Seeing Beyond the Dollar Signs: The Need for Intersectional Climate Change Policy

BRITTANEY KEY

WRITER'S COMMENT: *This paper on climate change policy was written as part of a group project on climate justice. In this paper, I chose to structure my work around case studies selected from multiple scales of government that illustrated variations of the same problem of focusing on single elements (usually economic disparities) rather than taking a "whole-picture" approach. I critique this pattern not only in policymakers but in academics as well, whose work policymakers may rely on to inform their decisions. Some of the examples I discussed were to connect my paper to course materials as required; however, I specifically included the disparate topics of indigenous peoples and infectious diseases to illustrate the widespread applicability of the shortcomings of a one-dimensional perspective. I also have a background in those two areas, and so I wanted to connect, however indirectly, the push for intersectionality and representation in the social sciences with the push for a One Health approach in the health sciences.*

INSTRUCTOR'S COMMENT: *Brittaney ends her powerful essay on the theories and histories of climate justice with this ringing endorsement of the power of research: "The combination of advocacy of social movements and empirical evidence and analysis from research can create a powerful force to inform and shape more equitable future climate change policy." This essay, written for my CRD 149 Environmental Justice and Community Development course, exemplifies Brittaney's approach to scholarship: theoretically sophisticated, empirically rich, and skillfully communicated. She*

explores the complex realm of environmental ethics with a careful eye to questions of race and racism, colonialism, capitalism. Brittaney pays special attention to the position and plight of indigenous peoples confronting the existential threats of loss of territory and land-based life ways with limited political agency in a system that rarely recognizes their sovereignty and ecological wisdom. She also highlights the leadership roles that young people are playing in climate justice movements, including suing the federal government for not protecting fundamental Constitutional and human rights through mitigating climate change. Brittaney has distinguished herself as a rising scholar with a clear vision of applying her skills for social and environmental justice. She gives me hope for our future.

—Jonathan London, Department of Human Ecology

Awareness of global warming and climate change has built slowly over a century and a half, beginning with the introduction of the "greenhouse effect" by physicist Joseph Fourier in 1824 and chemist Svante Arrhenius's hypothesis in 1896 that industrial-scale coal burning would enhance this effect, to the first alarms raised in 1938 by engineer Guy Callendar that global temperature increases were coinciding with increased CO_2 emissions (BBC 2013). While Callendar's claims were not taken seriously at the time, scientists returned to investigate the issue in the 1950s, and in the 1970s, the environmental movement lent greater public support and urgency to researching climate (Weart 2012). As technology improved and scientists could conduct more sophisticated research of the global climate system, alarming findings began to accumulate, and many climate scientists became convinced that the greenhouse effect was occurring and would continue into the future. Then, in 1988, the world saw its hottest year on record at the time, and the public began to take greater interest in climate scientists' concerns (Weart 2012). As a result, climate change also entered international political discourse at this time. The Intergovernmental Panel on Climate Change (IPCC) was formed in 1988 to investigate climate change and its potential impacts, releasing its first report in 1990, and the first calls for a global treaty on climate change were from UK Prime Minister Margaret Thatcher in 1989 (BBC 2013).

Since the IPCC released its first report on global warming in 1990, discussion of CO_2 emissions and global climate change has included rudimentary issues of equity and fairness in partitioning responsibility (Coventry & Okereke 2018). The United Nations Framework Convention on Climate Change (UNFCCC) brought special attention to this by designating the principle of "common but differentiated responsibility" in addressing climate change. However, while it is clear that responsibility for climate change is not evenly distributed across the globe, there continues to be ethical and political debate over the most equitable way to divide accountability for climate change and the burden of reducing CO_2 emissions. There are multiple ways of examining countries' *ability* and *obligation* to respond to climate change, including: historic largest CO_2 emitters; present-day largest absolute CO_2 emitters; largest per capita emitters; countries with the most financial/technological resources to address climate change; and countries that will be most affected by rising sea levels, increased temperatures, and severe weather. That there is not always overlap between the two—that is, between ability and obligation—adds to the complexity of resolving climate equity issues (Coventry & Okereke 2018). However, from the international to the local level, certain sociopolitical determinants are often given greater recognition than others in climate policy discussions, and this lack of intersectionality can lead to unjust and even fatal impacts. Focusing first on the shortcomings of international climate policy, I will then show how its themes of neglect of marginalized populations are repeated in domestic US climate policy and even health policy, which typically has a better record of holistic analysis. However, just as scientific research and social movements led to the introduction of climate change into public policy, these failings of current policy can also be remedied by increased intersectionality in the research which informs policy decisions, and continued pressure from ongoing social movements, which often have intersectionality at their core.

The most common factor in analyzing countries' "differentiated responsibility" has been economic, with a general division between developed and developing countries (Coventry & Okereke 2018). This method is accepted for two reasons. First, developing countries are understood to have different CO_2 emission needs than developed

countries, because while the latter have already industrialized and achieved a high standard of living, the former are currently trying to industrialize to obtain that same standard, so allotted CO_2 budgets and reduction measures must account for that. And second, developed countries have greater resources and technology to innovate solutions to climate change and switch to clean energy, and also have greater economic capacity to absorb the burdens of reducing reliance on fossil fuels. In this case, policy debates tend to revolve around what obligations should be imposed on rising economies such as India and China, who are large absolute emitters but fall in a transitional "grey" zone between developed and developing. This is indeed a heated area of contention that led to dramatic outcomes with the first attempt at an international climate treaty, the 1997 Kyoto Protocol, when the US Senate rejected the agreement outright and refused to ratify it because of China and India's inclusion among "developing" nations, and its corresponding exclusion from the enforcements placed on industrialized countries (Coventry & Okereke 2018).

Controversy aside, however, this focus on current economic distinctions fails to account for other sociopolitical factors which impact the question of climate justice, particularly race and colonial history. As Philip Coventry and Chukwumerije Okereke (2018) explain, "Developed countries have amassed a great 'ecological debt,' which articulates the reparations owed by the developed world to the developing for generations of exploitative resource extraction and use, international trade, and environmental damage." While they rely again on economic language here, "developing" and "developed" can be thought of as, respectively, proxies for traditionally people of color/colonized countries and traditionally white/historically colonizing countries (although, admittedly, such generalizations overlook differences within countries). Recognizing this racial component is important if climate policy is to be truly equitable because it would also acknowledge both the historical and contemporary responsibility that developed countries have to bear for the current Global North/South divide that exists (Coventry & Okereke 2018). The impact of colonialism on modern-day economic underdevelopment is a clear example of what Laura Pulido (1996) has explained as the entwinement of race and class, and the *continued* underdevelopment of the Global South is compounded by what Daniel Faber (2008) calls the "export of ecological hazard," where developed

countries "impose a growing environmental burden on weaker states." We can also recognize the latter as a component of racial capitalism, whereby poorer communities (or nations) of color are "*selectively victimized* to the greatest extent by corporate environmental abuses" because of the relative ease in polluting and degrading the less regulated, politically weaker Global South countries (whose condition as such is also a result of neoliberal pressures which create a political environment more vulnerable to exploitation) (Faber 2008).

This environmental and capitalist racism extends beyond the macro-international level to impact different sociopolitical populations within countries, too. When these differences are shared transnationally, they may become visible on and affect the international stage. One example of this is the struggle of indigenous peoples around the globe to receive recognition and protection of their cultural, political, environmental, and human rights. With regards to climate justice, indigenous peoples are particularly vulnerable because they "usually occupy marginal and remote areas, such as small islands, coastal plains, mountain areas, and drylands, that are exposed to adverse environmental effects" which are being exacerbated by climate change (Macchi et al. 2008, as cited in Collins 2016). However, despite their large stake in the outcome of global climate change efforts, they have faced great difficulty in participating in climate treaty negotiations (Leaness 2017). For example, it was not until after the UN passed its Declaration on the Rights of Indigenous Peoples in 2008 that indigenous peoples' demands to be included in the UNFCCC were finally met—and yet, "even as participation in the UNFCCC grows, Indigenous peoples are routinely left out of global agreements" (Leaness 2017).

Even in the most recent climate negotiations, the 2015 Paris Agreement, the inclusion of indigenous peoples was mixed at best. The International Indigenous Peoples' Forum (IIPF), representing over 300 indigenous communities from around the world, was granted entrance to the Paris negotiations, but in a more limited capacity (the "Green Zone") than was afforded the diplomats, leaders, and "celebrity environmentalists" present (the "Blue Zone") (Collins 2016; Leaness 2017). However, the IIPF was given the largest pavilion space in the Green Zone, and "garnered attention from high profile politicians, including presidents and prime ministers" (Leaness 2017). While this could count as a victory, the reality is still that, despite symbolic acknowledgement of

the "importance of 'indigenous' or 'traditional' knowledge in promoting sustainable lifestyles, conserving biodiversity, and understanding the planet and its behaviors," it remains a symbol only, and a weak one at that (Collins 2016). Protection of indigenous peoples' rights and respect for the critical role of their knowledge in adapting to climate change was either absent from the treaty or vaguely included with non-binding language (Collins 2016). Furthermore, even the agreement's end results for mitigating climate change were often non-binding, meaning that indigenous peoples—those with some of the most at stake under climate change—were unable to have a say in preventing this outcome, and as a result, still face cultural and survival threats from the effects of climate change. This also demonstrates why self-representation is an important principle in environmental justice—not only because it is considered a right of the people to have a say in decision-making processes that affect them, but also because it is necessary to ensure that their concerns are being met (First National People of Color Environmental Leadership Summit 1991). Evidently, this did not happen in the Paris Agreement, and given indigenous peoples' extreme vulnerability as a result of their historical exploitation and continued marginalization, their exclusion from participating in and from the language of climate treaty negotiations is an exceptional perpetuation of these injustices.

I now turn to climate policy in the United States, an important focus for climate justice given that the US is the world's second-largest CO_2 emitter (United States Environmental Protection Agency 2017). Currently, the US is under particular scrutiny for climate injustices because climate policy in itself is facing significant opposition. The current federal administration has focused extensively on rolling back regulations on greenhouse gas emissions, and even in the legislative branch, acknowledging the existence of anthropogenic climate change, much less passing climate policy, has become a partisan issue and has stalemated in Congress (Bookbinder 2017). This lack of policy itself is, in fact, an issue of climate justice. For example, in 2004, the Black Congressional Caucus released a report called *African Americans and Climate Change: An Unequal Burden*:

> [It] clearly focused on the claim that the impacts of climate change would fall disproportionately on already vulnerable populations. . . .

> African-Americans were already seen as disproportionately burdened by the health effects of climate change, including deaths during heat waves and from increased air pollution. Unemployment and economic hardship associated with climate change would also fall most heavily on the African-American community. (Schlosberg & Collins 2014)

Just as the inadequacy of the Paris Agreement to enforce reduction in CO_2 emissions is an injustice against indigenous peoples and others vulnerable to climate change, the United States' federal policy failure to take up climate change mitigation is a parallel injustice against marginalized communities. Given the unwillingness of the federal executive and legislative branches to take climate change seriously, environmentalists and environmental justice advocates are turning to the final branch of government, the courts, to force action and remedy these harms (Bookbinder 2017). One potentially landmark case currently underway is *Julianna v. United States*—a suit against the federal government being led by 21 youth plaintiffs, ages 8 to 19 at time of filing, alleging that the government has violated their fundamental rights to life, liberty, and property by failing to ensure a continued stable climate (Our Children's Trust 2015). This case was actually filed in 2015 under the Obama administration, but it has taken on special significance in the political environment of the Trump administration.

Despite obstacles on the federal level, the US federalism system means that states may also take up climate change policy, and in this regard, California has long been a progressive leader (London, Karner, Sze, Rowan, Gambirazzio, & Niemeier 2013). For example, in 2006, California passed the Global Warming Solutions Act (AB 32), which "went far beyond any other state or the nation at the time of its passage" and was even crafted with environmental justice values in mind. Representation and involvement of low-income and minority communities in an Environmental Justice Advisory Committee to the California Air Resources Board (CARB), the inclusion of a Community Empowerment Amendment in the bill, and mandates for CARB to consider impacts of regulations on marginalized communities were all provisions of AB 32. Nevertheless, AB 32 provides a cautionary tale for prematurely declaring success at the passing of a bill, as there were issues that followed in AB 32's implementation. The majority of the conflict between environmental justice advocates and the state government

occurred over the state's prioritization of a greenhouse gas emissions cap-and-trade program (and of market mechanisms in general) over regulatory "command and control" measures, the former of which advocates were concerned might "shift . . . the spatial distribution of dirty industries toward communities with less economic and political resources to resist" (London et al. 2013). This is a quintessential environmental justice concern, but given corporations' history of disproportionately polluting marginalized communities, it is a warranted one. The challenge going forward with pursuing additional progressive policies like AB 32 will be finding ways of balancing the state's neoliberal tendencies with social justice goals through both policy creation *and* implementation process (London et al. 2013).

The final realm of climate justice I will address is health policy. Climate change is expected to impact human health in a number of ways, including increases in heat-related illnesses and death from rising temperatures, increased prevalence of asthma from air pollution, injury and death from more frequent and intense severe weather, and greater spread of vector-borne diseases (VBDs) like malaria and dengue fever from increased habitat range of disease carriers (vectors) like mosquitoes (Center for Disease Control [CDC] 2016). In response, public health organizations like the CDC have focused on predicting health vulnerabilities to climate change and assisting public officials in devising adaptation plans to preempt and prepare for these possibilities. For example, the CDC has developed a "Building Resilience Against Climate Effects" (BRACE) framework which "allows health officials to develop strategies and programs to help communities prepare for the health effects of climate change" (CDC 2015). It includes a five-step plan for assessing the public health burden across different populations and creating an effective climate and health adaptation plan. For assessing vulnerability, the CDC (2015) also provides a comprehensive guide which includes advice on ensuring that diverse impact factors of health, such as income, age, education, race, and spatial distribution, are accounted for.

However, public officials also rely on existing scientific research to inform their policy decisions, and so their ability to assess health vulnerabilities will only be as good as their data. While some climate-related diseases, such as heat illnesses, are remarkably well-researched and

have lots of existing intersectional research, the same does not apply for all climate health impacts. For example, VBDs are of particular concern, not only because climate change will likely increase vector geographic range, but also because it is expected to speed up both pathogen and vector life cycles (i.e. reproduction occurs sooner and more frequently) (Bardosh, Ryan, Ebi, Welburn, & Singer 2017). Similar to international climate policy, the scientific literature on VBDs and climate change has proven adept at analyzing the connections between poverty and the risk of exposure to vectors and the vector's geographic range, but has paid far less attention to other sources of vulnerability (Bardosh et al. 2017; Chang, Fuller, Carrasquillo, & Beier 2014; Meason & Paterson 2014). Possible differences across lines of gender, race, ethnicity, and other social categories have been largely ignored in favor of the broader examination of economic class. For example, from a comprehensive review of literature on VBDs and climate change, only one study discussed gender differences—in this case, regarding differential exposure risks to Chagas disease in a Mexican community—while one study focused on the extreme vulnerability of an ethnic minority in Panama to malaria (Bardosh et al. 2017; Valdez-Tah, Huicochea-Gómez, Ortega-Canto, Nazar-Beutelspacher, & Ramsey 2015; Amarilis Hurtado, Cáceres, Fernando Chaves, & Calzada 2014). This dearth of intersectional research on VBDs means that differential exposure risks and other vulnerabilities are largely unknown, which means that said differences in climate change exacerbations of VBDs are also unknown and cannot be incorporated into policy planning. While different in topic, if not in effect, the potential dangers of this type of oversight were exemplified in Hurricane Katrina, when New Orleans' disaster evacuation plans did not account for the differential needs of disabled residents and who faced disproportionately high impacts as a result (Frieden 2006).

As we can see, patterns of oversight in policy exist on all scales of government, and analysis of inequities tends to favor only economic differences. In critiquing this omission, I do not seek to blame policy makers and researchers, but it does illustrate how social actors and processes can participate in and contribute to racial hierarchies and discrimination without intending to do so (Pulido 1996). Public policy exists not in a vacuum, but rather in concert with academia and social movements. Greater awareness of intersectionality in the science and climate policy research, such as exhibited by the CDC's BRACE guidelines, and pressures

from intersectional social movements such as Black Lives Matter, help to bring awareness to policy makers of these differential vulnerabilities and burdens. Moving forward, the combination of advocacy of social movements and empirical evidence and analysis from research can create a powerful force to inform and shape more equitable climate change policy.

Works Cited

Amarilis Hurtado, L., Cáceres, L., Fernando Chaves, L., & Calzada, J. E. (2014). When climate change couples social neglect: malaria dynamics in Panamá. *Emerging Microbes & Infections*, *3*(5), e28.

Bardosh, K. L., Ryan, S. J., Ebi, K., Welburn, S., & Singer, B. (2017). Addressing vulnerability, building resilience: community-based adaptation to vector-borne diseases in the context of global change. *Infectious Diseases of Poverty*, *6*(1), 166-186.

Bookbinder, D. (2017). How Trump's reckless climate policy invites a judicial backlash. *Vox*. https://www.vox.com/the-big-idea/2017/12/11/16759208/trump-climate-policy-courts-juliana-public-nuisance-lawsuits.

British Broadcasting Company. (2013). A brief history of climate change. http://www.bbc.com/news/science-environment-15874560.

Center for Disease Control. (2016). Climate Effects on Health. *U.S. Department of Health and Human Services*. https://www.cdc.gov/climateandhealth/effects/default.htm.

Center for Disease Control. (2015). CDC's building resilience against climate effects (BRACE) framework. *U.S. Department of Health and Human Services*. https://www.cdc.gov/climateandhealth/BRACE.htm.

Chang, A. Y., Fuller, D. O., Carrasquillo, O., & Beier J. C. (2014). Social justice, climate change, and dengue. *Health and Human Rights Journal*, *16*(1), 93-104.

Collins, B. (2016). Sidelined at the summit: Indigenous peoples ignored in the 2015 Paris climate change agreement. *Carnegie Council for*

Ethics in International Affairs. https://www.carnegiecouncil.org/publications/ethics_online/0113.

Coventry, P. & Okereke, C. (2018). Climate change and environmental justice. In R. Holifield, J.

Chakraborty, & G. Walker (Eds.), *Routledge handbook of environmental justice* (pp. 362-373). New York, NY: Routledge.

Faber, D. (2008). Introduction: The polluter-industrial complex & Chapter one: Not all people are polluted equal. In *Capitalizing on environmental injustice: The polluter-industrial complex in the age of globalization* (pp. 3-55). Lanham, MD: Rowman & Littlefield Publisher, Inc.

First National People of Color Environmental Leadership Summit. (1991). The principles of environmental justice.

Leaness, J. (2017). Chapter 1: Vulnerability and the voice of indigenous peoples through the lens of climate change policy. In K.E. Peterman, G.P. Foy, & M.R. Cordes (Eds.), *Climate change literacy and education: Social justice, energy, economics, and the Paris agreement* (pp. 1-11). Web: American Chemical Society.

London, J., Karner, A., Sze, J., Rowan, D., Gambirazzio, G., & Niemeier, D. (2013). Racing climate change: Collaboration and conflict in California's global climate change policy arena. *Global Environmental Change*, *23*(4), 791-799.

Meason, B. & Paterson, R. (2014). Chikungunya, climate change, and human rights. *Health and Human Rights*, *16*(1), 105-112.

Pulido, L. (1996). A critical review of the methodology of environmental racism research. *Antipode*, *28*(2), 142–159.

Our Children's Trust. (2015). America's youth file landmark climate lawsuit against U.S. government and president. https://static1.squarespace.com/static/571d109b04426270152febe0/t/575adceb4c2f8523de7286a2/1465572588513/15.08.12FederalClimateLawsuitPressRelease.pdf.

Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: climate change and the discourse of environmental justice. *Wiley Interdisciplinary Reviews: Climate Change*, *5*(3), 359-374.

United States Environmental Protection Agency. (2017). Global greenhouse gas emissions data. Retrieved from https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data.

Valdez-Tah, A., Huicochea-Gómez, L., Ortega-Canto, J., Nazar-Beutelspacher, A., & Ramsey, J. M. (2015). Social representations and practices towards triatomines and Chagas disease in Calakmul, México. *PLoS One*, *10*(7), e0132830.

Weart, S. (2012). The discovery of global warming [excerpt]. *Scientific American*. Retrieved from https://www.scientificamerican.com/article/discovery-of-global-warming/.