This Article suggests a paradigmatic reversal in the sociolegal conceptualization of environmental justice and seeks to expand the notion of environmental justice to a disaster risk reduction modality. This legal narrative chronicles how those with power and wealth govern the lives, fortunes, and health of those on the bottom rungs through discriminatory environmental policies. I explore case studies of sudden onset water hazard events, energy access, and the use of advanced biofuels in the localities of Puerto Rico, Pakistan, and the Philippines to show the problematic configurations of environmental justice. These examples elucidate how environmental justice is perceived and how the legal framework for environmental justice is marginalized. In turn, I recommend reframing environmental justice through the lens of the Anibal Quijano’s “coloniality of power” and the International Strategy for Disaster Reduction by the United Nations. This Article is a fourth in a series on advanced biofuels and environmental justice. Previously, I examined international dimensions in Blood Biofuels (Duke Environmental Law & Policy Forum), federal efforts in Resiliency and Responsive Regulation for Advanced Biofuels (Virginia Environmental Law Journal), and municipal initiatives in Energy for Metropolis (University of Miami Law Review).

INTRODUCTION

Justice is the foremost virtue of the civilizing races. It subdues the barbarous nations, while injustice arouses the weakest.

— José Rizal

His writings sparked the Philippine Revolution.Officials in the Spanish colonial government would execute him for the crime of rebellion. Even though he did not partake in the planning of the revolution, he ultimately supported the goal of Philippine independence. Jose Rizal was not referring to environmental justice in the above passage, but his words are also appropriate to describe the conceptualization of environmental justice between what Rizal terms “barbarous nations” and “the weakest.” This dichotomy between the powerful and the powerless parallels the simultaneous struggle between the corporate form and the environment. The “barbarous” elite are concerned with the interests of the corporation while the masses (“the weakest”) are concentrating on sovereignty, survival, and self-determination.

3 See generally Austin Craig, LINEAGE, LIFE, AND LABORS OF JOSE RIZAL, PHILIPPINE PATRIOT: A STUDY OF THE GROWTH OF FREE IDEAS IN THE TRANS-PACIFIC AMERICAN TERRITORY (1913).
On account of their interrelated colonial, post-colonial, and neocolonial configurations, Puerto Rico, Pakistan, and the Philippines illustrate the difficulty of using environmental justice as a tool to achieve equality and correct environmental imbalances in the built world. All three places serve as strategic geopolitical outposts, house significant U.S. military installations, and have been subjected to colonial domination. These places and their environmental issues make excruciatingly clear that the notion of environmental justice is a continuation of the colonial sociopolitical apparatus to strip individuals and communities of environmental rights when basic human dignity is denied. Environmental justice at its core assumes caste-like racial hierarchies and attempts to offer a rights-based approach to providing environmental and civil rights to minority, low-income, and indigenous communities. When the entire native population is a community of color existing in the way of a strategic military outpost, environmental justice is further problematized.

Peruvian sociologist Anibal Quijano argued that the “model of power that is globally hegemonic today presupposes an element of coloniality.”\(^4\) This Article extends Quijano’s framework for the coloniality of power to the notion of environmental justice as a colonial construct in that the lives and well-being of communities of color, the poor, and indigenous groups stand in the way of capital accumulation of the elite and are subordinated and sacrificed in the hegemonic processes of conquest and control. I posit that the Sendai Framework for Disaster Risk Reduction 2015-2030, which deploys a race-neutral lens, but carries an awareness of North-South and South-South hierarchies is better able to address the plight of the lack of environmental rights and human dignity than environmental justice on its own.\(^5\)

From disaster preparedness to disaster relief, alternate emergency responses are given to communities based on their zip codes and phenotypes. Acute responses for disaster relief are ferreted out based on the skin color and bank balances of the impacted. This Article is the fourth in a series related to the law and policy of advanced biofuels and environmental justice with a focus on sudden onset water hazard events or more broadly known as natural hazards. The sudden onset water hazard events are exacerbated by manmade disasters indicative of systematic discrimination. Previously, I examined international dimensions in Blood Biofuels (Duke Environmental Law & Policy Forum), federal efforts in Resiliency and Responsive Regulation for Advanced Biofuels (Virginia Environmental Law Journal), and municipal initiatives in Energy for Metropolis (University of Miami Law Review).

This Article proceeds in three parts. Part I theorizes the coloniality of environmental power by highlighting the deceit of integration in the transmodern environmental heterodoxy. Part II portrays the case studies of three specific environmental “natural” disasters in Puerto Rico, Pakistan, and the Philippines. Part III explores the agenda for disaster risk reduction and how the use of advanced biofuels can improve negative outcomes for energy access post-disaster.


I. Coloniality of Environmental Power

Environmental justice did not first emerge in the poor, rural, and predominantly African American community of Warren County, North Carolina, in 1973. The concept of environmental justice has been present since ever since low-income people, communities of color, and indigenous groups have been marginalized from ancient times to the height of the transatlantic slave trade to the transmodern era of the current global regimes. There is an ongoing colonial enterprise to subdue and denigrate populations to advance commercial endeavors at the expense of the beleaguered and marginalized classes and groups within societies. Quijano uses the theoretical framework for what he refers to as the “coloniality of power” to show the disparity of wealth, labor, and resources. His analysis is instructive for a reformulation of environmental justice. Quijano expresses how colonialism created the convergence of two axes of power: 1) “the codification of the differences between the conquerors and conquered in the idea of ‘race,’ a supposedly different biological structure that placed some in a natural situation of inferiority to others” and 2) “a new structure of control of labor and its resources and products.” Prior to the colonization of America, the concept of race as it is known now did not exist, but race would become the modality to grant “legitimacy to the relations of domination imposed by the conquest.” The conquest of America was the point that race emerged as a position to set forward “ranks, places, and roles in the new society’s structure of power.” Only once race is recognized as a means of subordination can the next phase begin: environmental subordination. The races inferior to the Anglo-Americans were not allowed access to the same level of environmental protection as they faced higher environmental threats on account of displacement, disease, slavery, and migration. The control of labor and production would create new hierarchies in society based on race. Quijano lays out the Eurocentrification of world capitalism:

The privileged positions conquered by the dominant white for the control of gold, silver, and other commodities produced by the unpaid labor of Indians, blacks, and mestizos (coupled with an advantageous location in the slope of the Atlantic through which, necessarily, the traffic of these commodities for the world market

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6 NRDC, Environmental Justice Movement, https://www.nrdc.org/stories/environmental-justice-movement “The state government decided that Warren County would be the ideal location for 6,000 truckloads of soil laced with toxic polychlorinated biphenyl known as PCBs, which are carcinogenic in nature and are toxic to the environment and human health, leading to endocrine disruption and neurotoxicity.” Id. See also Nadia Ahmad, The Baseline Bar, 65 KANSAS L. REV. (2017). “The dump trucks began arriving in Warren County in mid-September, 1982, headed for a newly constructed hazardous waste landfill in the small community.” NRDC, supra note 4. “But many residents and their supporters were understandably upset that the state officials dismissed their concerns over PCBs leaching into drinking water supplies, and they met the trucks as they were heading to the landfill.” Id. “And they stopped them, by risking their lives, by lying down on roads leading into the landfill.” Id. “Six weeks of marches and nonviolent street protest ensued, and more than 500 people were arrested.” Id. “This was the first time in U.S. history were arrests were issued over the siting of a landfill.” Id.

7 Mustapha Ali, Yale New Directions in Environmental Law Conference, March 2, 2018, Keynote Address, Yale University School of Law, New Haven, Connecticut.

8 Quijano, supra note 3.

9 Id. at 534.

10 Id.

11 Id.
had to pass) granted whites a decisive advantage to compete for the control of worldwide commercial traffic.\(^{12}\)

Seeing the origins of race rooted in the origins of the history of the American colonial enterprise shows the lineage of environmental justice. If the discussion of environmental justice begins in Warren County, it overlooks centuries of environmental denigration, pollution, and toxicity in communities, who carried the burden of the capital enterprise through the the loss of their lands, livelihoods, and lives, while the elite benefited from their toils. The environmental disparities since Christopher Columbus’ maiden voyage cannot accurately be traced or quantified, but at this point, the harm caused by Columbus should be acknowledged.\(^{13}\) Even if such an acknowledgment is not forthcoming, there should be a recognition that environmental justice places the burden on already marginalized communities to assert their basic human dignity in the form of permitting processes in the transmodern context.

\(^{12}\) Id. at 537.

A. The Deceit of “Integration”

The displaced farmer in water-stressed Peshawar killed by a drone strike, the villager in the Caroline Islands who dies from flooding, and the grandmother in San Juan enduring poor medical facilities following Hurricane Maria are interrelated water hazard events, because the precipitating and the final stresses were from natural hazards, environmental threats, and manmade disasters. The lack of arable water drives poor farmers into cities without jobs and access to education. Large development banks enter into investment and financial agreements with Third World nations with the promise of jobs and infrastructure projects, but instead leave debt and the dependency of First World financial structures to additionally worsen living and health conditions for Third World peoples. All this reordering is part of a larger structure of systematized subordination of lower classes and lesser races. How can lower classes and lesser races respond to these environmental threats which they did not create? These hazardous waste sites, mine tailings, water contamination, oil pollution, nuclear waste, etc. were left in the wake of colonialism, the neocolonial military industrial complex, agrobusiness enterprises, and the broader postcolonial project, which subsidizes First World farmers at the expense of bordering countries with lower labor and production costs. The entire American capital system is based on racial hierarchies, enslavement/incarceration/encagement of people of color, and the financial subordination of the Third World as recompense for the lifestyle for the landed, monied, and elite of the Global North, marginalizing Third World and Third World-looking peoples within and at its borders.

Richard Lazarus and Stephanie Tai’s 1999 article, Integrating Environmental Justice into EPA Permitting Authority recognizes the weaknesses of civil rights law and turns to environmental law: “Environmental law’s ability to provide such redress, however, turns largely on the answers to controversial questions respecting permitting decisions under existing federal environmental statutes.”\(^{14}\) The shift away from civil rights still shows the problems with environmental law as complex, inaccessible, and problematic, riddled with litigation delays. Historically, environmental law was designed to protect and shield hegemonic notions of wealth and capital accumulation. \(\textit{Inter alia,}\) environmental law protects aesthetic and natural viewsheds of hedge fund billionaires.\(^{15}\)

\(\textit{Integration}\) is the buzz word for the American attempt at decolonizing public places since the 1950s. Yet what was integration? Allowing people of color to share toilet seats and drinking fountains? Sharing classrooms? And \textit{integrating} environmental justice? The sharing of environmental laws? The whole notion of sharing led to sharing natural resources i.e. colonization. Sovereignty is about “what’s yours is yours” and “what’s mine is mine.” Colonialism is fixated on sharing and ignoring natural resource sovereignty.

Meanwhile, environmental law as a field is completely remote to the groups protected by environmental justice. When and how are individuals and groups who are surviving off of government-assistance for food, utility payments, and housing able to develop the wherewithal to

\(^{14}\) Richard J. Lazarus & Stephanie Tai, \textit{Integrating Environmental Justice into EPA Permitting Authority}, 26 Ecology L.Q. 617, 619 (1999). “The first question is whether the Environmental Protection Agency (EPA) has the authority to condition on environmental justice grounds permits that the Agency (and states with federally-approved programs) issues to regulated entities pursuant to the various federal environmental protection laws administered by EPA. The second related question is the extent to which that permitting authority (federal or state) may deny a permit altogether solely on environmental justice grounds.”

make environmental justice claims? Pollution, chemical contamination, and toxicity are acceptable in impoverished communities, where lives are expendable in the push for capital accumulation and wealth maximization. Grassroots environmental activism is only taking place in inner cities at the small scale. The very conception of environmental justice is an insult. Environmental justice, as currently construed, is the state’s gratuitous attempt on environmental protection so poor people, people of color, and indigenous groups have the same rights as the rest of society. These groups need another layer of laws or another set of hurdles to access the rights available to everyone else.

Consider the term, “integration.” Merriam Webster defines it as: “1: the act or process or an instance of integrating: such as a: incorporation as equals into society or an organization of individuals of different groups (such as races); b: coordination of mental processes into a normal effective personality or with the environment; 2a: the operation of finding a function whose differential is known; b: the operation of solving a differential equation.” Integration, also a mathematical term, is linked to the idea of desegregation, which needs another layer to benefit.

16 “Environmental justice issues arise most commonly in the permit approval process, but these issues also surface in state agency practices during day-to-day operations.” Ellen M. Peter, Implementing Environmental Justice: The New Agenda for California State Agencies, 31 GOLDEN GATE U. L. REV. 529, 566 (2001).

17 A panel discussion with Majora Carter, Majora Carter Group; Miranda Massie, et. al., Whose Survival? Environmental Justice As A Civil Rights Issue, 13 N.Y. CITY L. REV. 257, 258 (2010). “One of the movement’s main objectives is to empower residents of a community to gain greater control over the use of land and resources in their neighborhoods. Another is to provide opportunities to benefit from the environment such as access to healthy food, clean air, parks, and jobs in the growing green economy that will help communities survive our deepening economic crisis.” Id.

18 Raina Wagner argues for a combined adaptation-mitigation response for environmental justice:

The principles of the EJ Movement have always shifted the focus of environmental activism. If an active, affluent community succeeds in keeping pollutants out of its neighborhood, state, or even nation, some would view that as success. If the success is simply to move the emitted pollutant to another, poorer, less-activist community, state, or nation, the Environmental Justice activist will view the activity as a failure. Because of the specific goals of the EJ Movement, the success of any environmental activity will be assessed in terms of the ability of the poor, minority, and underserved communities to take advantage of the benefits. With the United States on the cusp of becoming a cap-and-trade nation, American programs that help humans adapt to the ways we have changed the world could lead the way to justice for all. Id.


19 Merriam Webster Dictionary, Integration, https://www.merriam-webster.com/dictionary/integration. Integration is defined as: “1: to form, coordinate, or blend into a functioning or unified whole: UNITE; 2: to find the integral of (something, such as a function or equation); 3a : to unite with something else; b : to incorporate into
which amounts to allowing people of color into historically white spaces. The field of environmental law is a white space. In this academic field of hundreds of environmental law professors across the Americas, I am the only one who looks like me. The terrain of environmental law and policy is not precisely unwelcoming, but it is disinviting for those of us, who are not male, pale, and stale. 20 Environmental justice is an attempt at a means of providing people, who have limited economic means and/or are from minority or indigenous communities, a way into the elite space of environmental law though executive orders without teeth 21 and weak case law. 22

_Sabr_ is the Arabic word for “patience.” 23 The refrain of patience is the adage for waiting our turn for environmental justice. The trouble is natural resources are being depleted before our eyes, the polar ice caps are thunderously disappearing, and soil, air, and water are being irreparably damaged. Once we complete our turn at patience for contesting permitting of sites in spaces that would not be on the table for the rest of society, we may have a shot at a shred of environmental justice only to watch it dwindle away in a court system inhospitable to the interests of working class groups, people of color, and indigenous communities. While these communities are not monolithic, they share the similar outcomes of environmental damage at the expense of their human dignity.

However noble attempts at environmental justice may be, they fall short and will continue the dehumanization process for the communities they seek to assist. Integration is designed “to eliminate segregation in; specifically: to free of any law, provision, or practice requiring isolation of the members of a particular race in separate units.” 24

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The formation of the elite Tuskegee Airmen came about because of the pressure civil rights organizations and the black news media put on the United States to _desegregate_ the military. —Brandon Patterson, _Detroit Free Press_, "Tuskegee Airman honored 73 years after being lynched in Austria," 27 May 2018 Racist sentiment is built into the fact that the state government squeezes the funds for public schools, which might technically be _desegregated_ but remain very segregated because the whites who
time, I hear the word “integration,” it stings. We all of sudden decided to treat you as equal after centuries of subordination, subjugation, and control. We have been letting you into our spaces for decades now. We have INTEGRATED. Instead of integrating environmental justice into the environmental rights framework through the permitting process for the National Environmental Policy Act, Clean Air Act, Clean Water Act, etc., a exhaustive decolonization of environmental justice is needed. The purging of environmental law’s colonial past will allow it to lead to the desired results and more equitable outcomes. Except how does one decolonize nature once it has already been colonized?


B. Transmodern Environmental Heterodoxy

One thing I tried to show in my travels so far is that this is not just an urban issue. It’s also a rural issue. And whether it’s pesticides put on crops affecting farmworkers, or mine runoff, or how they dispose of their toxic materials, we are living in a nation where more and more, we need a vigilant federal government to protect people. But the EPA is now controlled by people who are more in line with industry’s desires than they are with protecting families and communities from these toxins. The environmental justice issues in this country are not going to get better, they will get far worse under a president like this who has shown no desire to hold corporations and powerful interests in our country accountable.

-- U.S. Senator Cory Booker (D-NJ)  

I marvel at Sen. Booker crisscrossing the nation to document and draw attention to the environmental plight of communities and raise awareness for the issue of environmental justice. The environmental justice bill would be a game changer for the movement for environmental justice. ABA Section of Civil Rights and Social Justice organized a program titled, “Environmental Justice in the 21st Century: Threats and Opportunities,” featuring a keynote address by U.S. Senator Cory Booker at the ABA’s Washington, D.C. office. The intent behind the program was to motivate the next generation of environmental justice advocates. On October 24, 2017, Sen. Booker and U.S. Rep. Raul Ruiz, M.D. (D-CA) introduced a landmark piece of legislation to eliminate environmental injustice.

The Environmental Justice Act of 2017 mandates that federal agencies to respond to “environmental justice through agency actions and permitting decisions, and strengthens legal protections against environmental injustice for communities of color, low-income communities, and indigenous communities.” The bill is the culmination of a months-long process of working with dozens of grassroots organizations across the country to craft a comprehensive bill that strengthens environmental justice protections for vulnerable communities.

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28 Id. “The EJA has been endorsed by over 40 public health and environmental justice organizations, as well as the American Bar Association’s President Hilarie Bass.” Id.


30 Id.
featured a panel discussion on Sen. Booker’s landmark environmental justice legislation and the various ways it addresses critical issues for vulnerable communities nationwide, especially communities of color, in light of historical, ongoing challenges as well as new ones posed during this presidential administration. Other topics addressed included: changes at the Office of Environmental Justice of the EPA; recent appointments at EPA and the changing role of science in decision-making; and challenges to community efforts in support of environmental protection for clean air, water, and land via threats to citizen suits and enforcement.

The environmental justice bill falls in line with the idea of transmodernity, which is a tool for analyzing cultures and beliefs. The idea of transmodern is evident in the power dynamics of the European Union. While transmodernity and the EU experiment do have numerous flaws, this concept provides an additional means of reformulating the environmental hegemony to be more inclusive and Earth-centered instead of responsive to corporations. Marc Luyckx Ghisi explains four levels of the transmodern transformation: 1) “The lowest (subconscious) level is the danger of Humanity killing itself”; 2) “End of patriarchal values and presence of a new sacred”; 3) “The third level is the end of modernity…. From modern extreme intolerance to transmodern radical tolerance”; and 4) “The fourth level TRANSMODERN ECONOMY: End of industrial capitalism and birth of an intangible postcapitalist society.”

The move toward transmodernity is aligned with the goal of achieving environmental justice, not through rapprochements, but as collaborations and partnerships. The beleaguered state of environmental laws in the United States requires new approaches from meta-regulation in the corporate realm to transmodernity in

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31 Id.
32 Senator Booker was joined on the panel by Mustafa Ali, Vice President of Climate, Environmental Justice & Community Revitalization, for the Hip Hop Caucus, and former head of the EPA’s Office of Environmental Justice; Patrice Simms, Vice President of Litigation for EarthJustice, and former attorney at the U.S. Environmental Protection Agency, U.S. Department of Justice – Environment and Natural Resources Division, and Natural Resources Defense Council; and moderator, Randy Hayman, Principal, of Beveridge & Diamond, P.C., and former General Counsel of DC Water. Id.
33 Marc Luyckx, The transmodern hypothesis: towards a dialogue of cultures, 31 Futures 971, Nov. 1999. Luyckx states:

For a Brussels Seminar at the European Commission, a “double hypothesis” was proposed: that we are in transition to a transmodern way of thinking that combines intuition and spirituality with rational brainwork; and that 21st century conflicts will likely not be between religions or cultures but within them, between premodern, modern, and transmodern worldviews. Non-Western thinkers find this framework useful: it opens a door to criticism of the worst aspects of modernity without being “anti-Western”. Western reactions are more mixed, some critics wanting to maintain a high fence between religion and governance, others welcoming the transmodern concept as helpful in relating states to religions, and in analyzing conflicts involving beliefs about belief. “Transmodernity” turns out to be a rich tool of analysis, with important implications for European foreign policy in the century to come. Id.
the environmental sphere.\textsuperscript{35} Climate change may have evaded the vocabulary of some state and federal agencies, but the concern of climate change has not disappeared.\textsuperscript{36} In fact, climate change has intensified as result of the lack of policy to address it by the leader of the free world.\textsuperscript{37} Annise Katherine Maguire argues that ineffective laws for environmental justice stand in the way:

The difficulties faced by communities fighting environmental injustice do not end at agency inaction. Permitting under the [Clean Air Act] presents a substantial obstacle to successfully challenging agency actions that negatively impact minority and low-income communities. The ease with which companies have been able to

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\item \textsuperscript{37} What is so frustrating about environmental justice is that negative impacts to public health are so great, but the work done to abate those impacts is so limited:

In the case of emerging environmental health threats like PCBs in schools, it’s very hard for people to grapple with health risks that are serious but not immediate. Environmental health effects are compounded and combined over the course of childhood and adolescence and into adulthood. So you’re talking about latent impact and risk, which can be very difficult to organize around, given that the communities with which we work face immediate and harrowing problems, particularly in this economy. Environmental health risks can seem abstract--like luxury issues. And at the same time, paradoxically, there is parents’ terror, and sometimes consequent denial, about the impact of environmental toxins on their children.

These anxieties are well-placed: such impacts can be irreversible and profound, expressed over decades. In addition, we confront a reactionary body of law and policy that fundamentally fails to protect against these harms. These failures of U.S. toxics law and policy truly threaten the health of human residents of North America, and in a familiar, disturbing manner, the distribution of harm is sharply unequal along the lines of race and class. Environmental health problems affect wealthier and whiter communities as well, but the connection of race and class to the distribution of harm is wholly unacceptable in a society that purports to be democratic and egalitarian.

In sum, while various factors combine to make organizing around children's environmental health a challenge, the urgency of the issues provides jolts of motivation, as do the profound rewards of working in partnership with community members engaged in struggle with those same challenges. I hope the PCBs campaign has provided a concrete example of how community lawyering and environmental justice can work in practice.” A panel discussion with Majora Carter, Majora Carter Group; Miranda Massie, et. al., \textit{Whose Survival? Environmental Justice As A Civil Rights Issue}, 13 N.Y. CITY L. REV. 257, 267–68 (2010)
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obtain permits for the construction or modification of facilities that disproportionately burden minority and low-income communities is startling. \(^38\)

The next section turns to the similarities and distinctions of Puerto Rico, Pakistan, and the Philippines in responding to sudden onset water hazards event and how access to energy following a disaster is significant to consider in terms of environmental justice.