

HUMAN RIGHTS, INDIGENOUS PEOPLES, AND THE GLOBAL CLIMATE CRISIS

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"We are standing alone to try and survive."

—Lucy Adams, a Kivalina elder¹

"The social conflict that will erupt in the forests, should our peoples have no rights to defend themselves, will exact tremendous economic harm, as our forests are our homes, our lives, our culture, and the heart of our spirituality. We will not go quietly, and neither should you."

*—Victoria Tauli-Corpuz,
United Nations Special Rapporteur
on the Rights of Indigenous Peoples²*

The global climate crisis is an ongoing event the likes of which we have yet to experience. The science is clear, the phenomenon is traceable, and the effects are far-reaching. But, the consequences of the climate crisis affect particular populations more so than others, and often times the affected populations are voiceless. Among those most impacted are indigenous peoples. Indigenous peoples stand in a unique place in the context of climate change. In general, indigenous peoples have a comprehensive relationship with their place and surroundings, which incorporates culture, livelihood, economy, and a defining sense of self. Land and resources are not simply commodities to be bought and sold, but they function to give us our stories, directions, and identity. With

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1. Marissa Knodel, *Conceptualizing Climate Justice in Kivalina*, 37 SEATTLE U. L. REV. 1179, 1180 (2014).

2. Victoria Tauli-Corpuz, *Removing Rights for Indigenous Peoples Places Forests, Climate Plan at Risk*, VICTORIA TAULI-CORPUZ (Dec. 7, 2015), <http://unsr.vtaulicorpuz.org/site/index.php/en/statements/106-statement-cop21>.

many indigenous peoples existing in remote areas, the effects of climate change—like sea level rise and changing rainfall—have an enhanced negative effect. Indigenous relationships with land renders what is at stake all the more dire.

Given the political invisibility of most indigenous communities and the longstanding global resistance to indigenous self-determination, indigenous peoples are left without plausible means to engage in traditional democratic processes with any hope of success. Furthermore, the commons nature of the problem of climate change precludes indigenous peoples from simply utilizing their resources differently in order to avoid the effects of climate change. Therefore, the law is where indigenous peoples must look for aid. The framework of human rights law has the potential for employment as an important legal tool to further indigenous resistance and resilience in the face of the climate crisis and continuing domestic political paralysis. This Article outlines the unique commons problems presented by the global climate crisis. I argue that indigenous peoples are negatively affected at a far greater rate and to a far greater extent than nonindigenous populations. The past few years have highlighted the role that indigenous peoples play in the fight against climate change by the mainstream focus on the fight over pipelines in indigenous areas. Indigenous peoples across the globe will not stand idle while carbon industries march on, but the fight must utilize the law rather than merely act despite it through direct action protests. The opportunity to couple the human rights framework with the indigenous rights framework carries great possibility for enhancing advocacy on behalf of indigenous peoples.

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I. INTRODUCTION

A dinosaur walking along the Yucatan Peninsula sixty-six million years ago would not have seen the odd light in the sky. It must have seemed like a normal day for her. Maybe she was looking for food. Maybe it was raining and she was seeking shelter. Maybe it was at night and she was sleeping. But if she were awake, there would have been no noise, no pain, no anguish, and no time to perplex over what had happened. Literally, it happened in the blink of an eye. Her life, and all lives within the 110-mile-wide impact crater of the KT Asteroid, ended instantaneously.

Sixty-six million years ago, the Earth saw the mass extinction of the dinosaurs and nearly all other living things on the planet.³ Starting in the 1980s, this now-prevailing theory was based on the idea that an asteroid—a roughly six-to-nine-mile-wide space rock⁴—landed in present-day Gulf of Mexico creating a myriad of catastrophic consequences ending the 200 million-year dominion of dinosaurs.⁵ The KT Asteroid travelled so fast, more than 60,000 miles per hour, that the Earth’s atmosphere had little impact on it.⁶ The asteroids we witness today burn up upon entering the Earth’s atmosphere, or are at least modified by it.⁷ The air pressure created by the KT asteroid’s impending impact on the Earth pushed the ocean before it away.⁸ Author Peter Brannen describes it this way: “[A] rock larger than Mount Everest hit planet Earth traveling twenty times faster than a bullet. . . . In its nearly instantaneous descent, it compressed the air below so violently that it briefly became several times hotter than the surface of the sun.”⁹ He goes on,

[I]n the sky above the [KT Asteroid], where there should have been air, the rock had punched a hole of outer space vacuum in the atmosphere. As the heavens rushed in to close this hole, enormous volumes of earth were expelled into orbit and beyond—all within a second or two of impact.¹⁰

3. PETER BRANNEN, *THE ENDS OF THE WORLD* 187–91 (2017).
4. *Id.* at 187–90.
5. *Id.* at 189.
6. *Id.* at 188.
7. *Id.* at 187.
8. *Id.*
9. *Id.*
10. *Id.* at 188.

Most scientists who study this extinction event credit the KT Asteroid as either the lone act, or at least a critical one, that triggered reactions that ended life around the globe.¹¹ And it all happened in a day.¹²

In contrast to the Yucatan dinosaurs who never saw their end of the world coming nor felt the squeeze of adapting to a changing world, the Saami people (and many indigenous peoples across the world) are facing the reality of a warmer Earth on a sustained basis. They see it, feel it, and live it each day. The Saami people call their region Sampi, but it is more commonly known by the English word "Lapland."¹³ It is the Arctic area of Russia, Norway, Sweden, and Finland and is home to roughly 50,000–100,000 Saami people of which fifty to sixty percent reside within the boundaries of Norway, thirty to forty percent in Sweden, ten percent in Finland, and roughly four percent in Russia.¹⁴

Located above the Arctic circle, the region is characterized by reliance upon its polar climate for livelihood and sustenance.¹⁵ For example, the Saami people have, for roughly four centuries, engaged in the practice of reindeer herding in their traditional life ways.¹⁶ Now, less than ten percent of Sami continue this tradition.¹⁷ Their traditional fishing and farming methods are at risk as well due to changing seasons, rising arctic tides, and warming temperatures.¹⁸ The breadth and depth of their traditional knowledge of the land have given them a degree of knowledge about the land and its climate, allowing them to notice changes year by year.¹⁹ Their closeness to and reliance upon the land gives indigenous peoples, like the Saami a fine-grained insight into its alterations, no matter how minute.²⁰

A significant aspect of climate change and its effects on indigenous peoples is that we have not substantially contributed to the warming of the planet like other major industrialized nations.²¹ Our typically low-carbon lifestyles are not symptomatic of the

11. *Id.*

12. *Id.*

13. See generally Ezequiel Pinto-Guillaume, IAlA17 Conference Proceedings, Sami People: Natural Resources and Climate Change (Apr. 4–7, 2017), <http://conferences.iaia.org/2017/final-papers/Pinto-Guillaume,%20Ezequiel%20-%20Sami%20People,%20Natural%20Resourves%20and%20Climate%20Change.pdf>.

14. ILAN KELMAN & MARIUS WARG NÆSS, CTR. FOR INT'L CLIMATE & ENVTL. RESEARCH—OSLO, CLIMATE CHANGE AND DISPLACEMENT FOR INDIGENOUS COMMUNITIES IN ARCTIC SCANDINAVIA 2 (2013), <https://www.brookings.edu/wp-content/uploads/2016/06/30-arctic-scandinavia-kelman-paper.pdf>.

15. *Id.* at iii.

16. Pinto-Guillaume, *supra* note 13, at 2.

17. KELMAN & NÆSS, *supra* note 14.

18. *Id.* at ii.

19. *Id.* at 18.

20. *Id.*

21. Randall S. Abate & Elizabeth Ann Kronk, *Commonality Among Unique Indigenous Communities: An Introduction to Climate Change and Its Impacts on Indigenous Peoples*, 26 TUL. ENVTL. L.J. 179, 179 (2013).

systematic carbon stress that gives rise to climate change.²² The warming of the planet presents new challenges to indigenous peoples who have spent much of their entire existence fending off colonization, assimilation, and attempts at genocide.²³ Like nearly all indigenous groups, the Saami have been subjected to racist and colonial policies that sought to either assimilate them into larger populations or simply eradicate them.²⁴ Also like other indigenous peoples, they have resisted those policies, adapted to them, and demonstrated resilience in maintaining cultural, political, and social autonomy.²⁵ However, climate change presents a threat of an entirely different kind—one that is not so easily adaptable.

The Earth has undergone five mass extinctions—and may be teetering on a sixth. Our sixth, the potential End-Anthropocene²⁶ Mass Extinction, is not at all like the End-Cretaceous Mass Extinction brought on by the KT Asteroid.²⁷ The animals alive at that time had no warning, cause for concern, or chance to mitigate and adapt.²⁸ And, the asteroid *was coming*. We are different. We have plenty of warnings, and plenty of scientific and firsthand knowledge. But we may not have plenty of time given the possibility of a tipping point and nonlinear progressions in climate change.²⁹ The rate of change to our habitable climate may exceed our ability to adapt—especially for indigenous peoples reliant upon traditional life ways to sustain their communities.

In other works, I have referred to the habitable climate of the Earth as a type of “vital commons.”³⁰ Elsewhere, I have called climate change our “Climate Crisis.”³¹ In direct contrast to the KT Asteroid, the violence of climate change is slow, nearly invisible to the majority of people, but ever-present and growing.³² No population of people

22. Gleb Raygorodetsky, *Why Traditional Knowledge Holds the Key to Climate Change*, UNITED NATIONS U. (Dec. 13, 2011), <https://unu.edu/publications/articles/why-traditional-knowledge-holds-the-key-to-climate-change.html>.

23. Abate & Kronk, *supra* note 21, at 180.

24. Veli-Pekka Lehtola, *Sámi Histories, Colonialism, and Finland*, 52 ARTIC ANTHROPOLOGY 22, 25 (2015).

25. *Id.* at 30.

26. Joseph Stromberg, *What Is the Anthropocene and Are We in It?*, SMITHSONIAN (Jan. 2013), www.smithsonianmag.com/science-nature/what-is-the-anthropocene-and-are-we-in-it-164801414/.

27. THE MESOZOIC ERA: AGE OF DINOSAURS 221 (John P. Rafferty ed.) (2010).

28. *Id.* at 221–22.

29. John Von Radowitz, *Scientists Predict 90% Chance Earth will be Heated to ‘Tipping Point’ for Climate Change*, MIRROR (Aug. 1, 2017), <https://www.mirror.co.uk/science/scientists-predict-90-chance-earth-10910384>.

30. M. Alexander Pearl, *The Tragedy of the Vital Commons*, 45 ENVTL. L. 1021, 1021 (2015) [hereinafter *Vital Commons*].

31. M. Alexander Pearl, *The (Next) Big Short and the End of the Anthropocene*, UTAH L. REV. (manuscript at 4) (forthcoming 2019) (on file with author) [hereinafter *(Next) Big Short*].

32. See Nadja Popovich et al., *How Americans Think About Climate Change, in Six Maps*, N.Y. TIMES (Mar. 21, 2017), <https://www.nytimes.com/interactive>

understands this aspect of climate change better than the indigenous communities across the world.³³ Indigenous groups generally have a closer and multifaceted connection to land and place.³⁴ This stems from the historical fact that these communities have existed in their aboriginal homelands since time immemorial.³⁵ But more importantly, they generally relate to these lands in a manner completely distinct from the Western-derived commodified conception of land as property.³⁶ Distinctive relationships with land embodied by indigenous life ways put a higher price on the costs of climate change and enhance the call for action to mitigate, rather than merely adapt to our new world. Adaptation is often not an option for indigenous peoples—especially when that adaptation is contingent upon costly migration and unlearning traditional modes of living.

This Article looks at why climate change is so devastating to indigenous peoples across the world and how legal institutions may be utilized to incorporate the voices of indigenous peoples and drive a better societal response to climate change. First, Part II briefly addresses the science of climate change while focusing on the distinctive violence of the commons problem of climate change as applied to indigenous peoples. Next, Part III addresses the story of indigenous peoples in the Climate Crisis from the point of protests regarding the extraction of carbon resources, the current and ongoing climate-induced loss of life and culture experienced by indigenous peoples, and the potential solutions for mitigation that reside within indigenous lands. Part IV proceeds by identifying common problems for indigenous peoples in working with colonial nations and suggests certain approaches to integrating indigenous rights into the larger context of human rights and climate change through consultation and litigation. Finally, Part V provides a brief conclusion.

II. THE DISTINCTIVE VIOLENCE OF THE CLIMATE CRISIS

A. *The Climate Crisis Is a Commons Problem*

It is undisputed among the scientific community that particular gases, so-called “greenhouse gases,” contribute to a warmer Earth.³⁷ Once emitted, these gases do not easily leave the Earth’s atmosphere.³⁸ Instead, they remain and absorb heat in the form of

/2017/03/21/climate/how-americans-think-about-climate-change-in-six-maps.html.

33. See Abate & Kronk, *supra* note 21, at 183.

34. *Id.* at 187–88.

35. *Id.* at 187.

36. See *id.* at 189.

37. *Introduction: What Are Greenhouse Gases?*, NAT’L CTRS. FOR ENVTL. INFO., <https://www.ncdc.noaa.gov/monitoring-references/faq/greenhouse-gases.php> (last visited Oct. 8, 2018).

38. *Id.*

long-wave infrared energy.³⁹ Carbon dioxide, for example, may stay in the atmosphere for decades, or it may be absorbed by aspects of the earth (like plantlife), or by the ocean—which results in the acidification of the ocean.⁴⁰ No serious debate exists about whether this is happening.⁴¹ The serious debate focuses on what to do and how to conceptualize a political and legal response.⁴² Unfortunately, given the fact that indigenous peoples make up a relatively small percentage of the world population⁴³ and are often ignored by their colonial countries and majoritarian populations, it is no surprise that the effects of climate change upon indigenous peoples have not been properly acknowledged.⁴⁴ Indigenous peoples sustain an injustice resulting from climate change that is distinct from other nonindigenous populations.⁴⁵ The analysis of these consequences must be grounded in legal and property theory. Therefore, the theoretical analysis of the Climate Crisis requires some background from Garret Hardin and Harold Demsetz.

Garret Hardin wrote *The Tragedy of the Commons* nearly fifty years ago.⁴⁶ “Picture a pasture open to all,” is how Hardin’s seminal thought experiment on common-pool resources starts.⁴⁷ The pasture has a capacity of cattle based on the amount of grass that can be grown, eaten, and resown.⁴⁸ Hardin suggests that in this common pasture, each rancher will seek to maximize his individual gain while minimizing his individual costs.⁴⁹ Therefore, each will continue to add cattle, thereby increasing his own benefits while enhancing the

39. *Id.*

40. R.T. Pierrehumbert, *Cumulative Carbon and Just Allocation of the Global Carbon Commons*, 13 CHI. J. INT’L L. 527, 528 (2013).

41. John Cook et al., Consensus on Consensus: A Synthesis of Consensus Estimates on Human-Caused Global Warming, 11 ENVTL. RES. LETTERS, Apr. 13, 2016, at 1; *Scientists Agree: Global Warming is Happening and Humans are the Primary Cause*, UNION CONCERNED SCIENTISTS (Jan. 9, 2018), <https://www.ucsusa.org/global-warming/science-and-impacts/science/scientists-agree-global-warming-happening-humans-primary-cause#.W2EpeNJKhPY>.

42. *Scientists Agree: Global Warming is Happening and Humans are the Primary Cause*, *supra* note 41.

43. See Press Release, State of the World’s Indigenous Peoples, U.N. Press Release DPI/2551 (Jan. 14, 2010), <http://www.un.org/esa/socdev/unpfii/documents/SOWIP/press%20package/sowip-press-package-en.pdf>; Gillette Hall & Ariel Gandolfo, *Poverty and Exclusion Among Indigenous Peoples: The Global Evidence*, WORLD BANK (Aug. 9, 2016), <https://blogs.worldbank.org/voices/poverty-and-exclusion-among-indigenous-peoples-global-evidence>.

44. See PATRICIA COCHRAN ET AL., *Indigenous Peoples, Lands, and Resources*, in CLIMATE CHANGE IMPACTS IN THE UNITED STATES 298–99 (2014), <http://nca2014.globalchange.gov/report/sectors/indigenous-peoples>.

45. *Id.*

46. See generally Garret Hardin, *Tragedy of the Commons*, 162 SCI. 1243 (1968).

47. *Id.* at 1244.

48. *Id.*

49. *Id.*

costs to the community and expediting its exhaustion.⁵⁰ Hardin says, "[e]ach man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons."⁵¹ The proper response to this commons problem is, according to Hardin, the relinquishment of the "freedom to breed."⁵² But there are two more salient considerations of how to solve a commons exhaustion problem.

First, perhaps those ranchers with "conscience," as Hardin put it, might use less of the common-pool resources.⁵³ In his 1978 piece, *Political Requirements for Preserving Our Common Heritage*, Hardin suggests that there might be individuals who unilaterally elect to use less of the available common resources in order to arrive at a sustainable use rate, thereby preserving its long-term viability.⁵⁴ This is an act of self-sacrifice, thinks Hardin, and he reasons that others utilizing the common-pool resource will exploit this weakness rather than see the wisdom in it.⁵⁵ By opting to use less, our conscientious rancher simply leaves more resources available for her neighbors to use at a higher rate.⁵⁶ The problem of exhaustion, therefore, persists.

The second consideration stems from Harold Demsetz's article, *Toward a Theory of Property Rights*.⁵⁷ There he proposed a more direct solution to commons problems, and one much more realistic than Hardin's assertion that we restrict population increase. Demsetz focuses squarely on creating private property systems out of common pastures.⁵⁸ He asserts that "property rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization."⁵⁹ The primary tool to do this is the right to exclude—the building block of property rights.⁶⁰ Without such right, common-pool resource users have no incentive to do anything other than exploit the resource because they are powerless to affect the actions of other users.⁶¹ Now, picture a common pasture parceled into lots of private property, each with one owner who may use, exhaust, conserve, or underutilize their portion

50. *Id.*

51. *Id.*

52. *Id.* at 1248.

53. *Id.* at 1246.

54. *Id.*

55. *Id.*

56. *Id.*

57. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350 (1967).

58. *See id.*

59. *Id.*

60. Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 730 (1998) (arguing that "the right to exclude others is more than just 'one of the most essential' constituents of property—it is the sine qua non").

61. *See Demsetz, supra* note 57, at 356.

of pasture as he or she sees fit. Some may fail, and some may be sustained for the foreseeable future. The longevity of each is entirely dependent upon the actions of the owner.

In the context of the tragedy of exhausting common-pool resources, I have argued that not all common pool resources are created equal. I have suggested that there is a special class of common pool resources, called vital commons, with unique characteristics.⁶² This special class of commons resources is necessary to differentiate between others because of the magnitude of harm caused by their exhaustion as opposed to mere inconvenience. A vital commons is one where:

(1) the benefits of the [common-pool resource] are internalized by nearly all members of a given massive population; (2) the costs of the [common-pool resource's] depletion are externalized among nearly all members of that same massive population; (3) augmentation or depletion of the [common-pool resource] by one party affects the ability to use the [common-pool resource] by another party within the same massive population, (4) the [common-pool resource] itself is necessary for sustenance; and (5) damage or depletion of the [common-pool resource] is non-remediable or extremely difficult to correct.⁶³

The fundamental problem with the application of Demsetz's approach to the vital commons described herein is clear—and was anticipated by Hardin in 1968 and is experienced by indigenous peoples in the present day. “The tragedy of the commons as a food basket is averted by private property, or something formally like it. *But the air and waters surrounding us cannot readily be fenced*, and so the tragedy of the commons as a cesspool must be prevented by different means . . .”⁶⁴ The extraction of groundwater from aquifers or the diversion of water from a river demonstrates the clear limitations of Demsetz's thesis that we use boundary lines to identify private rights in a material corpus. Extending the analogy to a habitable climate amplifies the problem significantly.

Indigenous peoples cannot fence off their areas, choose to live sustainably, and wait to watch the other industrialized nations burn while their habitable climate remains untouched. This is the environmental injustice of climate change and perfectly exemplifies the conscience-eliminating self-sacrifice suggested by Hardin. Indigenous peoples are unable to stop the effects of climate change because the habitable Earth is an inherent commons *unsusceptible* to privatization. Demsetz's theory does not work when it comes to an indivisible commons like the habitable climate of Earth.

62. *Vital Commons*, *supra* note 30, at 1041.

63. *Id.*

64. Hardin, *supra* note 46, at 1245 (emphasis added).

B. The Problem of Slow Violence and Delayed Consequence

Our Climate Crisis is about as distinct from the KT Asteroid as possible. Indeed, this is precisely what makes climate change both more menacing as a problem and more difficult to address legally and politically, as the limitations of Demsetz's theory demonstrate above. Scholars have described the slow violence of environmental harms and the need for an enhanced response to environmental justice issues for underserved and underrepresented communities.⁶⁵ Climate change is an amplified example of the injuries caused by delayed environmental harm.⁶⁶

Difficult to notice changes in the environment may occur over the course of months and years. Of course, they are difficult to notice unless you are a part of an indigenous population and have a close and interdependent relationship with your environment. Imagine being one of the coastal Native Alaskan villages, like Kivalina,⁶⁷ living on sea ice and building your house, family, culture, language, and traditions upon that location. Having been there since time immemorial, you might notice even the most infinitesimal change, let alone when physical structures begin to fall into the ocean due to ice melt and sea level rise.⁶⁸ This is part of the great benefit indigenous peoples could contribute to responding to climate change. Scientists understand a great deal about the world, but the centuries long firsthand knowledge cultivated by indigenous peoples provides a historical data set upon which to utilize.

Climate change effects may be difficult to notice on a firsthand basis for most people: Is it warmer earlier than it was last year? What

65. See ROB NIXON, *SLOW VIOLENCE AND THE ENVIRONMENTALISM OF THE POOR* 2 (2011); Eric Biber, *Climate Change and Backlash*, 17 N.Y.U. ENVTL. L.J. 1295, 1299–1300 (2009); Aya Gruber, *A Provocative Defense*, 103 CAL. L. REV. 273, 326–27 (2015); Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1174–89 (2009); Rob Nixon, *Neoliberalism, Slow Violence, and the Environmental Picaresque*, 55 MFS MOD. FICTION STUD. 443, 444–45 (2009); Uma Outka, *Environmental Law and Fossil Fuels: Barriers to Renewable Energy*, 65 VAND. L. REV. 1679, 1685–87 (2012); Sarah L. Swan, *Plaintiff Cities*, 71 VAND. L. REV. 1227, 1249–50 (2018).

66. See Lazarus, *supra* note 65, at 1159–62.

67. Knodel, *supra* note 1, at 1179–80.

68. See Robert J. Martin, *The Village of Kivalina Is Falling into the Sea: Should CERCLA Section 9626(B) Be Available to Move the Village from Harm's Way?*, 2 EARTH JURIS. & ENVTL. JUST. J. 1, 1 (2012); Jon Rosales & Jessica L. Chapman, *Perceptions of Obvious and Disruptive Climate Change: Community-Based Risk Assessment for Two Native Villages in Alaska*, 3 CLIMATE 812, 813 (2015); Erica Goode, *A Wrenching Choice for Alaska Towns in the Path of Climate Change*, N.Y. TIMES (Nov. 29, 2016), <https://www.nytimes.com/interactive/2016/11/29/science/alaska-global-warming.html>; Chris Mooney, *The Remote Alaskan Village that Needs to Be Relocated Due to Climate Change*, WASH. POST (Feb. 24, 2015), https://www.washingtonpost.com/news/energy-environment/wp/2015/02/24/the-remote-alaskan-village-that-needs-to-be-relocated-due-to-climate-change/?utm_term=.3220aa1b11d7.

about the year before? Climate science isn't necessarily concerned about the year-to-year changes but rather is focused on the trends over much longer periods of time.⁶⁹ Nonetheless, part of the difficulty in noticing, or believing that, changes are occurring in our climate stems from our psychological evolution. The idea that as a consequence of climate change cities such as Miami, San Francisco, or Beijing might become inhabitable—due to heat, sea level rise, or some other occurrence⁷⁰—is unimaginable because such an event is simply outside the lived experience of contemporary society. Amos Tversky and Daniel Kahneman wrote about why people make errors in forecasting, risk perception, and belief.⁷¹ Among their many contributions is the idea that people hold beliefs, perceive the world, and judge risks based on *salient* experiences.⁷² Salient experiences are those that are personal to us and near in time.⁷³ For example, if your, or your neighbor's, house had been ripped apart by a flood in New Orleans, you would be much more likely to buy flood insurance than if you simply read about it in the newspaper.⁷⁴ Often these salient experiences influence our misperception of the world or a particular risk—such as the likelihood of being impacted by climate change.⁷⁵

The effects of climate change are slow in occurring; they are gradual rather than immediate.⁷⁶ Like the proverbial frog in a pot of slowly boiling water, perceiving the change happens far past the tipping point of adapting. Plus, most individuals have an entire lifetime, to say nothing of their generational familial experiences, of evidence that the crops will grow, it will rain eventually, and the disasters that have occurred can be withstood. Therefore, the system of belief goes, we will continue to do so no matter the challenge. Since there are no salient experiences that provide a touchstone for the challenges presented by climate change, we tend to underestimate, or wholly disbelieve, them. This is the problem of construing new evidence in the face of longstanding certainty about a particular proposition, i.e., that the Earth's habitable climate will persist regardless. The scientific evidence against that certainty is clear—as is the Earth's historical evidence if one considers the experience of our inhabitant predecessors, the dinosaurs.

69. See Definition of Climate, *Climate Glossary*, NAT'L WEATHER SERV., <http://www.cpc.noaa.gov/products/outreach/glossary.shtml#C> (last visited Oct. 8, 2018).

70. See *How Climate Is Changing*, NASA, <https://climate.nasa.gov/effects/> (last updated Oct. 3, 2018).

71. See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1127 (1974).

72. See *id.*

73. See *id.*

74. See Lazarus, *supra* note 65, at 1176.

75. (Next) *Big Short*, *supra* note 31 (manuscript at 22).

76. *How Climate Is Changing*, *supra* note 70.

III. THE UNIQUENESS OF PLACE AND POLITICS FOR INDIGENOUS PEOPLES

Indigenous lands, across the globe, are at the epicenter of climate change. They occupy critical points along the timeline of our Climate Crisis from beginning to end. The extractive hydrocarbon industry has significant production in indigenous areas in the Americas, indigenous groups from all over the world gathered in Paris in 2015 to advocate for their positions in the Conference of Parties (“COP”) agreement, and each day indigenous peoples see the effects of climate change in their communities.⁷⁷ This Part looks at the under-acknowledged prominence of indigenous peoples in the story of our Climate Crisis.

A. Carbon Production and Indigenous Peoples

In 2016, a standoff occurred at the Standing Rock Reservation in North Dakota.⁷⁸ An oil and gas pipeline was routed through an area sacred to the Standing Rock Indian Nation.⁷⁹ Protestors, including scores of indigenous peoples, from all over the world headed to the small region to challenge the pipeline’s construction.⁸⁰ The Standing Rock Nation then-chair, David Archambault II, explained that this fight was about water, environmental rights, treaty obligations, and the importance of land to his tribal community.⁸¹ Part of the concern focused on the possibility that the pipeline might rupture or leak, thereby potentially spilling crude oil into sacred sites of the Standing Rock Nation or contaminating their water supply.⁸² Ultimately, despite a federal judicial intervention, the energy company completed construction of the pipeline in 2017.⁸³ Notably, the pipeline has leaked five times in under two years.⁸⁴

77. *Indigenous Peoples’ Pavilion at COP 21*, INT’L INDIGENOUS PEOPLES’ FORUM ON CLIMATE CHANGE, <http://www.iipfcc.org/cop21/> (last visited Oct. 8, 2018); Maria Martinez, *Indigenous People and Climate Change: 3 Things to Know*, NAT. RES. DEF. COUNCIL (Aug. 9, 2016), <http://www.nrdc.org/experts/maria-martinez/indigenous-peoples-and-climate-change-3-things-know>.

78. See Carla F. Fredericks, *Operationalizing Free, Prior, and Informed Consent*, 80 ALB. L. REV. 429, 472–77 (2017); Carla F. Fredericks & Jesse D. Heibel, *Standing Rock, the Sioux Treaties, and the Limits of the Supremacy Clause*, 89 U. COLO. L. REV. 477, 517–30 (2018); Mary Kathryn Nagle, *Environmental Justice and Tribal Sovereignty: Lessons from Standing Rock*, 127 YALE L.J. F. 667, 668, 678–81 (2018).

79. Fredericks, *supra* note 78, at 473–76.

80. *Id.* at 475.

81. See Nagle, *supra* note 78, at 668.

82. Fredericks, *supra* note 78, at 473–74.

83. Nagle, *supra* note 78, at 682–83.

84. Alleen Brown, *Five Spills, Six Months in Operations: Dakota Access Track Record Highlights Unavoidable Reality—Pipelines Leak*, INTERCEPT (Jan. 9, 2018, 3:38 PM), <https://theintercept.com/2018/01/09/dakota-access-pipeline-leak-energy-transfer-partners/>.

The extraction of hydrocarbons from indigenous lands despite protests from indigenous peoples is not new.⁸⁵ Indigenous peoples have long made a variety of arguments as to why this conduct is problematic.⁸⁶ Even if the indigenous community was not concerned about leaks or the contamination of sacred sites, companies often took economic advantage of the indigenous community by preying upon the absence of indigenous legal entitlements to the land.⁸⁷ A history of international case law at the Organization of American States has focused on the problems arising from a state's denial to provide clear legally recognized title to the communal land holdings of indigenous peoples.⁸⁸ The clouded nature of indigenous land rights has long been an international concern of indigenous groups and the United Nations attempted to address that issue in the Declaration on the Rights of Indigenous Peoples ("UNDRIP").⁸⁹ Of course, the influence of that

85. See George K. Foster, *Foreign Investment and Indigenous Peoples: Options for Promoting Equilibrium Between Economic Development and Indigenous Rights*, 33 MICH. J. INT'L L. 627, 633 (2012); Jide James-Eluyode, *Collective Rights to Lands and Resources: Exploring the Comparative Natural Resource Revenue Allocation Model of Native American Tribes and Indigenous African Tribes*, 29 ARIZ. J. INT'L & COMP. L. 177, 187–89 (2012); Judith Kimerling, *Rio+10: Indigenous Peoples, Transnational Corporations, and Sustainable Development in Amazonia*, 27 COLUM. J. ENVTL. L. 523, 252 (2002) [hereinafter *Rio+10*]; Susann Funderud Skogvang, *Legal Questions Regarding Mineral Exploration and Exploitation in Indigenous Areas*, 22 MICH. ST. INT'L L. REV. 321, 323 (2013); *Developments—Indian Law—The Double Life of International Law: Indigenous Peoples and Extractive Industries*, 129 HARV. L. REV. 1755, 1756–57 (2016); Gerald P. Neugebauer III, Note, *Indigenous Peoples as Stakeholders: Influencing Resource-Management Decisions Affecting Indigenous Community Interests in Latin America*, 78 N.Y.U. L. REV. 1227, 1227–30 (2003).

86. *Rio+10*, *supra* note 85, at 527–29.

87. See Judith Kimerling, *Disregarding Environmental Law: Petroleum Development in Protected Natural Areas and Indigenous Homelands in the Ecuadorian Amazon*, 14 HASTINGS INT'L & COMP. L. REV. 849, 855–57 (1991); Judith Kimerling, *Rights, Responsibilities, and Realities: Environmental Protection Law in Ecuador's Amazon Oil Fields*, 2 SW. J.L. & TRADE AM. 293, 297 (1995); Judith Kimerling, *The Environmental Audit of Texaco's Amazon Oil Fields: Environmental Justice or Business as Usual?*, 17 HARV. HUM. RTS. J. 199, 201–03 (1994); Neugebauer, *supra* note 85, at 1228–29.

88. See *Mayagna (Sumo) Awas Tingni Cmty. v. Nicar.*, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 79, at 19 (Aug. 31, 2001); S. James Anaya & Claudio Grossman, *The Case of Awas Tingni v. Nicaragua: A New Step in the International Law of Indigenous Peoples*, 19 ARIZ. J. INT'L & COMP. L. 1, 1–2 (2002); Noah B. Novogrodsky, *All Necessary Means: The Struggle to Protect Communal Property in Belize*, 12 WYO. L. REV. 197, 206–08 (2012).

89. See G.A. Res. 61/295, annex, Declaration on the Rights of Indigenous Peoples, art. 26 (Sept. 13, 2007). Article 26 provides:

(1) Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired. (2) Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired. (3) States shall give legal recognition and protection to these lands,

legal document in the justice systems of particular nations is an entirely different question.⁹⁰ The UNDRIP attempts to recognize indigenous claims to sacred sites as well—something that the incident at Standing Rock exemplifies.

Standing Rock was not the first battle between indigenous groups and the carbon industry, and it is not even the most recent. The most well-known incident involving oil and gas extraction in indigenous peoples' territory is the subject of long-running litigation between Chevron and indigenous groups in Ecuador.⁹¹ Indigenous groups have litigated against Chevron in Ecuador, the United States, and international tribunals.⁹² Ultimately, the indigenous groups dealing with the health consequences and spoiled lands caused by inappropriate dumping of waste have been unsuccessful in obtaining a measure of justice.⁹³ A more recent battle between indigenous peoples and the carbon industry is located in Canada and concerns the Trans Mountain Pipeline.⁹⁴

In May of 2018, the Canadian government purchased the long-planned expansion to the Trans Mountain Pipeline project which stretches from the tar sands of Alberta to Vancouver, British Columbia.⁹⁵ The Canadian government decided to purchase the project from an American-owned energy company, Kinder Morgan, because of the local and regional legal challenges currently suspending the project's construction.⁹⁶ Doing so ensures that the pipeline will not languish further along the economic benefits that come with it.⁹⁷ The Trans Mountain project is complicated for many

territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.

Id.

90. See *Despite Progress, Rights of Indigenous Peoples Continue to be Violated, Ten Years After Adoption of UN Declaration*, U.N. DEPT ECON. & SOC. AFF. (Jan. 27, 2017), <https://www.un.org/development/desa/en/news/social/rights-of-indigenous-peoples.html>.

91. Judith Kimerling, *Indigenous Peoples and the Oil Frontier in Amazonia: The Case of Ecuador, ChevronTexaco, and Aguinda v. Texaco*, 38 N.Y.U. J. INT'L L. & POL. 413, 416 (2006); Karen Hinton, *Seven Years Documenting Chevron's Environmental Crimes in Ecuador Pollution Case*, HUFFPOST (June 1, 2015, 10:32 AM), https://www.huffingtonpost.com/karen-hinton/seven-years-documenting-c_b_7479948.html.

92. Kimerling, *supra* note 91, at 416.

93. See Damira Khatam, *Chevron and Ecuador Proceedings: A Primer on Transnational Litigation Strategies*, 53 STAN. J. INT'L L. 249, 250 (2017).

94. Ian Austen, *In Canada, 2 Provinces Feud Over Pipeline: Will It Bring Jobs or Spills?*, N.Y. TIMES (Apr. 14, 2018), <https://www.nytimes.com/2018/04/14/world/canada/justin-trudeau-alberta-british-columbia-kinder-morgan-pipeline.html>.

95. *Id.*

96. See Ian Austen, *Canadian Government to Buy Kinder Morgan's Trans Mountain Pipeline*, N.Y. TIMES (May 29, 2018), <https://www.nytimes.com/2018/05/29/world/canada/canada-oil-pipeline.html>.

97. See *id.*

First Nations peoples.⁹⁸ Some have signed agreements with Kinder Morgan that come with economic benefits and support.⁹⁹ Some of the First Nations groups with those agreements have suggested that the presence of these contracts does not demonstrate their support for the pipeline.¹⁰⁰ Instead, it represents the idea that indigenous peoples have other challenges—like poverty and healthcare access—that can be alleviated with the funds from these contracts.¹⁰¹ In addition, some leaders believe the completion of the project to be a *fait accompli* and that obtaining some economic benefit given the inevitability of the project's end is the best play for their people.¹⁰²

What is telling about the Canadian experience with Trans Mountain and First Nations groups is that it comes about on the heels of Prime Minister Trudeau's election in 2015.¹⁰³ The experience was marked by Trudeau's expressed commitment to First Nations peoples: "It is time for a renewed, nation-to-nation relationship with First Nations peoples, one that understands that the constitutionally guaranteed rights of First Nations in Canada are not an inconvenience but rather a sacred obligation."¹⁰⁴ Prime Minister Trudeau's comments at the COP21 meeting connect climate change to indigenous peoples: "Indigenous peoples have known for thousands of years how to care for our planet' . . . 'The rest of us have a lot to learn. And no time to waste.'"¹⁰⁵ For those First Nations communities loudly objecting to the pipeline, it is hard to see how Prime Minister Trudeau has made good on his twin goals of addressing First Nations' issues and climate change.

These myriad battles across the world between energy companies and indigenous peoples demonstrate the two-pronged nature of this story. First, there is the immediate indigenous concern about protecting their homelands and sacred sites from degradation and disruption. But, second, there is the important overarching concept that the extraction of hydrocarbons furthers the global Climate Crisis, which invariably affects indigenous groups earlier and more significantly than other populations. Complicating these matters is the fact that many indigenous peoples in oil-rich areas are challenged

98. Hilary Beaumont, *Why First Nation Chiefs Sign Trans Mountain Pipeline Deals*, VICE (May 3, 2018), https://news.vice.com/en_ca/article/ne9ayw/why-first-nation-chiefs-sign-trans-mountain-pipeline-deals.

99. *See id.*

100. *See id.*

101. *See id.*

102. *See id.*

103. *See* Susana Mas, *Trudeau Lays Out Plan for New Relationship with Indigenous People*, CBC (Dec. 8, 2015, 5:00 AM), <http://www.cbc.ca/news/politics/justin-trudeau-afn-indigenous-aboriginal-people-1.3354747>.

104. *Id.*

105. The Canadian Press, *Justin Trudeau Tells World Climate Change Fight Begins at Home*, MACLEAN'S (Nov. 30, 2015), <https://www.macleans.ca/politics/ottawa/justin-trudeau-tells-world-climate-change-fight-begins-at-home/>.

with poverty,¹⁰⁶ thereby forcing them to weigh the acute contemporary harms with contributing to long-term climate change.

B. The Scope of Climate Impact and Loss for Indigenous Peoples

As demonstrated in the previous Subpart, indigenous people are neither monolithic nor uniform in their political opinions relating to the carbon industry. It is important to understand the wide political and cultural diversity among indigenous peoples all over the globe. At the same time, some commonalities do exist—especially in the context of how climate change uniquely affects these indigenous peoples. Professors Kronk-Warner and Abate describe the important commonalities among the world's indigenous populations in the context of climate change.¹⁰⁷

Indigenous peoples tend to exist in areas more vulnerable to climate change.¹⁰⁸ In areas of the Amazon Rainforest, indigenous peoples make their traditional homes despite the increased intensity of drought and higher temperatures.¹⁰⁹ Traditional farming practices across Asia and South America are all at greater risk of failure due to increased temperatures.¹¹⁰ Indigenous peoples of the arctic are increasingly recognized as the face of climate change.¹¹¹ The Alaskan Native village of Kivalina has been enduring melting permafrost, rising sea level, and intensifying storms for more than a decade.¹¹² This makes their traditional fishing and hunting increasingly dangerous and difficult.¹¹³ For some groups, sea ice melt has caused built structures to collapse or fall into the sea.¹¹⁴ The environment has become so dire that they are seeking relocation.¹¹⁵

"Lucy Adams, a Kivalina elder, appeared resigned to a future beyond her control. The corners of her mouth turned down as she sighed, gazed up at the ceiling as if she was looking through it into an uncertain future, and said, 'We are standing alone to try and survive.'"¹¹⁶ The Inupiaq people of Kivalina are climate refugees.¹¹⁷ Unfortunately, while Ms. Adams may feel alone, Kivalina is not. Climate refugees are not only located in the Arctic. Over the past six

106. See Beaumont, *supra* note 98.

107. See Abate & Kronk, *supra* note 21, at 181–90.

108. See *id.* at 182.

109. *Id.*

110. *Id.*

111. See *id.* at 183–84.

112. *Id.* at 192.

113. *Id.* at 183–84.

114. *Id.* at 184.

115. *Id.* at 183.

116. Knodel, *supra* note 1, at 1180.

117. See Carol Kuruvilla, *Climate Change Will Cause Alaskan Village to Vanish under Water Within 10 Years: Scientists*, N.Y. DAILY NEWS (July 30, 2013, 3:18 PM), <http://www.nydailynews.com/news/national/alaskan-village-vanish-water-decade-scientists-article-1.1412920#commentpostform>.

decades, the Isle de Jean Charles band of the Biloxi-Chitimacha-Choctaw have watched their 22,400 acre island on the Louisiana coast shrink to 320 acres.¹¹⁸ Chantel Comardelle, the deputy tribal chief's daughter, said, "Once our island goes, the core of our tribe is lost."¹¹⁹ The climate change caused harm endured by indigenous peoples is difficult to characterize in western terms—especially where damages calculations dominate assertions of value and worth. However, it is clear that the costs are not simply monetary. "Climate change exacerbates existing social vulnerabilities."¹²⁰ The forced relocation of communities due to sea level rise or diminished food sources results in far more than economic loss. It extends to the loss of indigenous cultural connections, stories, and identities.¹²¹ One particular recent example of indigenous connections to land and loss comes from the Yurok Nation in Northern California.¹²²

The Yurok Nation Reservation is located along the Klamath River.¹²³ The Yurok people have traditionally fished the river since time immemorial and have relied upon the salmon native to the river for food, economy, and as a primary component of their culture.¹²⁴ Due to increasing demands on water resources in the region by farmers, a hydroelectric dam, and a growing population, the Klamath River saw a significant decrease in volume in the early 2000s.¹²⁵ The shallower water resulted in warmer temperatures, which caused the

118. Michael Isaac Stein, *How to Save a Town from Rising Waters*, WIRED (Jan. 25, 2018, 8:00 AM), <https://www.wired.com/story/how-to-save-a-town-from-rising-waters/>; Carolyn Van Houten, *The First Official Climate Refugees in the U.S. Race Against Time*, NAT'L GEOGRAPHIC (May 25, 2016), <https://news.nationalgeographic.com/2016/05/160525-isle-de-jean-charles-louisiana-sinking-climate-change-refugees/>

119. Van Houten, *supra* note 118.

120. Knodel, *supra* note 1, at 1183.

121. See, e.g., Sarah Krakoff, *Public Lands, Conservation, and the Possibility of Justice*, 53 HARV. C.R.-C.L. L. REV. 213, 257–58 (2018) (discussing the devastating effects of relocation on tribal cultural practices).

122. U.S. DEP'T OF THE INTERIOR, YUROK TRIBE SOCIOCULTURAL/SOCIOECONOMICS EFFECTS ANALYSIS TECHNICAL REPORT 8 (2012).

123. See Paul Stanton Kibel, *California Rushes In—Keeping Water Instream for Fisheries Without Federal Law*, 42 WM. & MARY ENVTL. L. & POL'Y REV. 477, 485 (2018).

124. Brian C. Chaffin et al., *Resilience, Adaptation, and Transformation in the Klamath River Basin Social-Ecological System*, 51 IDAHO L. REV. 157, 165–66 (2014); Ryan Sudbury, *When Good Streams Go Dry: United States v. Adair and the Unprincipled Elimination of a Federal Forum for Treaty Reserved Rights*, 25 PUB. LAND & RES. L. REV. 147, 151 (2004).

125. Holly Doremus & A. Dan Tarlock, *Fish, Farms, and the Clash of Cultures in the Klamath Basin*, 30 ECOLOGY L.Q. 279, 298–300 (2003).

death of more than 60,000 salmon.¹²⁶ The River was filled with floating dead fish.¹²⁷ The Yurok community was heartbroken.

The Yurok Tribe, its history, culture, identity, spirituality and economic survival have always relied upon the Klamath River. The dependence and interdependence of the Yurok on the River and its resources cannot be overstated. It has always been and remains the central feature in Yurok life, ceremony and traditions. Reliance on the Klamath River fishery is not simply for economics, but most importantly for subsistence and cultural survival. Prior to the arrival of non-Indians into the region, the Yurok Tribe was considered one of the most prosperous and wealthy tribes in the area. This wealth was a result of an abundant year-round fishery that provided the basis for the entire Klamath River tribal economic system. Fish were traded and sold to neighboring tribes for a range of resources used in daily and ceremonial life. Abundant food provided by the year-round fishery allowed for the development of a highly developed social and economic system that was reinforced through a highly structured ceremonial and cultural cycle that still persists today.¹²⁸

"The Klamath is our grocery store, our church and our main highway. It's our lifeline."¹²⁹ While the death of roughly 60,000 salmon in the early 2000s was not directly caused by increasing global temperatures, climate change makes droughts both more intense and frequent, which further stresses already inadequate freshwater resources.¹³⁰ The Yurok community continues to see a salmon population struggling to sustain itself, despite the tribe's best efforts and the devotion of significant human and monetary resources, given the contemporary artificial and environmental challenges.¹³¹ This, in all likelihood, will not be the last fishkill to be endured by an

126. Mary Milner, *Water Law Meets Participatory Democracy: A Klamath Basin Example*, 30 J. ENVTL. L. & LITIG. 87, 107–08 (2015); Glen Spain, *Dams, Water Reforms, and Endangered Species in the Klamath Basin*, 22 J. ENVTL. L. & LITIG. 49, 90–91 (2007).

127. GEORGE GUILLEN, U.S. FISH & WILDLIFE SERVS., KLAMATH RIVER FISH DIE-OFF SEPTEMBER 2002, at 8 (2002), https://www.fws.gov/arcata/ fisheries /reports/technical/Klamath_River_Dieoff_Mortality_Report_AFWO_01_03.pdf.

128. SLOAN, *supra* 122, at 8.

129. *Disaster Looms on the Klamath River*, YUROK TODAY, Apr. 2017, at 3, http://www.yuroktribe.org/documents/Yurok_April_newsletter_2017_Web_000.pdf.

130. See Chaffin et al., *supra* note 124, at 187.

131. See Lisa Morehouse, *'It Takes Our Purpose': With No Salmon, Yurok Tribe Struggles with Identity*, NPR (Nov. 29, 2017, 7:00 AM), <https://www.npr.org /sections/thesalt/2017/11/29/561581193/it-takes-our-purpose-with-no-salmon-yurok-tribe-struggles-with-identity>; Anna V. Smith, *How a Yurok Lawyer from Oregon Led Her Tribe's Fight over Klamath Basin's Future, and Past*, OREGONIAN (June 14, 2018), https://www.oregonlive.com/pacific-northwest-news/index.ssf /2018/06/how_a_yurok_tribal_lawyer_from.html.

indigenous people reliant upon them. It is one example of a tragedy triggered by the Climate Crisis that is felt only by indigenous peoples.

IV. A LEGAL FRAMEWORK FOR INDIGENOUS RESISTANCE AND RESILIENCE

An open and remaining question concerns the intersection of uniquely indigenous rights and human rights in the context of climate change. A further issue concerns whether the effects of climate change, either due to nonregulation by major industrialized states or affirmative acts by carbon industry entities, are able to be addressed by indigenous peoples via such an international indigenous human rights framework. Fundamentally, the actions of the major industrialized nations in expanding their reliance upon, and production of, carbon-based fuels has directly resulted in the loss of rights characterized by international law as unique to indigenous peoples.¹³² The growth of international customary law with the initial development of ILO 169,¹³³ the adoption of UNDRIP in 2008,¹³⁴ and the Organization of American States formalizing the American Declaration on the Rights of Indigenous Peoples in June of 2016¹³⁵ demonstrates a trend of international legal acknowledgment of uniquely indigenous rights. The challenge is to develop an overarching framework that incorporates these indigenous rights into international human rights law, which is then implemented by domestic nations and global stakeholders.

Many of the challenges for indigenous peoples are common, regardless of where they may be located. This Part focuses on some of those common challenges and makes two primary suggestions towards directly impacting indigenous interests.

A. *Unifying Human Rights and Indigenous Rights*

Andrew Erueti, noted scholar of Maori law and international indigenous peoples' rights, has theorized that a primary concern of industrialized colonial nations (Canada, Australia, New Zealand, and the United States) "is that [their] domestic legal practice falls well short of the self-determination framework in the [UNDRIP]. It is the prospect of meaningful autonomy and territorial rights that is of most

132. See Press Release, Permanent Forum on Indigenous Issues, Indigenous Peoples Must be Included in Global Negotiations Aimed at Combating Climate Change, Say Speakers in Permanent Forum, U.N. Press Release H.R./4946 (Apr. 22, 2008), <https://www.un.org/press/en/2008/hr4946.doc.htm>.

133. Int'l Labour Org. [ILO], Indigenous and Tribal Peoples Convention, No. 169 (June 27, 1989), https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169.

134. G.A. Res. 61/295 *supra* note 89, art. 26.

135. Org. of Am. States, American Declaration on the Rights of Indigenous Peoples, AG/RES.2888 (XLVI-O/16) (June 15, 2016), http://cdn7.iitc.org/wp-content/uploads/AG07150E06_web.pdf.

concern to [these states] and the use of international law to advance these rights.”¹³⁶ Erueti says the formal recognition of the “self-determination framework” is key for elevating the legal status of indigenous peoples in international law.¹³⁷

This framework is based on free, prior, and informed consent, historical redress, and self-determination.¹³⁸ In moving towards conceptualizing the indigenous rights as human rights model in international law, Erueti believes that “[s]elf-determination and other indigenous rights in the [UNDRIP] are about addressing international law’s denial of basic human rights to indigenous peoples.”¹³⁹ He goes on to note a few clear successes of this connection, beginning with the Awas Tingi property rights case where the High Court of the Organization of American States recognized a communal right to property for indigenous peoples as stemming from the legal principles in the human rights document, the American Convention on Human Rights.¹⁴⁰ However, Erueti sees potential drawbacks to focusing only on a human rights approach to advance uniquely indigenous interests because that framework misses the historical experience of “colonization, exploitation, and marginalization by colonial powers.”¹⁴¹ The human rights approach focuses on rights to equality, property, and culture without such historical framing.¹⁴² One jurisprudential amendment to consider in moving forward would be to incorporate what Erueti calls the “historical sovereignty model” in addition to the human rights framework so that the historical experience of indigenous peoples may serve as a co-equal normative justification for legally cognizing indigenous rights.¹⁴³

In the context of climate change, the human rights framework for indigenous rights provides an avenue for clearly articulating that those rights are entitled to protection.¹⁴⁴ The combination of indigenous rights as human rights also expands how those rights are conceptualized as communally enjoyed. Characterizing indigenous rights as a form of human rights also has the benefit of giving

136. Andrew Erueti, *Observations Relating to the U.N. Special Rapporteur’s Report on Māori People in New Zealand–2011: Introducing a Human Rights Discourse to Treaty Jurisprudence*, 32 ARIZ. J. INT’L & COMP. L. 195, 197 (2015).

137. *Id.*

138. *Id.* at 196.

139. *Id.* at 201.

140. *Id.* at 202–03; see *Mayagna (Sumo) Awas Tingni Cmty. v. Nicar., Merits, Reparations, and Costs*, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 79, ¶ 137–38 (Aug. 31, 2001).

141. Erueti, *supra* note 136, at 206.

142. See *id.* at 205–06.

143. *Id.* at 204–06.

144. Lillian Aponte Miranda, *Introduction to Indigenous Peoples Status and Rights Under International Human Rights Law*, in CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES 39, 60 (Randall S. Abate & Elizabeth Ann Kronk eds., 2013).

indigenous peoples a seat at the table within those international frameworks and with international law and policy making bodies—or at least it should. However, indigenous peoples still face significant entrenched political and legal opposition to their interests, despite the advancement of prevailing international law.¹⁴⁵ This is a clear contemporary manifestation of colonialism and serves to push indigenous people out of the picture, in part, because of their small global numbers and lack of resources to advocate and lobby.¹⁴⁶

B. *Enhanced Consultation at All Levels*

The indigenous peoples' right to free, prior, and informed consultation is now well established in international customary law.¹⁴⁷ It is a key component of Erueti's self-determination framework and is present in many nation's approaches to domestic indigenous communities¹⁴⁸—whether those nations actually and properly engage in consultation with indigenous groups is another matter.¹⁴⁹ However, the principle is well established.

A prominent recent example of an international failure to actualize indigenous rights to free, prior, and informed consultation occurred in 2015 at the Conference of Parties in Paris.¹⁵⁰ Indigenous peoples attempted to participate significantly in the proceedings, but not for the purpose of acting as a twenty-first century “crying Indian” to encourage wealthy industrialized nations to think of the planet.¹⁵¹

145. *Developments—Indian Law—The Double Life of International Law: Indigenous Peoples and Extractive Industries*, *supra* note 85, at 1755–57.

146. *See id.* at 1757.

147. *See* Walter H. Mengden IV, Comment, *Indigenous People, Human Rights, and Consultation: The Dakota Access Pipeline*, 41 AM. INDIAN L. REV. 441, 451 (2017).

148. *Id.* at 447 (“Two executive orders direct agencies on how to interact with tribes in these situations: Executive Order 13175 (‘Consultation and Coordination with Indian Tribal Governments’) and Executive Order 13007 (‘Indian Sacred Sites’).”); S. James Anaya, *Report of the Special Rapporteur on the Rights of Indigenous Peoples on the Situation of Indigenous Peoples in Canada*, 32 ARIZ. J. INT’L & COMP. L. 143, 146 (2015) (“Furthermore, since the *Haida Nation v. British Columbia* case in 2004, federal and provincial governments have been subject to a formal duty to consult indigenous peoples and accommodate their interests whenever their asserted or established aboriginal or treaty rights may be affected by government conduct.”).

149. *See, e.g.*, Fredericks, *supra* note 78, at 476–77; Matthew J. Rowe et al., *Accountability or Merely “Good Words”? An Analysis of Tribal Consultation Under the National Environmental Policy Act and the National Historic Preservation Act*, 8 ARIZ. J. ENVTL. L. & POL’Y 1, 30–40 (2018).

150. “Annexed:” *The Rights of Indigenous Peoples in the UN Climate Change Conference 2015*, CULTURAL SURVIVAL (Dec. 16, 2015), <https://www.culturalsurvival.org/news/annexed-rights-indigenous-peoples-un-climate-change-conference-2015>.

151. *See Indigenous Peoples Take Steps to Have a Voice in COP21*, U.N. DEV. PROGRAMME, (Nov. 18, 2015), <http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2015/11/11/indigenous-people-take-steps-to-have-a-voice-in-cop21.html>.

Instead, indigenous peoples went to sit at the table, negotiate legal language, and be heard.¹⁵² The presence of indigenous groups was clear, but their advocacy was not met with meaningful responses from other participating nations.¹⁵³ In negotiating the final language for the Paris Agreement, the specific recognition of indigenous rights was removed from the operative articles of the final text.¹⁵⁴ Indigenous rights are mentioned only in the Preamble, which is nonbinding.¹⁵⁵

It is universally acknowledged that indigenous peoples stand at the forefront of climate change.¹⁵⁶ Our vulnerability to increased warming, sea ice melt, and diminished food resources have a comparatively enhanced effect on indigenous peoples' identity, culture, and lifeways.¹⁵⁷ With the advancement of stronger international human rights norms that incorporate indigenous peoples' rights, there was hope that this agreement would be different.¹⁵⁸ However, it was not to be. The U.N. Special Rapporteur on the Rights of Indigenous Peoples, Victoria Tauli-Corpuz, said that "[s]hould human rights for indigenous peoples be struck from the final agreement, negotiators will have destroyed any pretense of their intention to mitigate climate change. If our rights are violated, we will be unable to protect the forests. This is the direct link between human rights and climate change."¹⁵⁹

The Paris Agreement amounted to a missed opportunity to continue the progressive incorporation of global indigenous peoples into the mainstream response to climate change. Perhaps more telling is that the agreement takes a unilateral approach to mitigating climate change rather than incorporating nonmainstream, that is, indigenous, viewpoints and rights into the agreement.¹⁶⁰ It is clear that indigenous peoples must continue to advocate at all levels of government, both domestic and international, armed with the

152. See "Annexed:" *The Rights of Indigenous Peoples in the UN Climate Change Conference 2015*, *supra* note 150.

153. *Id.*

154. Tauli-Corpuz, *supra* note 2.

155. The Paris Agreement Preamble states: "Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, [and] *the rights of indigenous peoples.*" Conference of the Parties' Twenty-first Session, U.N. Framework Convention on Climate Change, Paris Agreement, U.N. Doc. FCCC/CP/2015/L.9/Rev.1, pmb1. (Dec. 12, 2015) [hereinafter Paris Agreement], https://treaties.un.org/doc/Treaties/2016/02/20160215%2006-03%20PM/Ch_XXVII-7-d.pdf (emphasis added).

156. Meetings Coverage, *Indigenous Peoples Disproportionately Impacted by Climate Change, Systematically Targeted for Defending Freedoms, Speakers Tell Permanent Forum*, U.N. (Apr. 18, 2018), <https://www.un.org/press/en/2018/hr5389.doc.htm>.

157. See Knodel, *supra* note 1, at 1179.

158. Tauli-Corpuz, *supra* note 2.

159. *Id.*

160. Paris Agreement, *supra* note 155, arts. 2–4.

important international principles that are now well established, but not well practiced.

C. *Intensifying Litigation and Affecting the Cost for Carbon*

Indigenous peoples embody a history of resistance and resilience in the face of colonialism and other challenges.¹⁶¹ Our contemporary frame is not so different than our past. When dialogue is not an option, or the discourse does not result in the recognition of indigenous human rights, indigenous peoples have no choice but to proceed on other fronts.

In particular, indigenous groups should focus on directly impacting the carbon industry in two primary ways. First, across the world, indigenous groups should see the Alaskan Native Village of Kivalina as a rough blueprint for future conduct. In order to positively impact climate change, despite the oil-friendly actions of major industrialized nations, indigenous peoples have the potential for recourse in domestic and international courts. The Native Village of Kivalina sued twenty-four major oil and gas producers as the direct cause of their current dire circumstances, which required them to relocate from their homelands where they resided since time immemorial.¹⁶² Ultimately, the village lost in the United States Court of Appeals for the Ninth Circuit,¹⁶³ but this does not mean that all causes of actions against oil companies are destined to fail, nor does it mean that Kivalina's particular cause of action would fail in other circumstances or other countries.¹⁶⁴

If indigenous peoples cannot convince colonial governments to take on the carbon industry through meaningful carbon emissions regulation or carbon pricing frameworks, then we must do so. Even if litigation isn't successful, it nonetheless increases the cost of oil and gas production for these companies—the idea of defending multiple lawsuits in multiple countries all over the world might have an effect on the companies' decision making. At the same time, indigenous groups should work towards monetizing their available renewable resource options like solar power and battery storage. If the objective is to mitigate climate change, there are a myriad of ways to do that with varying degrees of feasibility, likelihood, and success. However, one common goal for indigenous peoples should be to increase the cost of carbon-based fuel. Introducing competitors into the energy

161. See *500 Years of Indigenous Resistance*, 1 OH-TOH-KIN 3, 3 (1992), <https://issuu.com/randalljaykay/docs/oh-toh-kinvolno1winterspring1992>.

162. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 868–69 (N.D. Cal. 2009).

163. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 853 (9th Cir. 2012).

164. See *ExxonMobil Loses Venezuela Case*, AL JAZEERA (Mar. 19, 2008), <https://www.aljazeera.com/business/2008/03/200852513289114584.html>.

marketplace, like solar and other nonconflicting sources of renewable energy,¹⁶⁵ is another avenue.

Ultimately, litigation is a significant tool for indigenous peoples to use in furthering their human rights. One particular type of action not yet brought by any community—indigenous or not—is based in the law of restitution.¹⁶⁶ As compared to other contemporary pieces of climate change litigation, it presents distinct opportunities for success and may be able to take advantage of the emerging human rights framework for indigenous peoples' rights.

The *Kivalina* case relied upon one of the most fundamental doctrines of property law—nuisance and the property right to quiet use and enjoyment of land.¹⁶⁷ International climate change litigation scholar Douglas Kysar has said that “[o]f all the first wave American climate tort suits, *Kivalina* was the best pled. In addition to sympathetic plaintiffs, the case rested on a traditional cause of action—the exclusive use and enjoyment of property—and sought only modest damages, at least as compared to the defendants’ profits.”¹⁶⁸ In explaining the dismissal, the Ninth Circuit determined that the plaintiffs lacked Article III standing and emphasized the “extended causal link between the defendants’ conduct and the plaintiffs’ injuries.”¹⁶⁹ Causation is a major hurdle in common law tort and property based climate change litigation.¹⁷⁰ More recent cases brought by coastal communities across the U.S. similarly ground their claims in nuisance or trespass law.¹⁷¹ However, plaintiffs bolster these claims with better science regarding causation and assertions that oil and gas companies knew, or should have known, that the effects of climate change would be significantly harmful.¹⁷² Michael Burger, Executive Director of the Sabin Center for Climate Change Law at Columbia University School of Law, notes

165. While there are a variety of types of renewable energy sources, the development of some would be in direct conflict with indigenous rights. There is not a city among conservation policy and the protection of indigenous rights. For example, in the Yurok fish kill tragedy a major contributor to that event was the presence of hydroelectric dams—which produce cleaner energy. Of course, in no way am I advocating for the subversion of indigenous rights to climate change responses—even though that is what the Paris Agreement has effectively done.

166. See RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 1 (AM. LAW INST. 2011).

167. See R. Henry Weaver & Douglas A. Kysar, *Courting Disaster: Climate Change and the Adjudication of Catastrophe*, 93 NOTRE DAME L. REV. 295, 328 (2017).

168. *Id.*

169. *Id.*

170. See *id.* at 337–41.

171. Grace Nosek, *Climate Change Litigation and Narrative: How to Use Litigation to Tell Compelling Climate Stories*, 42 WM. & MARY ENVTL. L. & POL’Y REV. 733, 770 (2018); Swan, *supra* note 65, at 1259.

172. See John Schwartz, *Climate Lawsuits, Once Limited to the Coasts, Jump Inland*, N.Y. TIMES (Apr. 18, 2018), <https://www.nytimes.com/2018/04/18/climate/lexxon-climate-lawsuit-colorado.html>.

that two key issues in all contemporary climate change litigation are (1) whether the claim is properly justiciable and not reserved for the political branches, and (2) whether adequate evidence of causation exists.¹⁷³

Litigation based on the age-old concept of restitution, in contrast, need not rely on a specific scientific causation of carbon emission to climate change effect as a basis for determining liability. The law of restitution is confusing.¹⁷⁴ It functions as both an independent basis for liability as well as a measure for redressing the defendant's culpable conduct at issue.¹⁷⁵ The first section of the Restatement states that "[a] person who is unjustly enriched at the expense of another is subject to liability in restitution."¹⁷⁶

Applying this *very* general principle to the enrichment of oil and gas companies at the expense of the property rights (and internationally recognized indigenous rights) of the Inupiaq people of Kivalina, the Saami of Sampi, or the Choctaws of southern Louisiana might lead to some traction. The primary benefit of the restitution-based claim is the absence of *causation*. Of course, the term "unjust enrichment" requires particularized examination, but many scholars characterize it as referring to something "without adequate legal foundation" rather than guided by an amorphous sense of equity or justice.¹⁷⁷ Furthermore, the prevailing international customary law detailed herein would bolster a restitution-based claim when brought by indigenous peoples in any common law nation's court. Under either conceptualization, indigenous peoples have both a compelling narrative and compelling rights—thanks to the human rights framework for indigenous rights—to make our claims. A detailed analysis of this potential cause of action extends beyond the scope of this Article. The true task is to arm indigenous peoples with the legal weaponry necessary to impact the carbon industry's well-entrenched and easily defended legal position. No litigation relying upon this theory has been brought, and the present approaches based on various theories of nuisance, trespass, or statutory claims continue to fail.

173. See Michael Burger, *Update: Upcoming Hearings on Motions to Dismiss Climate Change Nuisance Cases in California and New York*, CLIMATE L. BLOG (May 23, 2018), <http://blogs.law.columbia.edu/climatechange/2018/05/23/update-upcoming-hearings-on-motions-to-dismiss-climate-change-nuisance-cases-in-california-and-new-york/#more-5713>.

174. See, e.g., RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 1 cmt. a (AM. LAW INST. 2011).

175. *Id.*

176. *Id.* § 1.

177. See Emily Sherwin, *Restitution and Equity: An Analysis of the Principle of Unjust Enrichment*, 79 TEX. L. REV. 2083, 2088 (2001).

V. CONCLUSION

Time is running out for indigenous peoples all across the planet. And for some, time is up. The stories, their identities, languages, and worldviews may slip into the ocean with their houses and buildings. The progressive international legal trend of recognizing indigenous rights as unique gives the rest of us hope that all is not yet lost. International indigenous rights are increasingly seen as valid, in large part due to the recent characterization of indigenous rights as human rights.¹⁷⁸ Human rights are a well-understood framework, and by adding indigenous rights into that framework, indigenous advocates are spared the task of explaining what, why, and how indigenous rights are to be conceptualized.

While drawbacks exist to situating indigenous peoples' rights within the larger universe of human rights, the benefits are clear. The happy talk of indigenous rights as human rights and the celebration of the adoption of various international legal documents recognizing them only goes so far. At some point, indigenous people must be able to rely upon these documents in domestic and international tribunals in order for them to matter at all. Prior to that, these documents and their global application must bear fruit with international entities and other nations when they negotiate agreements, such as the COP21 Paris Agreement. The fact that indigenous peoples represent only about five percent of the world's population¹⁷⁹ can no longer be the basis for our exclusion from the negotiating table. The vulnerability of indigenous peoples is well-known; therefore, our voice simply must matter more than it does at present.

The Climate Crisis does a special kind of violence to our vital commons. The delayed consequence not only impairs our psychological ability to intuit the dire need to mitigate and change, but it creates significant uncertainty with when, where, and how bad the effects of a warmer world will be. Where that intensity of harm is not predictable with precision, this further demands immediate and significant attention. There is no alternative to our habitable Earth. Indigenous peoples across the globe see this, live this, and feel this. It is time to listen to us.

178. See, e.g., G.A. Res. 61/295, *supra* note 89..

179. *Indigenous Peoples*, WORLD BANK (Apr. 11, 2018), <https://www.worldbank.org/en/topic/indigenouspeoples>.