapuche poet Elicura Chihuailaf won the country’s highest literary award, the Chile National Literature Prize. In September 2020, the government agreed to negotiate with Mapuches to discuss territorial conflicts and to change the constitution. In addition, the Senate is considering setting aside seats for Indigenous people in the constitutional assembly.

Gómez-Barris documents equally powerful efforts made in Ecuador by the Yasuní, who launched a radical conservation plan for their territory as massive oil drilling threatened it. They now conduct ecological tours to make visible the peril that drilling poses to ecosystems. In volume 2 of *Recovering Lost Footprints: Contemporary Maya Narratives*, I describe how the Zapatista uprising on 1 January 1994 marked a before and after in Chiapas (175–76). The uprising was an epistemic change for Mexico. The presidential candidate Luis Colosio was assassinated, and the PRI (Institutional Revolutionary Party) fell from power in 2000, after seventy continuous years in office. Zapatistas brought back to the foreground the importance of Indigenous cultures, nationally and internationally. Mexico modified its 1917 constitution. Article 2 now states that the country has a pluricultural composition. Zapatista lands are run by *caracoles* (“conch shells”), nonhierarchical councils exercising direct rule. In Guatemala’s thirty-six-year civil war, Mayas won their right to speak, write, and be educated in their languages and gained recognition for their cultures. They now have an academy of Maya languages, publish works in them, and exercise local power in their communities.

Europeans justified colonialism by conceptualizing non-European land, peoples, and the environment as empty or underused spaces to develop and modernize, thus implying that native peoples were incapable of performing this task. The importance of the biotic environment never crossed their minds. Neither did respect for Indigenous civilizations found in situ. Colonizers considered their inhabitants to be savages in need of Christian salvation, and they quickly exterminated local ecosystems by introducing cattle and other domestic European animals while they pursued extractive policies. When Spanish pigs were brought into Mesoamerica, the pathogen *salmonella enterica*, locally known as *cocoliztli*, produced deadly outbreaks beginning in the sixteenth century, resulting in nearly unparalleled demographic catastrophes. In 1519, the year the Spaniards arrived, the population in Mexico was close to thirty million (Dunbar-Ortiz 17); three million people lived in Guatemala and about two million lived in the rest

of Central America (Lovell et al. 4). In 1600, only two million Indigenous people were left in the entire region. Other epidemics introduced by the Spaniards—smallpox, measles, and mumps—contributed to the death toll. However, sixty to seventy percent of these losses resulted from *cocoliztli*.<sup>4</sup>

During the previous twelve thousand years, Indigenous peoples learned that every single element configuring their biotic environment was critical for survival. Archeoastronomy has shown the correlation between astronomical studies and agricultural cycles. Ivan Šprajc documents links between the Venus cycle, rain, and maize in data found in pre-Hispanic documents, corroborated in contemporary ethnographic research. These astronomical observations led to the configuration of symbolic deities based on stellar bodies in their spiritual practices.

Maize was the cosmological epicenter of Mesoamerican culture, around which a holistic web of relationships was woven that joined human beings, animals, plants, natural forces, spirits, and landforms. This web structures *Popol Wuj* and *Time Commences in Xibalbá*, in which the Hero Twins Jun Ajpu and Xb'alamke descend to Xib'alb'a, the Underworld, defeat the Lords of the Underworld, then ascend to the cosmos, become the sun and the moon, and generate the water and fire needed to produce maize. After the maize grows, Xpiyacoc and Xmucane, Grandmother of Day and Grandmother of Light, grind the kernels that K'uk'ulkan, the Feathered Serpent,<sup>5</sup> uses to forge the first four men and women, the people of maize. To live, they have to plant, cook, and consume maize. This means preserving the ecological conditions that make this cycle possible. A Mesoamerican subject only truly existed upon creating a planting parcel, called a *milpa*, which contains maize, beans, and squash. These crops benefit from being planted together. Maize provides the structure on which beans climb, beans provide nitrogen to the soil, and squash spreads along the ground, preventing a weed infestation, its thorns keeping destructive pests at bay. A microclimate is thus created. Eaten together, maize, beans, and squash provide complex carbohydrates and all nine essential amino acids.

They enabled Mesoamerican cultures to prosper and evolve on a plant-based diet. The Mesoamericans eschewed domestication of animals in favor of game management, grew crops beneath the canopy of rainforests to preserve them, and created a relatively disease-free environment thanks to hygienic practices that included daily bathing and ritual sweat baths.

Mesoamerican cultures' ontological thinking thus centered on the *milpa*. Cosmic symbolism and ecosystems were inextricably linked. The *milpa* was the center, evoking the Feathered Serpent. The cosmic dimension gave unity and integrity to the cosmic factors that determined the well-being of the *milpa*: the wind, the rain, the number of long nights and of days that must pass before maize can flower, the growth of enough vegetation in the mountains to ensure that rivers flow properly, the amount of volcanic eruption needed for the soil to be replenished by lava. These factors were determined by celestial bodies. The sun and the moon loomed the largest, but more subtle planetary movements were also key, such as the earth's approach to or retreat from the sun, and the solar system's crossing of magnetic fields, which pushed and pulled it as it circulated throughout the galaxy. Following this logic, the Mesoamericans established rituals that built bridges with deities associated with the celestial bodies that affected the growth of maize. These bodies became sacred, yielding deities like the Feathered Serpent. A semiotic signification integrated human and natural elements with the cosmos, symbolized by rituals, festivities, and mythicized practices.

As time went by, the cosmological machinery articulated significations that transcended the maize cycle, which became a semantics of symbolic representation. Yet behind the symbolism, the cult of maize remained dominant. To exist, maize needed the sacrifice of the Hero Twins. They died as old maize stems do, became the new seeds, and reemerged as baby maize. The original twins, now the sun and moon, provide the right amount of water and warmth for the new stems, and for the ears of maize to develop in a healthy fashion. New generations would also have to sacrifice themselves by planting *milpas* and defending their communities

to preserve the never-ending healthy cycle of maize, which multiplied the number of healthy people who could build large cities, engineer complex canals and roads, and construct boats that could travel far away to trade with other communities. These ontologies articulated the Mesoamericans' need to work with given biotic environments in order to survive and thrive as a community.

Every city-state had its singular biotic environment. They were located at various latitudes, which determined their seasons. Some were closer to the jungle or to the sea. Others were located at very high altitudes or in desertic lands. Depending on where they were located and what local climatic conditions were like, they would need specific types of irrigation systems. Diverse rivers supplied their water. Specific mountain peaks surrounded them, determining the time of sunrise and sunset, the dates for sowing or harvesting, unique configurations of the sky at night, indicating different periods for the beginning or end of the rains, for how long or short the rainy season would be, for what stones or wood were available for construction. Different fauna and flora surrounded them, complementing their diets and health.

An example of how celestial bodies became Maya deities is the cult of Venus—Chak Ek' for the Mayas. This planet, a smaller celestial body than the sun, is the evening star at dusk, appearing first after the sun has set; at dawn it is the morning star, disappearing last before the sun rises. For early sky observers it was the most important celestial body after the sun and moon. To establish calendric rituals associated with the movement of celestial bodies, Mayas needed an exact understanding of how Chak Ek' moved, to set the dates of ritual events—planting, harvesting, and so on—in their calendar. Thus, Mesoamerican cultures kept records of numerous astronomical events with mathematical precision. A case in point: a Maya astronomer established the synodic period of Chak Ek', 583.92 days, in the great metropolis of Chi'ch'èen Itsa' around 875 CE. It was later determined that he was off by just one tenth of one percent. As Gerardo Aldana states, in the West it remained unknown until Galileo wrote independently about

it in 1613. Aldana adds that it was only in 1716 that Edmond Halley published data analogous to the Maya calculation elaborated 841 years before. No magical realism here—just pure astronomy, trigonometry, and calculus.

Understanding the cosmos was part of the long process of domestication of maize, which, as stated, enabled the thriving of rich and powerful city-states throughout the region. Learning the cycles of the sun, moon, and Venus was a basic, material necessity. Such priorities also explain the logic of Mesoamerican languages, which favor physiographic features of their biotic environment to form toponyms (Nielsen and Helmke 115). In time, knowledge of the cosmos was adapted to other purposes, from engineering (building canals in the dry season or dams in low tide) to navigating at night, allowing the Mesoamericans to trade all along the Pacific Coast and throughout the Caribbean.

There is still a catch. In Western cultures, biotic factors are defined as the living components of an ecosystem. Abiotic factors imply nonliving ones. For native cultures, everything was biotic, even what the West calls nature and rendered the prime object of extraction. Mountains and caves were venerated primarily because of their impact on weather and water sources. They were embedded in ordinary subsistence practices and affirmed by mythic narratives, yet their worship implies that the Mayas placed the hidden powers of nature in broader, cosmic frames of reference, thus making explicit their shared values. Animals play a role in this cosmic process as well. As John Grim wrote about Native Americans, “[E]voking animal presence as cosmic power involves a somatic, sensual training, an intellectual effort, and a spiritual empathy with larger cosmological forces” (374).

The salient element in ongoing differences between Western ecologists' and Native peoples' cosmological ecologies is that of other-than-human entities. For Native peoples, recognition of these entities—bodily knowing, not just abstract, conceptual knowledge—is key. It activates an immediate relational epistemology, implying personhood shared with beings in the more-than-human

world.<sup>6</sup> For them, cosmological forces and beings “own” their biotic environment, demanding as much respect from human beings as do people’s own living elders and ancestors. Providing this respect allows human beings not only to have harmonious relations with local ecological realities but also to avoid retribution from angry earth beings who feel disrespected by those living in their space. Grim affirms that “Indigenous cultures present a more seamless weave between social, economic, ecological, and cosmological realms” (378). For Native subjects, personhood implies establishing bodily and sensuous connections with their environment, a biotic space that places human subjects and earth beings on an equal plane as active reciprocal agents of each other’s well-being and survival. Western ecologists, on the other hand, tend to prioritize the material world over the spiritual, and to regard Native behavior as the mystification of natural objects even when joining them in defending the environment. This attitude betrays a fundamental lack of respect for earth beings. They remain commodities, even when policy makers recommend that greater care and limitations be implemented in extractive practices.

Current debates on the Anthropocene have been rethinking the relations among ecology, technology, and coloniality, as scholars like Karsten Schulz have demonstrated. To reverse the Anthropocene’s impact, Indigenous, more-than-human political ecologies need to be part of the solution. We must learn from these ecologies without fetishizing them. Otherwise, the Anthropocene will become entangled in the perpetuation of the colonial Western gaze that enslaved and essentialized Indigenous populations the world over. There is no need to mystify Indigenous ontologies either, whether elevating them above, or setting them in opposition to, Enlightenment thinking. Indigenous ontologies are fully legitimate ways of knowing. If they are to be feared, it should be for the concrete political threat they pose to extractivism.

In *Time Commences in Xibalbá*, the two protagonists embodying the Hero Twins represent two alienating ways of limiting racialized subjects in the colonial order: Pascual Baeza joins the army,

and Juan Caca joins the church. Both self-destruct and generate the death of all the townspeople. As the novel ends, “the sugar apple trees” are “populated with . . . heads of children.” The trees finally let go of their fruits, but they fall “not little by little as the fruit matured, but all at once, like rain” (de Lión 83). The land becomes dust, a wasteland. Everything rots, and the rooster in Juan Caca’s house begins acting like a hen who seeks a nest to warm her eggs, signaling that life is out of balance. This sense of a life in turmoil, an imbalance between human beings and the wider world that supports them, is conveyed by the Hopi word *koyaanisqatsi*. The text ends with the words “Then, that night, first there was the wind . . .” (84), the same words that open the text, thus completing the circular textual spin, turning like the Maya calendar wheel.

As indicated by the ending of *Time Commences in Xibalbá*, rather than a replenishment of nature, the objectification of earth beings becomes the symbolics of the globalized extractive economy murdering nature. The end result is that trees no longer bear fruits but display the heads of dead children. The flipping over of identities, like that of the rooster’s, becomes a metaphor of the world upside-down. The wind of death sweeps the plains because the main Maya male characters of this novel—Juan Caca, who joins the priesthood, and Pascual Baeza, who joins the military—both fail to negotiate the racialized, misogynist, and heterosexist limits of the modern Western world that subalternized and racialized them. Yet, circular in nature, history begins anew once more. The novel’s last line connects with the first one. As I have stated elsewhere, if to Western eyes this reads like *Finnegans Wake* in its circularity, the vision behind its conception is the Mayas’ cyclical notion of time, the *k’atun* (a cycle repeating itself every twenty years), already present in the earliest forms of the Maya calendar, dating back three thousand years (Arias, vol. 1). There were thirteen *k’atuns* in a cycle. It was the same for *b’aktuns* (four-hundred-year cycles). The last time the new beginning of the *b’aktun* cycle was celebrated was on 21 December 2012. It is supposed to indicate a new transition in human beingness on earth. *K’atuns* and *b’aktuns* share some

traits. For example, within these units of time, Mayas believed specific events like the fall of a kingdom could take place. These ideational aspects and worldview visible in calendrics and cosmology, such as the synodic period of Venus, remain anchored in the *Popol Wuj*. Today, many of their elements spread to contemporary literary spaces like the novel, evidencing the never-ending cycles of circular time, and the eternal possibility of righting wrongs in each new cycle.

Globalized neoliberalism's intensification of new forms of extractivism threatens to finally dislodge the Indigenous communities' tenuous hold on their remaining lands. In the pursuit of rare-earth elements, a key part of many high-tech devices, corporations generate millions of tons of acidic pollution through conventional extraction methods, making this industry infinitely less green than it is sometimes claimed to be.<sup>7</sup> We must then ask whether global development as the West understands it has any future. Does the planet require a shift away from extraction, and a turn toward restorative planetary needs? New forms of extractive violence demand new responses, as well as a radical rethinking of where the human species may realistically go if it is to survive at all. We can explore this ontological turn—a return to how the environment was understood before 1500—when taking a closer look at Indigenous cultures and the lessons they offer for new ecological approaches that could bring about a different future. Being open to “spiritual” concerns, while remaining firmly rooted in a Western-centric perspective, is no longer enough.

## NOTES

1. *Abiyala* comes from the Guna (previously Kuna) language. It means “land in its full maturity” (Arias 2: 3–4). The Bolivian Aymara leader Takir Mamani (born Constantino Lima Chávez) called for the use of this name—spelling it *Abya Yala*—in the early 1980s (25–34). The name was ratified in the Kito Declaration of the Second Continental Summit of the Indigenous Peoples and Nationalities of Abya Yala, which took place in Ecuador's capital in July 2004 (13–20). Gunas standardized their written language in 2006 and made the change from *Abya Yala* to *Abiyala* official in 2017 (2n1; 327).

2. The novel, written in the 1970s, was published posthumously in 1985 and followed by an English translation in 2012.

3. I take the phrase “more-than-human world” from Grim (376), who borrowed it from Abrams.

4. As the authors of “When Half of the Population Died” state, “The disease, called *cocoliztli*, appeared for the first time in 1545 and in three years, it killed an estimated 5–15 million people, or up to 80% of the native population at the time. This represents the worst epidemic in recorded Mexican history. . . . Other major *cocoliztli* epidemics were those of 1576, 1736 and 1813. Lesser outbreaks were registered in 1559, 1566, 1587, 1592, 1601, 1604, 1606, 1613, 1624, and 1642. . . . The last epidemic of hemorrhagic fevers in Mexico ended in 1815. . . .” (Acuña-Soto et al. 1–2).

5. What is known in the West as the Milky Way was called the Feathered Serpent by Mayas and other Mesoamerican peoples.

6. Grim analyzes the Lakota medicine man Black Elk's vision of the Horse Dance in similar terms (375–76).

7. Steffen, for instance, claims that “a better way to extract rare-earth elements . . . has been discovered.”

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