INTRODUCTION

Rooting in a Useless Land

SIXTY-SIX MILLION YEARS AGO, an asteroid pierced the surface of a shallow sea and buried itself in the ocean floor, just north of the karst that was to rise from the water to become the Yucatán Peninsula. The force of this asteroid ruptured the Earth's rhythms so greatly that an impact winter immediately descended, a churning of the climate so intense that three-quarters of the planet's species—many of them dinosaurs—died out. The asteroid left a void under the sea, a crater. In the time of humans, the crater will be called Chicxulub, named for a nearby fishing village on the flat plain of the limestone coast. I find Chicxulub listed in a Yucatec Maya glossary. It tells me Chicxulub means "the devil's flea."

Sixty-six million years after the asteroid hits, it's spring of 2022 and a new theme park is opening in Chicxulub. The theme park is called Sendero Jurásico, Jurassic Trail. Tourists come to see the dinosaurs: a fiberglass triceratops perched on a pedestal of limestone rubble, a fiberglass brachiosaur standing alone in a swampy lagoon, the front half of an animatronic velociraptor bursting out from a wall of vegetation. For decades, tourism in the peninsula has hinged on ancient Maya civilization and archaeology, but Sendero Jurásico reaches beyond the pyramids to beckon tourist dollars towards a different past. "Chicxulub is the place where it all happened," says a local politician in a speech at the park's opening celebrations. "It's the place where the course of life on the planet changed forever." Tourists at Sendero Jurásico can commemorate the Cretaceous-Paleogene (K-Pg) mass extinction with hot dogs and dinosaur-shaped pizzas.

At the theme park's grand opening, the politician takes care to remind his audience, with a touch of pride, "We started, not with zero, from nothing, we started with a dump." He's speaking literally: the patch of coastline where

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FIGURE 1. Wind turbines on the road to Chicxulub. Photo by the author.

animatronic dinosaurs now roam was previously a *basurero clandestino*, an unauthorized dump. Press releases praise private investors for removing more than five hundred tons of garbage to clean the ground for the dinosaurs, while the people who actually moved the waste—almost certainly from local Indigenous Maya communities—are neatly erased from the narrative.⁴ So, too, disappear the five hundred tons of garbage; where did it all go? These questions appear to be not only unanswered but also unasked. The official story of Sendero Jurásico is that it has converted useless land into useful land.⁵ The theme park, the public is told, will bolster sustainable tourism in Yucatán.

These shores are no strangers to sustainability stories. On another day, I drive out to Chicxulub from the city of Mérida, passing through the newest strata of urban sprawl creeping towards the coast. The highway cuts across the almost lunar rockiness of the northern peninsula, and in the near distance stand the white metal trees of an alien forest. They are turbines, and this is a wind farm (fig. 1). So many clean energy projects, like this wind farm, enable private companies, many of them foreign, to proclaim net zero emissions. Yet the land required for wind farms, solar parks, nature preserves, and biofuel plantations does not start from zero, from nothing. In a troubling number of cases, these projects occupy lands bought for cheap or downright stolen from Indigenous communities.⁶ Not far from this highway, development plans for a Chicxulub wind farm are on pause after local Maya land-

owners protested that five thousand hectares of their agricultural landholding had been sold without their consent or even their knowledge. Such on-the-ground realities quickly complicate the glossy sustainability stories handed to us in corporate branding.

These stories are haunted by a tension that takes many forms. I sense that tension in a theme park built on the ghost of a clandestine dump, and I sense it in wind farms built on ground where generations of forests and farmers previously lived together. This tension has been unfolding now for hundreds of years, and its messiness makes me hesitate to pin it down with words. But if I were to try, I'd say this tension is a conflict between different ways of being with land. It's a conflict between extractive land relations and mutual land relations. By extractive land relations, I'm talking about actions and beliefs that prioritize economically profitable ways of being with land while dismissing or, often, dismantling most other ways of being with land as useless, inefficient, and wasteful. This extractive reckoning is predicated on a calculated categorization of useful versus useless.

Mutual land relations situate the value of land not in terms of use or useless but instead in deeply rooted relationships of reciprocity, symbiosis, and care. Mutual land relations are far older than their extractive counterparts, and mutual reciprocity continues to be the beating heart of Indigenous ecological paradigms around the world. Humans on every inhabitable continent learned, over thousands of years and through the teachings of good times and hard times, to practice restraint and reciprocity in their engagements with land. Sometimes that learning came through the experience of environmental degradation, through erosion, extirpation, salinization, and other humancrafted ecological imbalances. This element of learning matters: mutual land relations are not somehow innate or intrinsic—they are collectively learned, cared for, and passed along through culture and across generations of relationship among particular people and places. 9

Extractive land relations are younger and they, too, have been learned. They have been incubated and refined only over the last five hundred years on plantations, in missions, in mines, in factories, and in company towns. Extraction sits at the core of colonialism and its current manifestations under late capitalism. ¹⁰ It is the driving force of global climate change and environmental injustice. The doctrines of extraction insist it can continue forever, but by its very definition, it cannot. As Indigenous communities and other advocates for mutual land relations have been telling us for a long time now, a return to reciprocal relationship with land offers possibilities for

restoration, for healing some of the damage wrought by extraction. ¹¹ But the struggle to unlearn extraction goes on.

The archives of this struggle between mutual land relations and extractive land relations are stored in the land and seas of virtually every place on the planet. It's why Indigenous Maya lands in northern Yucatán were transformed into cattle ranches, then into henequen (a species of agave once used for producing much of the industrial world's twine) plantations, then back to subsistence farmland and forest, then into wind farms or dumps or dinosaur theme parks. Under the logic of extraction, useless lands have value only when they are converted to useful lands; the practices that accomplish that conversion—deforestation, damming, pollution, plantations—tend to render most other kinds of land relations impossible. Potawatomi environmental philosopher Kyle Powys Whyte writes that settler-colonial land relations "systematically erase certain socioecological contexts, or horizons, that are vital for members of another society to experience themselves in the world as having responsibilities to other humans, nonhumans, and the environment."12 In Whyte's understanding, environmental justice conflicts involve "one society robbing another society of its capacities to experience the world as a place of collective life that its members feel responsible for maintaining into the future."13 Extractive land relations uproot possibilities for mutual land relations. Yet even as extractive logic asserts its supremacy, mutual land relations continue—preserved, nurtured, and passed on in pockets of resistance.

Sendero Jurásico feels like an omen, and I study the Yucatecan tourism industry's tentative pivot from ancient Maya tourism to dinosaur tourism with great interest. For a while now it has seemed that when ancient Maya civilization is invoked in popular media, it's been for climate change collapse parables. Unsustainable farming, unsustainable forestry, severe drought, severe violence, political upheaval, societal breakdown—what can we learn? ¹⁴ But perhaps, here and now, people have become exhausted with this kind of story. Maybe the market researchers think that people are still hungry for apocalypse but for one that carries with it no lessons to be learned because it is utterly unstoppable. Maybe they think people crave the absolution of an asteroid.

I am trying to offer a different sort of story. Instead of abandoning the lands discarded as useless by extractive land relations, what if there were a collective rooting in those lands? Useless lands are lands stripped of their history; to transform land into a commodity, the deep connections among beings (human and nonhuman) and land have to be uprooted first. Environmental justice conflicts—pipelines, strip mines, water and air pollu-

tion, toxic waste dumping, biopiracy, deforestation, land grabs—all rely on the uprooting of history to turn land into a fungible, usable resource. What could happen if history, deep history that roots into the ways past people lived with land for long centuries before colonial logic rendered land useless, were restored to these lands? Rather than the desolation of an apocalypse or yet another sustainability parable, the restoration of history in useless lands offers possibilities for a different future, for a patchy and granular restoration of mutual land relations.

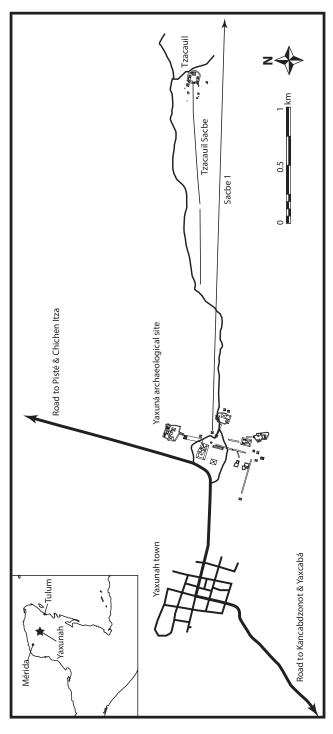
That restoration will be patchy and granular because particular histories matter: these are precise entanglements. ¹⁵ Though similar systems and structures may be at play, deep histories of land cannot be universalized. The precise entanglement I engage here takes place deep inland from the coasts of the Chicxulub crater, in an Indigenous Yucatec Maya community called Yaxunah and its collective agricultural landholding, or *ejido*. Between 2015 and 2017, I worked as an archaeologist with Yaxunah community members at the site of an ancient Maya farming village, Tzacauil, in the forested edge lands of the Yaxunah ejido (map 1). Private developers periodically try to acquire that land. Yaxunah landowners have so far rejected these offers, deciding that the long-term erosion of food sovereignty and community access to firewood, building materials, game animals, honey, agricultural land, and clean water outweighs any promise of a brief burst of cash. ¹⁶

At the same time, the calculus of that decision is in flux for a surprising reason: a cadre of world-famous celebrity chefs, along with several sustainable development initiatives, have made Yaxunah a global destination for culinary tourism. These interventions, combined with the increasing vulnerability of subsistence farming, are together—I believe unintentionally—reshaping land relations in Yaxunah. The "useless land" narrative is slowly spreading in the ejido edge lands, bringing with it the growing likelihood that these lands will be sold, or otherwise taken, for conversion into more useful ground.

What would it mean to restore deep histories to these edge lands, instead of transforming them into nature reserves, ecotourism attractions, wind farms, dumps, or dinosaur theme parks? What would it mean to root in useless lands?



I drove by Sendero Jurásico on my way to the beach a few months ago and looked at it with curiosity but no real intention of going in. I can resist a



MAP 1. The eastern lands of the Yaxunah ejido, showing the modern town of Yaxunah, the Yaxuna archaeological site, and the Tzacauil archaeological site. The inset map shows Yaxunah's location in the central interior of Mexico's Yucatán Peninsula, as well as the locations of Tulum and Mérida.

half-finished dinosaur theme park, but I can't resist historical echoes. Like this one: in 1978, geologists scouting sites for oil drilling in the Gulf of Mexico were surprised to detect strong magnetic anomalies off the north coast of the Yucatán Peninsula. These anomalies, found during the insatiable hunt for fossil fuels, were the first clue in recognizing Chicxulub as the long looked-for site of the impact crater responsible for the K-Pg mass extinction.¹⁷

Also in 1978, trucks began secretly dumping liquid contaminated with toxic polychlorinated biphenyls (PCBs) alongside miles of rural highways in North Carolina. State authorities handled the illegal dumping by building a landfill to bury the contaminated waste. The community response to this particular toxic landfill started the modern environmental justice movement.¹⁸

Environmental justice conflicts have deep roots in histories of colonial and capitalist extraction, but the environmental justice movement is still quite young, an offshoot from the American civil rights movement.¹⁹ The sixty thousand tons of PCB-laced waste dumped by the North Carolina government in rural Warren County would have gone quietly into the ground—and into the water table—if Black community organizers had not taken action, pointing out that the waste posed a direct threat to public health. Environmental sociologist Robert Bullard compiled data from Warren County and other polluted regions to demonstrate, decisively, that environmental benefits and risks are not distributed evenly in the United States: the benefits go disproportionately to white communities, while the risks go disproportionately to Black communities and communities of color.²⁰ Bullard's first systematic documentation of environmental racism soon grew to include the wider concept of environmental justice, which considers not only the racialized dynamics of how environmental risks and benefits are assigned but also how class, gender, ethnicity, immigrant status, and disability impact those decisions.²¹

Though the modern environmental justice movement is only a few decades old, the origins of environmental justice conflicts themselves reach many centuries back. Most of these conflicts originate, in some way, in the extractive land relations of colonialism. Max Liboiron, a Michif researcher of plastic pollution, is careful to emphasize that colonial land relations insist on their own exclusive dominance: "Colonization is not just about having access—it is also about eliminating other types of relations that might threaten that access." The colonial roots of contemporary environmental justice conflicts are readily apparent as soon as you start to look. As a colonial roots of contemporary environmental justice conflicts are readily apparent as soon as you start to look.

When Energy Transfer Partners asserted access to land to build the Dakota Access Pipeline (DAPL) even though the pipeline posed real threats to the drinking water, land, and sacred places of the Standing Rock Sioux Tribe, their assertion and its assumptions were reproducing deeply historical extractive land relations of the American frontier. Kyle Powys Whyte has written of this conflict, "US settler colonialism viciously imposed harm and risks on the ancestors of the Standing Rock Sioux Tribe that have continued through the DAPL ordeal. It is precisely this social process of settler colonialism that explains why it is no accident that Energy Transfer sought to build a key segment of DAPL through tribally significant lands and water systems."²⁵

When the public sanitation needs of rural Black communities in Lowndes County, Alabama, were ignored by the (predominantly white) local government to the point that many Black families were living among open pools of worm-ridden human waste, that systemic neglect was reproducing the extractive land relations and racialized violence of slavery. Environmental justice activist Catherine Coleman Flowers, who brought national attention to the Lowndes County waste crisis, ²⁶ called it "the final monument to the Confederacy."

Land grabbing is a very particular kind of modern environmental justice conflict with deep historical connections to colonialism and imperialism, and it's the one at the heart of the story I'm telling here. ²⁸ Colonialism has always been about taking land. Modern land grabbing both reproduces colonial land relations and enacts new kinds of land relations shaped by late capitalism.

There was a sharp increase in global food prices in the first decade of the twenty-first century. Feeling pressure to shore up agricultural production, agents for powerful countries and corporations rushed to acquire large tracts of land for farming, as well as for growing biofuels.²⁹ Yet available land was scarce within the political borders of many of these land-hungry nations, and so much of the land being sold in those years was in other countries. Often the sale of lands happened with limited or no consultation with local communities, and with little transparency.³⁰ Millions (and potentially hundreds of millions) of hectares have been sold in this way.³¹ Most land grabbing has been concentrated in Africa, but significant amounts happen in Asia and Latin America as well.

There is no one kind of land grab. There are transnational and domestic land grabs, there are land grabs of huge areas and land grabs of relatively