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## SPEECH

### CLIMATE MIGRATION AND THE DEEP ROOTS OF CLIMATE JUSTICE

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Maxine Burkett delivered the keynote address for Temple Law Review's 2021 symposium titled "A Gathering Wave: Emerging Legal and Policy Implications of Climate Migration." The following transcript has been edited lightly for publication.

#### I. INTRODUCTION

Thank you to the editors of the *Temple Law Review* for your foresight and vision in devoting an entire symposium to this critical issue. It is a particular honor to join the panelists assembled virtually, all of whom are thinkers whom I have read extensively and have learned from greatly.

The scope of my current research project extends to over a decade of interest in the dramatic shifts climate change will bring to human mobility, which is ushering in a twenty-first-century "brand" of movement. My climate migration work kicked off during the 2009 United Nations Framework Convention on Climate Change's (UNFCCC) Conference of the Parties meeting in Copenhagen, which was meant to set the post-Kyoto direction for the global community. At that time, Ronald Jumeau, Seychelles ambassador to the United Nations and the United States, exhorted legal minds to do the thorny and complex work that certain climate migration scenarios might introduce. His particular concern was the plight of small island nations that face the specter of permanent loss of habitable territory. At a conference side event, Ambassador Jumeau asked the rapt audience:

When we relocate, what happens to the resources you may have on the seabed? . . . When you relocate and you lose your country, what happens?

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What's your status in the country you relocate to? Who are you? Do you have a government there? Government of what? There hasn't been a government of refugees before.<sup>1</sup>

The frontlines will recede; such is the nature of a changing climate. Loss of habitability concerns are, therefore, universal. According to Jumeau, however: "If you save the islands of the world, you save everybody."<sup>2</sup>

Jumeau's exhortation resonated. Shortly thereafter, I began to focus my larger climate justice work on the issues of migration and, more specifically, theoretical and then empirical work on the challenges that the Republic of the Marshall Islands face. That work demonstrated just how intimately related migration was to the issues of climate justice and climate reparations that have also been key aspects of my scholarly research. Today I will share current research that builds on four interlinked propositions that have driven my work over the years.

The first proposition is that racial hierarchy and environmental degradation (now including climate change) have long been inextricably intertwined. They have, in fact, served as mutual accelerants, with human mobility always being a key feature. In many cases, particularly in the early days of colonialism, that movement was unfettered and violent.<sup>3</sup> Second, the law has been complicit in racialized environmental degradation historically and, today, is inadequate in the face of cascading crises including climate change and its geopolitical impacts.<sup>4</sup>

Third, part of law's inadequacy is related to our compartmentalization of the environment, such that ecological limits are not taken into account in all the ways that we organize and manage the spaces where we live, work, and play. This compartmentalization departs from environmental justice, indigenous, and relational understandings of humans and nature. Indeed, consistent with these understandings the environment is not separate, distinct, or easily circumscribed; it is where one lives, works, and plays.<sup>5</sup> That compartmentalization has practical, while still significant, effects as it even stymies our ability to understand how climate change affects global migration (even when one rightfully concedes that migration is almost always multicausal), interpersonal to interstate conflict, and increased poverty from the household to the country level, among other things.<sup>6</sup>

The fourth and final proposition is that dominant legal structures would do well to look to alternative ways of knowing as we mitigate, adapt to, and perhaps reverse climate

<sup>1.</sup> Seychelles Sink as Climate Change Advances, NPR (Sept. 22, 2010, 1:00 PM), http://www.npr.org/templates/story.story.php?storyId=130049417 [https://perma.cc/MC6V-MP78].

<sup>2.</sup> Id.

<sup>3.</sup> See, e.g., E. Tendayi Achiume, Migration as Decolonization, 71 STAN. L. REV. 1509, 1533–39 (2019); Carmen G. Gonzalez, Migration as Reparation: Climate Change and the Disruption of Borders, 66 LOY. L. REV. 401, 405–06 (2020).

<sup>4.</sup> See Maxine Burkett, *Revolution or Collapse?* \**Climate*\* *Change and the International Legal Order*, *in* CHANGE IN THE INTERNATIONAL LEGAL ORDER (David Sloss ed., forthcoming) (manuscript at 2) (on file with author).

<sup>5.</sup> See Maxine Burkett, Just Solutions to Climate Change: A Climate Justice Proposal for a Domestic Clean Development Mechanism, 56 BUFF. L. REV. 169, 188–92 (2008).

<sup>6.</sup> See infra Section III.

change.<sup>7</sup> Indeed, we cannot fully solve the problem we are facing without being clear-eyed about all of the above.

Today's talk takes more of a global perspective but can be easily translated to the U.S. context. We see familiar patterns of hierarchy, degradation, and disproportionate burden repeat at all scales. Like climate change generally, to the extent that migration has been addressed in a climate context, decisionmakers have generally favored low-hanging fruit when problem-solving. At the roots, however, we find the origins of both a dangerously cabined view of the environment and a political economy that has relied on sacrificing land and people.

Through the lens of one of the most difficult challenges facing law and governance—climate migration—I will seek to grasp at the roots of the structural problems to uncover possibilities for just and enduring solutions moving forward. First, I will discuss climate justice and climate migration through an exploration of historical and widely divergent contributions to the climate crisis, which altogether tell a vivid story of the root issues.<sup>8</sup> Next, I will consider whether our legal systems, beyond just environmental law, are capable of responding adequately, especially when they, too, are deeply implicated in perpetuating these crises.<sup>9</sup>

I will then take a very quick detour to introduce and summarize my work on climate reparations, and the most important element of reparations—the guarantee of nonrepetition.<sup>10</sup> I believe this guarantee is essential to getting to the roots of the problem of climate-induced migration and the climate crisis generally, and to ensuring that future "solutions" do not perpetuate crises of race and environmental degradation. I will close with an exploration of what that engagement might entail as we look in the rearview mirror while contemplating preferred futures.<sup>11</sup>

#### II. MAPPING CLIMATE CHANGE AND CLIMATE JUSTICE

Physical scientists, through describing geophysical phenomena, often lay bare the geopolitical dilemmas of the climate crisis. In reference to glacier melt in Greenland and the resultant rise in sea level, former U.K. science advisor Sir David King has warned that the "[m]aps of the world will have to be redrawn."<sup>12</sup> This statement has a larger meaning when one considers how we have organized ourselves in the geopolitical landscape, in which firm boundaries and jurisdictions make movement more difficult, particularly across borders. Those boundaries also hamper our ability to mitigate the crisis, because the notion that those borders meaningfully define or delimit "national

<sup>7.</sup> Maxine Burkett, *Behind the Veil: Climate Migration, Regime Shift, and a New Theory of Justice*, 53 HARV. C.R.-C.L. L. REV. 445, 485 (2018) [hereinafter Burkett, *Behind the Veil*] ("To succeed, [a theory of justice] would, at the very least, need to provide an affirmative and viable alternative to the current socio-economic and legal structures.").

<sup>8.</sup> See infra Section II.

<sup>9.</sup> See infra Section III.

<sup>10.</sup> See infra Section IV.

<sup>11.</sup> See infra Section V.

Geoffrey Lean, Global Warming 'Will Redraw Map of World,' INDEPENDENT (Nov. 07, 2004, 1:00 AM), https://www.independent.co.uk/climate-change/news/global-warming-will-redraw-map-of-world-5350562.html [https://perma.cc/RKZ5-LYU8].

interests" has been formidable to the detriment of scientifically appropriate mitigation responses across all landscapes.

Many of those borders and boundaries in the Global South were imposed and, today, the strength of the nation-state is buttressed by the right to exclude, which international law scholars have underscored as being in direct conflict with the needs of migrants.<sup>13</sup> That right to exclude and its violent byproduct was evinced, for example, by the actions of the Trump administration, even in its closing days postelection. At the U.S.-Mexico border, "border as construct" and a mode of racialized exclusion became painfully evident as revealed in images of dynamite blasted mountains and bulldozed access roads tearing through "stunning landscape[s]," such as Guadalupe Canyon in southeastern Arizona.<sup>14</sup>

The disastrous impacts of climate change are, of course, indifferent to the borders and boundaries we have drawn on the political map. Legacies of power imbalances and subjugation, however, make each countries' experience of those impacts vastly different. Justice and equity considerations are, therefore, of grave concern. Those considerations are encapsulated by even a cursory consideration of the United States' or China's emissions in a given year compared to the almost 150 countries whose annual emissions fall well below the world average.<sup>15</sup> The fact that those countries, individually, dwarf the emissions of entire continents (namely, South America and Africa) is also remarkable and troubling from a basic justice and equity perspective.<sup>16</sup> Notably, Pacific Island nations' emissions are virtually imperceptible.

The justice implications are even starker when one considers per capita emissions. The per capita emissions of Canada are, for example, 15.6 tonnes, dwarfing those of China, India, and the world average (7.1, 1.9, and 4.8 tonnes, respectively).<sup>17</sup> Thirty-five countries, including those of the European Union, are above the world average, while almost 150 countries fall below the average.<sup>18</sup> The emissions of the Republic of the Marshall Islands, for example, are 2.53 tonnes.<sup>19</sup> This discrepancy is crucially important to consider when discussing responses to climate-induced migration. It is also of particular interest to proximate island countries and communities, like Hawai'i, as the

See Fiona Harvey, An Atlas of Pollution: The World in Carbon Dioxide Emissions, GUARDIAN (Jan. 31, 2011, 5:40 AM), http://www.theguardian.com/environment/2011/jan/31/pollution-carbon-emissions [https://perma.cc/62RS-GSZD]; U.N. ENV'T PROGRAMME, *supra* note 15, at 4–6.

17. See Hannah Ritchie & Max Roser, CO<sub>2</sub> Emissions, OUR WORLD IN DATA, http://ourworldindata.org/ co2-emissions [https://perma.cc/NH7P-45TM] (last visited June 1, 2021).

<sup>13.</sup> See, e.g., Achiume, supra note 3, at 1523–31; Ama Ruth Francis, Migrants Can Make International Law, 45 HARV. ENVTL. L. REV. 99, 116–21 (2021).

<sup>14.</sup> See John Burnett, *Trump's Border Wall Builders Carry on Even Though Projects May Never Be Completed*, NPR (Nov. 16, 2020, 11:33 AM), http://www.npr.org/2020/11/16/934784015/trumps-border-wall-builders-carry-on-even-though-projects-may-never-be-completed [https://perma.cc/5TZT-4XDC].

<sup>15.</sup> See Mengpin Ge, Johannes Fredrich & Thomas Damassa, 6 Graphs Explain the World's Top 10 Emitters, WORLD RESOURCES INST. (Nov. 25, 2014), http://www.wri.org/blog/2014/11/6-graphs-explain-world-s-top-10-emitters [https://perma.cc/JT8W-VXWG]; U.N. ENV'T PROGRAMME, EMISSIONS GAP REPORT 2020, at 6 (2020).

<sup>18.</sup> See Ge et al., supra note 15.

<sup>19.</sup> Hannah Ritchie & Max Roser, *Marshall Islands: CO<sub>2</sub> Country Profile*, OUR WORLD IN DATA, http://ourworldindata.org/co2/country/marshall-islands#per-capita-how-much-co2-does-the-average-person-e mit [https://perma.cc/L467-6Y7N] (last visited June 1, 2021).

state already serves as a host and transition location for Pacific Islanders who are moving to the United States for myriad compelling reasons.

We know that there are geophysical dynamics unrelated to climate change that help to clarify the early sea level impacts on the particularly exposed islands of the Western Pacific.<sup>20</sup> Research is also revealing that the "drowning islands" narrative is, perhaps, the least accurate in the near term, and "thirsty" or "extremely hot" island narratives are, perhaps, more on point.<sup>21</sup> Yet, early inundation and relocation stories may be a preview of things to come.<sup>22</sup>

Whereas climate forecasters deem small islanders as among the most vulnerable to climate change impacts, a subset of small islanders—like the Marshallese—also face the specter of permanent loss of habitable state territory, rendering them migrants without a home country. In that regard, a quotation from another physical scientist is especially relevant to the legal and political future of some nation-states: "we have effectively entered a *no-analogue state*."<sup>23</sup> Zeebe and his coauthors describe the rate of carbon release during the Paleocene-Eocene Thermal Maximum, which was much smaller than the current input of carbon to the atmosphere from human activities.<sup>24</sup> Notably, of course, this occurred when humans did not have a proverbial dog in the fight, some sixty-six million years ago.<sup>25</sup> As a result of such incredible increases of carbon in our atmosphere, we are facing disruptions to human systems for which there are no historical analogs.

#### III. MIGRATION, JUSTICE, AND SYSTEM CAPABILITIES

#### A. System Capabilities

Few other consequences so neatly encapsulate the features of contemporary life that test the foundations of our legal system than climate migration and displacement. From notions of agency and self-determination to fixed concepts of the nation-state and the rights of the affected peoples and populations, the changes forecast and the acceleration in the rate of that change beg for a legal system that is just, durable, and dynamic. How is the legal system currently keeping up?

<sup>20.</sup> See, e.g., Mark A. Merrifield, A Shift in Western Tropical Pacific Sea Level Trends During the 1990s, 24 J. CLIMATE 4126, 4127 (2011).

<sup>21.</sup> See CURT STORLAZZI, STRATEGIC ENVTL. RESEARCH & DEV. PROGRAM, THE IMPACT OF SEA-LEVEL RISE AND CLIMATE CHANGE ON DEPARTMENT OF DEFENSE INSTALLATIONS ON ATOLLS IN THE PACIFIC OCEAN 2–3 (2017); Kees van der Geest, Maxine Burkett, Juno Fitzpatrick, Mark Stege & Brittany Wheeler, *Climate Change, Ecosystem Services and Migration in the Marshall Islands: Are They Related*?, 161 CLIMATIC CHANGE 109, 109 (2020); KEES VAN DER GEEST, MAXINE BURKETT, JUNO FITZPATRICK, MARK STEGE & BRITTANY WHEELER, MARSHALLESE MIGRATION: THE ROLE OF CLIMATE CHANGE AND ECOSYSTEM SERVICES 12 (2019).

<sup>22.</sup> See, e.g., Neil MacFarquhar, Refugees Join List of Climate-Change Issues, N.Y. TIMES (May 28, 2009), http://www.nytimes.com/2009/05/29/world/29refugees.html [https://perma.cc/P3MU-VSWW]; John D. Sutter, You're Making This Island Disappear, CNN, http://www.cnn.com/interactive/2015/06/opinions/ sutter-two-degrees-marshall-islands/ [https://perma.cc/W4QG-29V4] (last visited June 1, 2021); see also Maxine Burkett, Lessons from Contemporary Resettlement in the South Pacific, 68 J. INT'L AFF. 75, 77 (2015).

<sup>23.</sup> Richard E. Zeebe, Andy Ridgwell & James C. Zachos, *Anthropogenic Carbon Release Rate Unprecedented During the Past 66 Million Years*, 9 NATURE GEOSCIENCE 325, 328 (2016) (emphasis added).

<sup>24.</sup> See id.

<sup>25.</sup> See id.

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To answer this question, the tools and insights of "systems thinking" are useful. Systems thinkers "prioritize[] understanding the factors and dynamics that make up a complex problem" and "focus[] on developing a nuanced understanding of a problem to the creation of a systems map."<sup>26</sup> Ultimately, they work "to build solutions that do not create unintended consequences but instead foster healthy dynamics."<sup>27</sup> When asking and answering the question, "What capabilities does a system need to respond to challenges with vibrancy and resiliency?," one seasoned thinker considers several questions, including whether the system is able to see itself as complex, able to make meaning or sense of challenges, able to align around the next best action, and able to test/prototype, learn, and adapt.<sup>28</sup>

It is plausible, perhaps probable, that the globe will experience a more than three degrees Celsius, and possibly even five degrees Celsius, temperature increase by 2071 through 2100.<sup>29</sup> The global temperature increase would quite literally produce a whole new world.<sup>30</sup> The severity, speed, and recent governance failures at multiple scales suggest that with respect to vibrancy and resiliency our system and its infrastructure are woefully underprepared.

Consider the immigrant caravan debacle. The political discourse on and media coverage of heightened migrant flows fueled often xenophobic fears of an influx of Latin Americans at the southern border of the continental United States.<sup>31</sup> The media belatedly began to take notice of the "climate fingerprint" on these migrations,<sup>32</sup> including a 2019 above the fold article in the New York Times in which a farmer, Carlos Peña Orellana,

<sup>26.</sup> AMY AHEARN, SIDE-BY-SIDE: DESIGN THINKING AND SYSTEMS THINKING (chart on file with author); see also Matthew Amissah, Thomas Gannon & Jamie Monat, *What Is Systems Thinking? Expert Perspectives from the WPI Systems Thinking Colloquium of 2 October 2019*, SYSTEMS, Feb. 27, 2020, at 1, 1.

<sup>27.</sup> AHEARN, supra note 26.

<sup>28.</sup> Conversation with Karen Grattan, Founder and CEO of Engaging Inquiry; *see* ENGAGING INQUIRY, http://engaginginquiry.com [https://perma.cc/RGX7-K5XT] (last visited June 1, 2021).

<sup>29.</sup> Alexa Jay et al., *Overview*, *in* 2 U.S. GLOB. CHANGE RESEARCH PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT 33, 42 fig.1.3 (2018).

<sup>30.</sup> Burkett, Behind the Veil, supra note 7, at 449.

<sup>31.</sup> See, e.g., David Hernández, '3 Mexican Countries': When All Latin American Migrants Become Mexicans, U. OXFORD L. (Oct. 1, 2019), http://www.law.ox.ac.uk/research-subject-groups/centre-criminology/ centreborder-criminologies/blog/2019/10/3-mexican [https://perma.cc/Q53B-E763]; Julio Ricardo Varela, Trump's Border Wall Was Never Just About Security. It's Meant To Remind Latinos that We're Unwelcome, NBC: THINK (Dec. 28, 2018, 10:14 AM), http://www.nbcnews.com/think/opinion/trump-s-border-wall-was-never-just-about-security-it-ncna952011 [https://perma.cc/7CMK-U3YD]; The World Staff, Xenophobia 'Takes Its Toll' as Trump Works To Curb Immigration, WORLD (Apr. 22, 2020, 2:15 PM), http://www.pri.org/stories/2020-04-22/xenophobia-takes-its-toll-trump-works-curb-immigration [https://perma.cc/8ZU5-HRTB].

<sup>32.</sup> See, e.g., Stephanie Leutert, Opinion, How Climate Change Is Affecting Rural Honduras and Pushing People North, WASH. POST (Nov. 6, 2018, 8:32 PM), http://www.washingtonpost.com/news/global-opinions/wp/2018/11/06/how-climate-change-is-affecting-rural-honduras-and-pushing-people-north/

<sup>[</sup>https://perma.cc/DE8V-Y6Y8]; Oliver Milman, Emily Holden & David Agren, *The Unseen Driver Behind the Migrant Caravan: Climate Change*, GUARDIAN (Oct. 30, 2018, 1:30 AM), http://www.theguardian.com/world/2018/oct/30/migrant-caravan-causes-climate-change-central-america [https://perma.cc/TRV2-YMP4]; Adam Wernick, *Climate Change Is Contributing to the Migration of Central American Refugees*, WORLD (July 15, 2018, 10:00 AM), http://www.pri.org/stories/2018-07-15/climate-change-contributing-migration-central-american-refugees [https://perma.cc/B9PU-DWFY]; Justin Worland, *The Real Culprit Behind Trump's Border Emergency? Climate Change*, TIME (Feb. 22, 2019, 2:15 PM), http://time.com/5535086/trump-climate-change-national-emergency/ [https://perma.cc/2RP3-UC2B].

explained: "The weather is crazy . . . . Everything's out of control."<sup>33</sup> Climate change as an emerging and distinct driver of human mobility finally began to receive deserved coverage in the popular media. Interestingly, however, in the reporting, climate change was presented as just a tipping point for migration. The article cited farmers and experts who identified violence and poverty as prime drivers of migration (though it is important to note that climate change can impact those drivers as well).<sup>34</sup>

Nevertheless, we see already that today's "tip" can have profound consequences if you consider the relative number of migrants against the backdrop of our existing legal arrangements and political discourse. It is important to note that during the 2015–2016 period, migrant flows constituted 0.2% of both the European Union and Australia's populations and only 0.02% of the population of the United States.<sup>35</sup> Throughout the globe, however, voters were choosing their leaders and decisionmakers were conducting high stakes debates on border control, with xenophobic undercurrents and without understanding a key variable of twenty-first-century mobility.

Further complicating the prospects for more sound governance, there are many areas of the law that could address this issue—including international law fields such as refugee law and human rights law, domestic law such as immigration and national security law, and hybrid fields such as climate law and indigenous rights. Professor William Buzbee has described this kind of phenomenon as "the regulatory commons" problem.<sup>36</sup> Buzbee argues, in essence, that although a social ill is widely recognized, the very existence of multiple potential managers prevents any one player from taking responsibility.<sup>37</sup> This is especially true when the causes and harms of that ill cross jurisdictional or state boundaries. Because of its cross-cutting nature, particularly into deeply compartmentalized fields that do not understand themselves as "environmental," the ill can continue to evade focused attention because no one policy community is obliged to respond nor can climate migrants hold any one entity accountable for its failure to respond.

In short, the mobility options for those on the move are circumscribed by increasingly antiquated twentieth-century parameters.<sup>38</sup> These options include a move to the (rare) neighboring country that allows unrestricted entry; formal international migration programs that facilitate entry to high-income countries, such as skilled worker

<sup>33.</sup> Kirk Semple, *Central American Farmers Head to the U.S., Fleeing Climate Change*, N.Y. TIMES (Apr. 13, 2019), http://www.nytimes.com/2019/04/13/world/americas/coffee-climate-change-migration.html.

<sup>34.</sup> Id.; see also Noah S. Diffenbaugh & Marshall Burke, Global Warming Has Increased Global Economic Inequality, 116 PROC. NAT'L ACAD. SCL, 9808, 9808 (2019) (discussing climate change's impact on economic inequality); Cullen Hendrix, Are We Radically Underestimating the Effects of Climate on Armed Conflict?, NEW SECURITY BEAT (Mar. 3, 2020), http://www.newsecuritybeat.org/2020/03/radically-underestimating-effects-climate-armed-conflict/ [https://perma.cc/9VTQ-KB7F] (recognizing that climate change will increase the risk of armed conflict).

<sup>35.</sup> Jaya Ramji-Nogales, Migration Emergencies, 68 HASTINGS L.J. 609, 618 (2017).

<sup>36.</sup> William W. Buzbee, *The Regulatory Fragmentation Continuum, Westway and the Challenges of Regional Growth*, 21 J. L. & POL. 323, 357 (2005).

<sup>37.</sup> See id. at 348-50.

<sup>38.</sup> See Lauren Herzer Risi & Maxine Burkett, Reorienting Perceptions of Climate Change, Migration, & Displacement, WILSON CTR. (Sept. 30, 2020), http://diplomacy21-adelphi.wilsoncenter.org/article/ reorienting-perceptions-climate-change-migration-displacement [https://perma.cc/ZF9Q-6MYV].

visa programs; and the extralegal, clandestine, and often life-threatening journey to another country to seek asylum.<sup>39</sup>

#### B. Contemporary Migration Governance

In light of the limited options, scholars and practitioners alike are seeking viable and appropriately comprehensive mechanisms for facilitating migration at the scale and scope required while protecting the rights of affected populations. Most climate change and mobility scenarios fall outside of almost all legal frameworks, including the Refugee Convention,<sup>40</sup> prompting numerous and sustained calls for a global governance regime to manage international migration, supporting funding and administrative resources in particular.<sup>41</sup> Some have called for a new legal instrument, such as a standalone treaty to address cross-border climate-induced migration,<sup>42</sup> while others remain skeptical that migration spurred by climate change differs substantially from other kinds of survival migration to warrant a new instrument—never mind the difficulty of drafting and passing a new instrument or amending the Refugee Convention.<sup>43</sup>

More recent international attempts to manage movement related to climate change include three United Nations initiatives relevant to migration: the Global Compact for Safe, Orderly and Regular Migration (GCM),<sup>44</sup> the Global Compact on Refugees,<sup>45</sup> and the UNFCCC Task Force on Displacement,<sup>46</sup> which seeks to enhance the capacity of governments and regional and international organizations to address climate-related drivers and impacts of displacement by developing recommendations for integrated approaches in response. Some believe that a combination of extant approaches—like the GCM and the UNFCCC Task Force—*if* fully taken up, could yield effective results.<sup>47</sup> Yet the United States, Australia, and a number of European states did not vote to adopt the GCM, despite the fact that it does not create any legal obligations.<sup>48</sup> Finally, some

42. E.g., Bonnie Docherty & Tyler Giannini, Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees, 33 HARV. ENVTL. L. REV. 349, 350 (2009).

<sup>39.</sup> Robert McLeman, International Migration and Climate Adaptation in an Era of Hardening Borders, 9 NATURE CLIMATE CHANGE 911, 913–14 (2019).

<sup>40.</sup> Convention Relating to the Status of Refugees, July 28, 1951, 189 U.N.T.S. 137; Protocol Relating to the Status of Refugees, Jan. 31, 1967, 606 U.N.T.S. 267.

<sup>41.</sup> See, e.g., Liv Feijen, Book Note, 28 MERKURIOUS 61, 61 (2012) (reviewing JANE MCADAM, CLIMATE CHANGE, FORCED MIGRATION, AND INTERNATIONAL LAW (2012)); Khalid Koser, Introduction: International Migration and Global Governance, 16 GLOBAL GOVERNANCE 301, 301–03 (2010).

<sup>43.</sup> See MCADAM, supra note 41, at 42-46.

<sup>44.</sup> United Nations, *Global Compact for Safe, Orderly and Regular Migration* (July 13, 2018), http://refugeesmigrants.un.org/sites/default/files/180713\_agreed\_outcome\_global\_compact\_for\_migration.pdf [https://perma.cc/98HH-TG9E].

<sup>45.</sup> U.N. High Commissioner for Refugees, Global Compact on Refugees, U.N. Doc. A/73/12 (2018).

<sup>46.</sup> U.N. Framework Convention on Climate Change, *Adoption of the Paris Agreement*, Dec. 1/CP.21, U.N. Doc. FCCC/CP/2015/10/Add.1 (Jan. 29, 2016).

<sup>47.</sup> McLeman, *supra* note 39, at 911.

<sup>48.</sup> Ulf Laessing & Andreas Rinke, U.N. Members Adopt Global Migration Pact Rejected by U.S. and Others, Reuters (Dec. 9, 2018), http://www.reuters.com/article/us-europe-migrants-un-pact/u-n-membersadopt-global-migration-pact-rejected-by-u-s-and-others-idUSKBN1090YS [https://perma.cc/XW2P-XJ2X]; see also The Global Compact for Safe, Orderly and Regular Migration (GCM), INTERGOVERNMENTAL CONFERENCE ON THE GLOBAL COMPACT FOR MIGRATION, http://www.un.org/en/conf/migration/global-compact-for-safe-orderly-regular-migration.shtml [https://perma.cc/RZR4-RL7U] (last visited June 1, 2021).

believe we are looking at the wrong scale and should focus primarily on domestic immigration law.<sup>49</sup>

#### C. Justice and Climate Migration

To say that we need to figure this out in short order may sound obvious, but I seek to emphasize that the "we" refers to those of us concerned with rights, justice, and equity in the problem-solving. Again, we are hurtling toward a more than three degrees Celsius temperature increase.<sup>50</sup> For context, an increase of just 1.2 degree Celsius above normal, our current status, produced summer 2020's dry lightning storms, firenadoes, massive and repetitive hurricanes that hit the gulf coast, and one hundred degrees Fahrenheit heatwaves in Siberia, rendering their June and parts of July hotter than Honolulu.<sup>51</sup> The impacts that might accelerate migration are legion.

Existing law and policy, as well as the lack of relevant laws, can aggravate the negative impacts of climate change and related migration. Worse still, in the absence of better or balanced information on or planning for climate's influence on human mobility to fill a relative void, vivid narratives are fueling demagogues throughout the Global North and Global South.<sup>52</sup> Those narratives have the effect of creating a self-fulfilling prophecy regarding the climate crisis and its relationship to an increase in violent conflict at all scales, perhaps rending that conflict inevitable. With regard to demagogues and accompanying dangers, it is important to note that there is vibrant conversation, planning, and investment occurring outside of the formal and considered legal system, which includes smart border walls and weaponized drones, among other things.<sup>53</sup> In sum, solving for this is urgent. Because the source of the problem is also deeply rooted, it requires a broad scope and deep ambition.

#### IV. CLIMATE REPARATIONS AND GUARANTEES OF NONREPETITION

#### A. Climate Harms and Reparations

Climate migration presents novel legal issues, such as this unique kind of twenty-first-century statelessness that the Marshallese, for example, must contemplate. It also provokes all of the unfinished work of our current legal regimes—namely, power (such as fossil-derived electrons and uneven heft at the international negotiations table)

<sup>49.</sup> E.g., David James Cantor, Environment, Mobility, and International Law: A New Approach in the Americas, 21 CHI. J. INT'L L. 263, 277–78 (2021).

<sup>50.</sup> CLIMATE ACTION TRACKER, PARIS AGREEMENT TURNING POINT 3 (2020), http://climateactiontracker.org/documents/829/CAT\_2020-12-01\_Briefing\_GlobalUpdate\_Paris5Years\_Dec20 20.pdf [https://perma.cc/CV37-3GDL].

<sup>51.</sup> See Joe Lo, WMO: Siberian Heatwave Put 2020 Among Three Hottest Years on Record, CLIMATE HOME NEWS (Feb. 12, 2020, 1:00 PM), http://www.climatechangenews.com/2020/12/02/wmo-siberian-heatwave-put-2020-among-three-hottest-years-record/ [https://perma.cc/Y5HD-5Y79] (stating that temperatures in Siberia reached 38 degrees Celsius, which converts to approximately 100.4 degrees Fahrenheit).

<sup>52.</sup> See, e.g., TODD MILLER, STORMING THE WALL: CLIMATE CHANGE, MIGRATION, AND HOMELAND SECURITY 31–33 (2017); Robinson Meyer, *Donald Trump Is the First Demagogue of the Anthropocene*, ATLANTIC (Oct. 19, 2016), http://www.theatlantic.com/science/archive/2016/10/trump-the-first-demagogue-of-the-anthropocene/504134/ [https://perma.cc/FBB9-7TWN].

<sup>53.</sup> Cf. MILLER, supra note 52, at 213.

and historical contributions to both climate change and other communities' and countries' vulnerability to it. Further, major components of our legal infrastructure have gotten us here and support continued paralysis. Understanding how we got here and ensuring that it is not repeated guides us through the critical exercise of diagnosing the complex problem and prescribing complex solutions—solutions that will advance the just and equitable futures we prefer to see.

I have previously argued for climate reparations in order to achieve the primary goal of building trust and solidarity to address the mother of all collective action problems.<sup>54</sup> The moral case for reparations becomes abundantly clear when you recount the numerous disproportionate burdens. In short, the suffering that is resulting from climate change has been uneven, the indirect violence and trauma of overconsumption and unjust enrichment have been borne by many for the benefit of a privileged few, the outcomes and prognoses are grave, and the resolution to ensure that all of us survive and (ideally) thrive requires transfers of diverse resources to reduce emissions dramatically and support adaptive capacity.

There is also strategic benefit to climate reparations. We must properly diagnose the problem to repair the climate crisis and not repeat the initiating and now, decades-and-centuries-old harm. The dynamic is summed up by climate activists as follows: the carbon economy has required sacrifice zones, and sacrifice zones have thrived on and require racism.<sup>55</sup> Eliminating that dynamic and remediating its efforts will yield benefits that inure to everyone. Addressing the underlying logic also limits the likelihood of it happening again.

Blending the moral and strategic cases reveals, perhaps, the most hopeful elements of a reparative approach. Reparations, a common feature of international law, are meant to right wrongs as well as forge right relations between parties.<sup>56</sup> As a practical matter, the relationships within our country—between the Global North and South and across movements—need to be repaired to build trust and solidarity in the face of mounting change. So, instead of asking whether reparations are appropriate or feasible, the operative question becomes: Is remotely adequate climate action even possible without collective action? And, if not, can collective action of this scale emerge within current relationships? And, if not, what would facilitate this repair?<sup>57</sup>

A reparative approach can address general and specific harms as well. Specific harms are receiving appropriate attention, particularly following the murder of George Floyd, which reverberated around the globe.<sup>58</sup> Countries like Nigeria are becoming

<sup>54.</sup> Maxine Burkett, *Climate Reparations*, 10 MELBOURNE J. INT'L L. 509, 535 (2009) [hereinafter Burkett, *Climate Reparations*].

<sup>55.</sup> Hop Hopkins, *Racism Is Killing the Planet*, SIERRA (June 8, 2020), http://www.sierraclub.org/sierra/ racism-killing-planet [https://perma.cc/L3JJ-9ZAA] ("You can't have climate change without sacrifice zones, and you can't have sacrifice zones without disposable people, and you can't have disposable people without racism.").

<sup>56.</sup> Burkett, *Climate Reparations, supra* note 54, at 522–23.

<sup>57.</sup> See Sonja Klinsky, Michael Mehling & Andreas Tuerk, Beyond Déjà Vu: Opportunities for Policy Learning from Emissions Trading in Developed Countries, 2012 CARBON & CLIMATE L. REV. 291, 301–04 (discussing the role of currently existing systems in addressing climate change).

<sup>58.</sup> E.g., How George Floyd's Death Reverberates Around the World, ECONOMIST (June 8, 2020), http://www.economist.com/international/2020/06/08/how-george-floyds-death-reverberates-around-the-world

poorer while contending with heat extremes, depicted vividly in a summer 2020 New York Times article, which explained: "In Nigeria, rising temperatures are supercharged by nonstop gas flares. You can feel them singe the skin."<sup>59</sup> We see familiar patterns repeat at all scales.

The pattern is also mirrored in cities across the United States. One example is redlining and its legacy.<sup>60</sup> Researcher Jeremy Hoffman and colleagues conducted a spatial analysis of 108 urban areas in the United States to better understand how historically redlined neighborhoods, which remain predominately lower income and of color, related to current patterns of the urban heat island effect.<sup>61</sup> Their research revealed that ninety-four percent of the areas studied experienced elevated temperatures in formerly redlined areas, with temperature differences averaging five degrees Fahrenheit warmer and as great as 12.6 degrees Fahrenheit above nonredlined neighborhoods.<sup>62</sup> Coastal crises and cultural heritage also collide in the Carolinas, in such a way that violent storms and "heartache" have killed many people who have been displaced.<sup>63</sup>

We can see, however, that the story is even older and has resulted in more general harms. Racial hierarchy and environmental disruption have been mutual accelerants since as early as the fifteenth century.<sup>64</sup> In researcher Alexander Koch and his coauthors' study, they concluded that "[t]he Great Dying of the Indigenous Peoples of the Americas resulted in a human-driven global impact on the Earth System in the two centuries prior to the Industrial Revolution."<sup>65</sup> The "Great Dying" resulted in large part from disease but also warfare, enslavement of indigenous peoples, and hunger following social disintegration.<sup>66</sup> The deaths of tens of millions led to large-scale reforestation, sequestering enough carbon to be perceptible on a global scale and measurable in cooling

60. See, e.g., Brad Plumer, Nadja Popovich & Brian Palmer, *How Decades of Racist Housing Policy Left Neighborhoods Sweltering*, N.Y. TIMES (Aug. 24, 2020), http://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html [https://perma.cc/HH89-MXWV].

61. Jeremy S. Hoffman, Vivek Shandas & Nicholas Pendleton, *The Effects of Historical Housing Policies* on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas, CLIMATE, Jan. 13, 2020, at 1, 3–4.

62. Id. at 1; see also Linda Poon, Housing Discrimination Made Summers Even Hotter, BLOOMBERG: CITYLAB (Jan. 22, 2020, 3:00 PM), http://www.bloomberg.com/news/articles/2020-01-22/the-link-betweenredlining-and-extreme-urban-heat [https://perma.cc/SY5F-A96K].

63. Oliver Milman, Gullah Geechee: Distinct US Culture Risks Losing Island Home to Climate Crisis, GUARDIAN (Oct. 23, 2019, 6:00 AM), http://www.theguardian.com/environment/2019/oct/23/gullah-geecheedistinct-us-culture-risks-losing-island-home-to-climate-crisis [https://perma.cc/6TS2-VYUW] (statement of Queen Quet of the Gullah Geechee) ("You may move to another place, but that does not mean that the environment of that new place will allow your cultural traditions to be sustained. Heartache has killed many people that have been displaced.").

64. See, e.g., Alexander Koch, Chris Brierley, Mark M. Maslin & Simon L. Lewis, Earth System Impacts of the European Arrival and Great Dying in the Americas after 1492, 207 QUATERNARY SCI. REVS. 13, 13–14 (2019); see also Simon L. Lewis & Mark A. Maslin, Defining the Anthropocene, 519 NATURE 171, 174–75 (2015).

<sup>[</sup>https://perma.cc/2CQD-TECH]; Protests Across the Globe After George Floyd's Death, CNN: WORLD (June 13, 2020, 3:22 PM), http://www.cnn.com/2020/06/06/world/gallery/intl-george-floyd-protests/index.html [https://perma.cc/MS24-4ZVP].

<sup>59.</sup> Somini Sengupta, *This Is Inequity at the Boiling Point*, N.Y. TIMES (Aug. 7, 2020), http://www.nytimes.com/interactive/2020/08/06/climate/climate-change-inequality-heat.html [https://perma.cc/238E-EFXT].

<sup>65.</sup> Koch et al., *supra* note 64, at 13.

<sup>66.</sup> Id. at 20-21.

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temperatures to mark a period that has since been dubbed the Little Ice Age.<sup>67</sup> The research demonstrates, in sum, that human actions—and the nearly unfettered mobility of Europeans—had global impacts on the Earth system from the 1400s onward.<sup>68</sup>

Similarly, researchers Simon Lewis and Mark Maslin argue that this event is the strongest of just two to arguably mark the start of the Anthropocene, the proposed geological period in which humans have left an indelible imprint in the Earth's stratigraphy, because of disease, war, enslavement, and famine, as well as transoceanic movement of species.<sup>69</sup> The "Great Divergence," according to Lewis and Maslin, marked the period of time in which the "agricultural commodities from the vast new lands of the Americas allowed Europe to transcend its ecological limits and sustain economic growth."<sup>70</sup> They further explain:

In turn, this freed labour, allowing Europe to industrialize. That is, the Americas made industrialization possible owing to the unprecedented inflow of new cheap resources (and profitable new markets for manufactured goods). This 'Great Divergence' of Europe from the rest of the world required access to and exploitation of new lands plus a rich source of easily exploitable energy: coal. Thus, dating the Anthropocene to start about 150 years before the beginning of the Industrial Revolution is consistent with a contemporary understanding of the likely material causes of the Industrial Revolution.<sup>71</sup>

For these globe-shifting general harms, climate reparations efforts seek reparations for the concerns of the most vulnerable and, simultaneously, consider the most important prong: nonrepetition. They ask the question: What does nonrepetition look like in the context of centuries-old, multisystemic failures? For climate change and justice together, that is an extraordinary question (in the literal sense of the word) because, more than repairing or compensating for past harms, it asks for us to really understand the foundational faults in the contemporary political economy. I have argued in a few pieces that, in addition to the apology and demonstration of commitment to repair (monetary compensation or satisfaction), reparations claims should also include and emphasize this guarantee of nonrepetition because it is the most transformative element of repair in its capacity to effectuate meaningful change.<sup>72</sup>

#### B. Nonrepetition and Legal Theory

How can we look to the past yet remain forward-thinking and acting at this critical time? Climate justice, as a maturing field, provides critical guidance. Professor Anna Grear, for example, analyzes the law's structural complicity in the uneven outcomes and

<sup>67.</sup> See Robert A. Dull, Richard J. Nevle, William I. Woods, Dennis K. Bird, Shiri Avnery & William M. Denevan, The Columbian Encounter and the Little Ice Age: Abrupt Land Use Change, Fire, and Greenhouse Forcing, 100 ANNALS ASS'N AM. GEOGRAPHERS 755, 755 (2010).

<sup>68.</sup> See Koch et al., supra note 64, at 30.

<sup>69.</sup> See Lewis & Maslin, supra note 64, at 171-76.

<sup>70.</sup> Id. at 177.

<sup>71.</sup> Id. (footnote omitted).

<sup>72.</sup> See, e.g., Burkett, Behind the Veil, supra note 7, at 484; Burkett, Climate Reparations, supra note 54, at 532–34.

forecasts for the poor and of color globally.<sup>73</sup> She notes that the very design of the law, particularly corporate law and international trade law, is fundamentally predisposed to environmental degradation and indifferent, at best, to the heightened vulnerability of much of the Global South to externally driven change. Efforts to do less harm, limit the excesses of our global political economy, and understand that climate change is not an issue to be resolved but a context and landscape to be navigated will be essential.

Scholar Marcus Hedahl argues, among other things, that the inability to clearly articulate duties or obligations in response to identifiable rights is a wrong in itself.<sup>74</sup> Other scholars of international environmental law have noted the same and prescribed intentional efforts to articulate what the obligations (from the general to the granular) are for decisionmakers, countries, or the international community to meet rights claims related to environmental degradation.<sup>75</sup>

Climate justice can also leverage other relevant critiques, such as TWAIL scholars' critiques of international migration law. Professor Jaya Ramji-Nogales argues that migration law actively creates refugee crises by its own parameters with, for example, its requirements that migrants access a state's territory to appeal for refugee status by, more than likely, embarking on a risky and perhaps extralegal journey.<sup>76</sup> Further, she argues that the crisis is one created by infrastructure choices.<sup>77</sup> It is not a crisis of absolute capacity. Given the relative size of cross-border migrant flows, better infrastructure choices can strengthen capacity. To the extent that climate change introduces even greater numbers, which is plausible (some estimates range from the hundreds of millions to one to two billion), planning or expanding capacity and the ability to manage a dynamic and increasing phenomenon is optimal. Finally, and perhaps most importantly, this kind of proactive planning is best able to incorporate the perspectives of the migrants themselves and ensure that states protect migrants' rights throughout the process of migration.

Regarding migration and its intimate relationship with colonial histories, Professor E. Tendayi Achiume's persuasive arguments are also uniquely relevant. She maintains that against the backdrop of colonialism and the centuries of free and consequential movement of Europeans throughout the Global South, there is an obligation of former colonial powers to open their borders to former colonial subjects.<sup>78</sup> Similarly, Professor

<sup>73.</sup> See, e.g., Anna Grear & Conor Gearty, Choosing a Future: The Social and Legal Aspects of Climate Change 5 J. HUM. RTS. & ENV'T (SPECIAL ISSUE) 1, 1 (2014); Anna Grear, The Vulnerable Living Order: Human Rights and the Environment in a Critical and Philosophical Perspective, 2 J. HUM. RTS. & ENV'T 23, 43–44 (2011); Anna Grear, Towards 'Climate Justice'?: A Critical Reflection on Legal Subjectivity and Climate Injustice: Warning Signals, Patterned Hierarchies, Directions for Future Law and Policy, 5 J. HUM. RTS. & ENV'T (SPECIAL ISSUE) 103, 119 (2014).

<sup>74.</sup> See Marcus Hedahl, Directional Climate Justice: The Normative Relationship Between Moral Claim Rights and Directed Obligations, 5 J. HUM. RTS. & ENV'T (SPECIAL ISSUE) 35, 35–36 (2014).

<sup>75.</sup> See, e.g., Maxine Burkett, Justice and Climate Migration, in CLIMATE REFUGEES: BEYOND THE LEGAL IMPASSE? 73, 84 (Simon Behrman & Avidan Kent eds., 2018) [hereinafter Burkett, Justice and Climate Migration]; Christina Voigt & Evadne Grant, *The Legitimacy of Human Rights Courts in Environmental Disputes*, 6 J. HUM. RTS. & ENV'T 131, 132–33 (2015).

<sup>76.</sup> Ramji-Nogales, supra note 35, at 614.

<sup>77.</sup> Id. at 618-19.

<sup>78.</sup> Achiume, supra note 3, at 1573.

Carmen Gonzalez argues for migration as reparations<sup>79</sup> and builds out proposals akin to earlier propositions from Professor Michael Gerrard, who in a 2015 editorial suggested that countries take responsibility for addressing climate-induced migration proportional to their historical contribution to global carbon emissions.<sup>80</sup>

#### V. ROOT AND BRANCH

To guarantee nonrepetition, the answer is not simply, "do not use fossil fuels again!"—as incredibly important and indispensable as that is. The initiating actions (and their underlying logic) that we seek not to repeat are more deeply rooted. In the context of the larger divide that has defined rich and poor, Global North/South, and the West and everyone else, economic anthropologist Jason Hickel, for example, has provided a critical through line, from root to branch, worth considering.<sup>81</sup> The impacts of enslavement, colonialism, and their aftermath allowed a small cohort to grow through accessing much greater resources, including human and natural bodies. In his book *The Divide*, Hickel reminds the reader that in the year 1500, there was no appreciable difference in incomes and living standards between Europe and the rest of the world.<sup>82</sup>

In sum, the divide between rich countries and poor countries is neither natural nor inevitable. Europe's development was built upon colonial exploits, with devastating knock-on effects for the colonized people and places.<sup>83</sup> Structural adjustment came on the heels of a brief postcolonial period and is widely acknowledged by scholars as one of the greatest single causes of poverty in the Global South, after colonialism.<sup>84</sup> In 2012, aid to developing countries totaled two trillion dollars, but approximately five trillion dollars flowed out of the Global South in the same year, through debt payment, foreign investor profits, payment to foreign patent owners, capital flight, and unequal exchange.<sup>85</sup> Hickel explains:

The charity paradigm obscures the real issues at stake: it makes it seem as though the West is 'developing' the global South when in reality the opposite is true. Rich countries aren't developing poor countries; poor countries are effectively developing rich countries—and they have been since the late [fifteenth] century.<sup>86</sup>

In short, Hickel is saying "Poor countries don't need our aid; they need us to stop impoverishing them."<sup>87</sup>

Similarly, and relevant to climate change, poor countries do not necessarily need more international environmental law; they need us to do less harm. They need us to pore

<sup>79.</sup> Gonzalez, supra note 3, at 403-04.

<sup>80.</sup> Michael B. Gerrard, Opinion, America Is the Worst Polluter in the History of the World. We Should Let Climate Change Refugees Resettle Here., WASH. POST (June 25, 2015), http://www.washingtonpost.com/ opinions/america-is-the-worst-polluter-in-the-history-of-the-world-we-should-let-climate-change-refugees-rese ttle-here/2015/06/25/28a55238-1a9c-11e5-ab92-c75ae6ab94b5\_story.html [https://perma.cc/GJ4Z-8QLX].

<sup>81.</sup> See JASON HICKEL, THE DIVIDE: GLOBAL INEQUALITY FROM CONQUESTS TO FREE MARKETS (2017).

<sup>82.</sup> See id. at 64.

<sup>83.</sup> See id. at 66–73.

<sup>84.</sup> See id. at 22.

<sup>85.</sup> See id. at 25.

<sup>86.</sup> Id. at 29.

<sup>87.</sup> Id. at 31.

over the laws and related governance regimes of international trade and the conduct of multinationals, for example, and expunge those that further accelerate climate and racial crises. They need us to press domestic lawmakers to develop temporary and oft-times fickle or arbitrary protection regimes<sup>88</sup> into predictable pathways to access and integrate into new states and nation-states. They need us to ensure that environmental agencies have as much ability to determine public policy as the treasuries. Indeed, they need us to break down the actual and conceptual isolation of ecological limits and "environmental" laws from the crafting of commercial laws, which are the most impactful on the places we live, work, and play.

Hickel also shares a hopeful understanding of the stamina of mythology, such as the notion that the Anthropocene was inevitable,<sup>89</sup> no matter which set of humans were at the helm. He explains: "Anthropologists tell us that when the structure of a core myth begins to change, everything else about society changes around it, and fresh new possibilities open up that weren't even thinkable."<sup>90</sup> Another myth inextricably intertwined and similarly deserving of close attention is that our fortune is not interlinked with the living planet. Our perceived distance from nature reflects a crippling dualism in our understanding, one that is cleverly rebuffed by youth climate strikers who declare that we are not activists defending nature: "We Are Nature Defending Itself."<sup>91</sup>

This is not just rhetorical play as the dualist lens also hampers our ability to diagnose the problem and therefore prescribe appropriate solutions. We see a great example of this in the climate change and increased conflict context. A significant 2019 study found that climate change is only a modest contributor to armed conflict since World War II,<sup>92</sup> and the researchers cited factors such as "low socioeconomic development, low state capacity, and intergroup inequality emerging as vastly more consequential."<sup>93</sup> However, one member of the team of the leading climate experts, Cullen Hendrix, asserted in hindsight that they may be "massively underestimating" the impacts of climate change on armed conflict because standard methodologies fail to

<sup>88.</sup> See, e.g., Continuation of Documentation for Beneficiaries of Temporary Protected Status Designations for El Salvador, Haiti, Nicaragua, Sudan, Honduras, and Nepal, 85 Fed. Reg. 79,208 (Dec. 9, 2020); Jacqueline Charles, Activists Call on Biden to Issue a New TPS for Haitians as Nation's Turmoil Deepens, MIAMI HERALD (Mar. 22, 2021, 5:52 PM), http://www.miamiherald.com/news/nation-world/world/americas/ haiti/article250119774.html [https://perma.cc/N5C6-8LUP]; Hannah Knowles, Reports that U.S. Won't Offer Bahamians 'Protected Status' While Islands Recover Don't Surprise Experts, WASH. POST (Sept. 11, 2019, 11:02 PM), http://www.washingtonpost.com/immigration/2019/09/12/reports-that-us-wont-offer-bahamians-protected-status-while-islands-recover-dont-surprise-experts/ [https://perma.cc/SM9Q-23XT].

<sup>89.</sup> See HICKEL, supra note 81, at 13–17; see also Burkett, Justice and Climate Migration, supra note 75, at 84.

<sup>90.</sup> HICKEL, *supra* note 81, at 13.

<sup>91.</sup> Jonathan Davis, *We Are Nature Defending Itself*, WILD OPEN (July 26, 2019), http://www.wildopen.net/we-are-nature-defending-itself/ [https://perma.cc/H9DE-BR8D]; *see, e.g.*, Maxine Burkett, *Climate Disobedience*, 27 DUKE ENVTL. L. & POL'Y F. 1, 3 (2016); Matt McDonald, *The 'Climate Games' Aren't Just Activist Stunts-They're Politics Beyond the UN*, CONVERSATION (Dec. 9, 2015, 6:06 AM), http://theconversation.com/the-climate-games-arent-just-activist-stunts-theyre-politics-beyond-the-un-51872 [https://perma.cc/4UTX-4X3P].

<sup>92.</sup> Katharine J. Mach et al., Climate as a Risk Factor for Armed Conflict, 571 NATURE 193, 193–94 (2019).

<sup>93.</sup> Hendrix, supra note 34.

explore and incorporate the pathways through which climate change affects key factors not deemed as strictly environmental.<sup>94</sup>

Taking their review of Kenya as an example, Hendrix later noted that the researchers "have focused more attention on comparing Kenya in times of drought to Kenya in times of heavy rains than asking whether the vast differences in socioeconomic development and state capacity across the world are in part attributable to climatic conditions."<sup>95</sup> He asks, "Low socioeconomic development and low state capacity are two factors most associated by climate-conflict scholars with armed conflict, surpassing by a large margin factors like climate change and physical geography. But what if socioeconomic development and state capacity are themselves products—at least in part—of climatic conditions?"<sup>96</sup> Here, the compartmentalization of the environment is evident in social science research.

The effect of compartmentalization on the ability to forecast future vulnerabilities is not only salient but also potentially dangerous. Failing to see these linkages in the first place belies a broad blind spot in the research, which mirrors blind spots that are pervasive across numerous disciplines. The law reflects a similar preference for clear domains, which hinders effective responses to systemic challenges like structural racism or environmental change. In short, I maintain, the root causes of the climate crisis are the collision of this dualism, which compartmentalizes and degrades the environment, and racial hierarchy and subjugation.

#### VI. CONCLUDING THOUGHTS

Because I am nearing the end of a climate talk, I am compelled to end on a hopeful note. But I eschew tales of windmills or vast fields of solar arrays here, though they and energy justice generally are incredibly important. Instead, I want to emphasize that the "intellectual technology" also already exists—there are alternative paradigms.

Numerous rights discourses and critical legal theories have highlighted these inequities and forwarded elegant and longstanding alternatives. The principles that are the most just for the worst off, including the nonhuman natural world, are embraced and articulated by the literatures on traditional knowledge and indigenous legal orders, earth jurisprudence, environmental justice, and Third World Approaches to International Law.<sup>97</sup> Although these discourses may appear a radical departure from current sociolegal structures, they may, nonetheless, be mandated by those seeking justice in our climate-constrained world.

Because the climate crisis is a uniquely time-bound struggle, a *full* articulation of those new structures will likely not come in time. I think we will be building the solar plane as we fly it, if you will. On that front, there is some hopeful news. The Biden administration has signaled a clear-eyed understanding of the urgency of the crisis and has also outlined priorities and specific intentions regarding even the more contentious

<sup>94.</sup> Id.

<sup>95.</sup> Id.

<sup>96.</sup> Id.

<sup>97.</sup> Burkett, Behind the Veil, supra note 7, at 485–91; see also Makau Mutua, What Is TWAIL?, 94 PROC. AM. SOC. INT'L L. ANN. MEETING 31, 31 (2000).

elements of climate disruption, such as climate migration.<sup>98</sup> The Biden administration's February 4, 2021, executive order was such a seismic development.<sup>99</sup> It is an order to rebuild and enhance programs to resettle refugees and plan for the impact of climate change on migration.<sup>100</sup> It understands the issue as one relevant beyond the levers of force, such as the tasks under the purview of the Department of Defense and Department of Homeland Security, but also those of diplomacy and collaboration, through the efforts of the Department of State and United States Agency for International Development.<sup>101</sup> Among other things, the executive order specifically asks for a report on: "[O]ptions for protection and resettlement of individuals displaced directly or indirectly from climate change" and "opportunities to work collaboratively with other countries, international organizations and bodies, non-governmental organizations, and localities to respond to migration resulting from climate change."<sup>102</sup>

For those of us who have been working in this field for years, this is as close to a game changer as it gets. It is a whole of government approach. It understands that challenges can be a space for deep coordination and partnership, and it encourages a thinking that is beyond fear and opens up the possibility for innovative and rights-oriented decisionmaking. Further, key voices within the Biden administration have affirmed the fundamental relevance of climate change to international agreements, institutions beyond the Paris Agreement, international environmental law generally, as well as all elements of foreign policy.<sup>103</sup>

The importance of this perceptual shift is difficult to overstate. The byproduct of that shift signals, at minimum, a possible evolution in the legal and policy systems and infrastructure that, depending on the speed with which they develop, may well ensure vibrancy and resilience.

<sup>98.</sup> *See, e.g.*, Rebuilding and Enhancing Programs To Resettle Refugees and Planning for the Impact of Climate Change and Migration, Exec. Order No. 14,013, 86 Fed. Reg. 8839 (Feb. 4, 2021); Tackling the Climate Crisis at Home and Abroad, Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

<sup>99.</sup> See Exec. Order No. 14,013, 86 Fed. Reg. 8839.

<sup>100.</sup> Id.

<sup>101.</sup> See id. at 8843.

<sup>102.</sup> Id. at 8844.

<sup>103.</sup> See Susan Biniaz, 'Multilaterialism,' the Climate Challenge, and the (Greater Metropolitan) Paris Agreement, in 21ST CENTURY DIPLOMACY: FOREIGN POLICY IS CLIMATE POLICY 89, 91 (Alexander Carius et al. eds., 2020).