COMMENTARY

Beyond Climate Isolationism: a Necessary Shift for Climate Justice

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Abstract
Purpose of Review This review explores how more transformative climate policies are emerging arguing that such policies require decision-makers to move beyond the dominant, narrow technocratic lens that I call climate isolationism.
Recent Findings Climate isolationism refers to the common framing of climate change as an isolated, discrete, scientific problem in need of technological solutions. Stemming from dominant assumptions of patriarchal white-male conceptions of privilege and power, climate isolationism has not only been ineffective in responding to the climate crisis and mobilizing transformative change but it has also resulted in climate and energy programs, policies, and priorities that exacerbate inequities and perpetuate economic and racial injustice.
Summary This paper reviews the inadequacy and dangers of climate isolationism, explores why climate justice provides an alternative more effective framing, and calls for more intentional consideration of power and power dynamics in climate decision-making to shift from climate isolationism to climate justice.

Keywords Climate justice · Climate policy · Climate science · Climate action · Climate decision-making · Energy democracy

"Climate change is not the problem"
- Colette Pichon Battle

Introduction: The Inadequacy of Climate Isolationism

As the climate crisis worsens and continues to reveal stark injustices and inhumane inequities in society, the evidence suggests that our decision-making and policy processes have resulted in ineffective and inadequate responses in both climate mitigation [73] and climate adaptation [39]. The systemic, transformative changes that are needed to end fossil fuel reliance and to invest in supporting the most vulnerable people and communities have not yet been prioritized. A key contributor to the insufficient actions taken so far toward a more just and sustainable future is the fact that climate decision-making has been all-too-often constrained within a narrow technocratic lens which I call “climate isolationism” [63, 64]. I have coined this term to characterize the common framing of climate change as an isolated, discrete, scientific problem in need of technological solutions. Decision-makers working within a lens of climate isolationism often focus in a quantitative way on carbon reductions, greenhouse gas emissions, and temperature changes while inadvertently ignoring the societal complexities and social injustices associated with these quantitative measures [30].

This narrow technocratic lens is prevalent in decision-making around both climate mitigation and climate adaptation. When climate isolationism is applied to climate mitigation, decarbonization is usually the goal [26], carbon accounting is the primary metric, and incentives and costs of a variety of different mitigating technologies are often projected and compared [5]. When climate isolationism is applied to climate adaptation, a disproportionate focus on investing in technical infrastructure (i.e., sea walls and drought-resistant crops) often detracts attention and investment from social innovation and social changes that could enhance climate resilience [59].

This paper reviews the inadequacy and dangers of climate isolationism, explores why climate justice provides
an alternative more effective framing, and calls for more intentional consideration of power and power dynamics in climate decision-making to shift from climate isolationism to climate justice. This review is based on a US-based perspective with potential for global application.

The Dangers of Climate Isolationism

Climate isolationism is dangerous because it is exclusive and ineffective in advancing the transformative social change that is needed to reduce the suffering of climate change. A review of the literature on public perception of low carbon technologies reveals that the narrowness of climate isolationism results in limited opportunities for people to connect and that interest and awareness about these technologies are constrained [55].

The technocratic focus limits public discourse because it excludes people for whom these abstract, scientific terms, or the technological details may not be meaningful and it makes the challenge seem distant and unapproachable [63]. Not only does the very technical way of discussing climate change resonate with only a small subgroup of society, it also often projects the need for sacrifice and hardship rather than highlighting benefits and opportunities [54]. Climate isolationism is also exclusive because many proposed technological “solutions” are also expensive and perceived as options that are only accessible to the rich. Driving a Tesla electric vehicle, for example, is not an option for most people, so the focus on this technological innovation results in many people feeling disempowered and disengaged [68].

This disempowerment is compounded by science and engineering fields that continue to be dominated by white men [78]. Despite efforts to diversify science and engineering, persistent racial, gendered, and economic injustices of our economy and our educational systems perpetuate excluding, persistent racial, gendered, and economic injustices of men [78]. Participating in our economy and our educational systems perpetuate excluding, persistent racial, gendered, and economic injustices of men [78]. Despite efforts to diversify science and engineering, persistent racial, gendered, and economic injustices of our economy and our educational systems perpetuate excluding, persistent racial, gendered, and economic injustices of men [78]. Despite efforts to diversify science and engineering, persistent racial, gendered, and economic injustices of our economy and our educational systems perpetuate excluding, persistent racial, gendered, and economic injustices of men [78].

Wealth and Power

Climate isolationism limits public discourse and constrains the voices of diverse constituents, this is a part of larger trend of people and communities being disempowered to be involved in policy decision-making [54, 56], especially when they are perceived as scientific issues [42]. For decades, strategic governmental responses to the climate crisis have been focused almost exclusively on investments in science and technology [61], while very little has been invested in social innovation. Some examples of social innovations include cooperative ownership of businesses, non-extractive finance like zero-interest, negative interest, or low-interest loans, and community-based initiatives to support the provisioning of local and regionally appropriate energy, food, and other essentials.

How Climate Isolationism Concentrates Wealth and Power

By focusing almost exclusively on technological innovation, climate isolationism obfuscates the potential for transformative social change and diminishes the priority of investing in climate resilient innovations that simultaneously advance social justice [31]. Climate isolationism limits public discourse and constrains the voices of diverse constituents, this is a part of larger trend of people and communities being disempowered to be involved in policy decision-making [54, 56], especially when they are perceived as scientific issues [42].

The persistence of the narrow climate isolationism perspective has been beneficial for the polluter elite, those wealthy individuals, and organizations that do not want transformative change because they are profiting from fossil fuel reliance and exploitative corporate business practices [38]. Climate denialism, which has been supported by fossil fuel interests and the polluter elite, has also required climate decision-makers to spend a lot of time and energy defending what is known about the science of climate change [51].
The polluter elite’s decades-long strategic misinformation campaign to confuse the public about the science of climate change has been an effective delay tactic [22]. The prevalence of climate denialism has confined climate discourse to the scientific realm and limited options for non-scientific discourse about how to respond to the climate crisis and reduce climate vulnerabilities.

Continuing to increase investment in technological innovation while underinvesting in social innovation is preventing the transformative changes that are required both for stabilizing the climate and for reducing social injustice. So, not only does climate isolationism result in missed opportunities to advance social and economic justice, but it also results in insufficient environmental protection [31].

One example of the dangerous implications of climate isolationism and how it contributes to concentrating wealth and power is the recent increased interest in investing in solar geoengineering research [71]. The National Academies recently released a report providing recommendations for advancing research on solar geoengineering, which is a technological intervention in the climate system that involves spraying aerosols into the atmosphere to block incoming solar radiation [49]. Once on the fringes of climate policy, solar geoengineering is gaining traction, particularly in the USA, where some are calling for substantial public investments in solar geoengineering research [49]. The ultimate “technical fix” [46, 67, 77], this approach does nothing to address the cause of climate change, and the social and political risks of advancing this cannot be understated [68].

During the past five years, the USA has become the global leader in solar geoengineering research, with multiple philanthropic efforts funding research at major universities, with the largest solar geoengineering research program at Harvard. The Harvard solar geoengineering program is funded by philanthropic gifts from individuals and foundations including Bill Gates [68]. Solar geoengineering is also fraught with ecological and governance risks and investing in this approach is detracting from efforts for transformative social change [23]. There are multiple societal risks of advancing solar geoengineering [66]. In addition, to being a delay and distraction from the transformative changes that are desperately needed [48], the disruptions to the earth’s hydrologic systems, including the inequitable impacts of altering the monsoon season in Southeast Asia, could cause new regional disparities and injustices in food and water access [1], new global health disparities [16], and further exacerbate biodiversity losses [72]. The imagined potential of solar geoengineering has created a new pathway for the rich and powerful to establish additional control over everybody else as climate impacts worsen [68]. The mainstreaming of solar geoengineering technology demonstrates the outsized social power of the polluter elite, a very few wealthy billionaires are driving the techno-climate conversation and perpetuating climate isolation in dangerous ways.

**Toward Climate Justice: Redistributing Power**

Moving beyond the lens of climate isolationism, climate justice provides a more productive, complex, and holistic framework within which to assess and prioritize responses to the climate crisis [58, 70]. Climate justice requires recognizing that: (1) many policies, processes, and practices of wealthy elite institutions and individuals are the drivers of climate change, (2) the impacts of climate disruptions and the capacity to adapt are distributed unequally among and within local and global communities; and (3) equitable climate adaptation and strengthening climate resilience requires new transformative investments, innovations, and actions to rectify the disproportionate burdens on those who are most vulnerable to ongoing and future climate impacts [27]. Decision-making within a climate justice frame involves striving for transformative systemic changes that integrate technological and social innovation while prioritizing equity and social, racial, and economic justice.

Just as Ibram X Kendi explains in his book “How to be an Antiracist” (2019) that there is no such thing as neutrality when it comes to considering systemic racism [37], there is no policy that is neutral on climate justice. Policies and decisions at every level are either perpetuating climate injustices if they are not intentionally and explicitly trying to reduce climate injustices. Given the racial and economic injustices associated with fossil fuel reliance [28] and fossil fuel combustion [47], a societal transformation toward a renewable-based society needs to be prioritized. The case for keeping fossil fuels in the ground can be made from a climate isolationism lens, however, the case becomes so much more compelling and practical when the social justice opportunities are also explicitly called out [41].

To move beyond climate isolationism toward climate justice, climate decision-making has to focus more explicitly on power dynamics and social innovations to redistribute power to people and communities who are most vulnerable. Climate decision-making needs to explicitly consider how policies, practices, and priorities either reinforce or disrupt the systems that are currently concentrating wealth and power. For less powerful groups to gain a foothold in decision-making processes, renewed attention to the multiple ways that social, economic, and political power shape social change must be acknowledged [34]. Feminist theory offers expertise in the study of power [11], so embracing a
feminist lens is one valuable approach to moving away from climate isolationism toward climate justice.

The social science literature on sociotechnical transitions has been critiqued for minimizing the role of power [6], and a recent contribution by Avelino [7] identifies seven specific ways to consider power in decision-making, processes of change, and innovation: (1) power over versus power to, (2) centered versus diffused, (3) consensual versus conflictual, (4) constraining versus enabling, (5) quantity versus quality, (6) empowerment versus disempowerment, and (7) power in relation to knowledge [7]. As jurisdictions around the world grapple with the interconnected crises of housing and food insecurity, climate disruptions, and economic precarity, narrow efforts to reduce greenhouse gas emissions or control the global average temperature are likely to cause more harm than good. New ways of strategically integrating climate action into other social policies, in the way that the Biden/Harris administration integrated their climate agenda into pandemic recovery and inflation reduction investments, provides an empirical example of the practical valuable potential of moving away from climate isolationism [32].

**Who Is Perpetuating Climate Isolationism?**

To move mainstream climate decision-making beyond climate isolationism toward climate justice, it is helpful to understand how climate isolationism is being perpetuated. The prevalence of climate isolationism can be attributed to multiple factors including the limited experiences and perspectives of many climate experts whose knowledge is limited to climate science and technology. White men have made up the majority of climate and energy experts [36], and the systemic exclusion of diverse voices in mainstream climate decision-making has contributed to climate isolationism [68]. Since the climate crisis was first recognized as an emerging problem in the late 1970s and early 1980s [35, 45], [50], a technocratic, reductionist, top-down approach to climate policy has dominated. Large investments have been made in technological innovations to mitigate climate change [24, 29], but minimal attention has been given to social innovation, power dynamics, and how climate and energy policy could leverage change toward social justice [76]. The lack of diversity in the energy sector [53], and the masculinity and power associated with fossil fuel interests resisting climate justice action [17], both add another way to consider who is perpetuating climate isolationism. As the climate crisis gets worse, new authoritarian movements in many parts of the world are promoting a toxic combination of climate denial, racism, and misogyny that feminist scholar Cara Daggett has called “petro-masculinity” [17].

One prominent and influential privileged white man who is perpetuating climate isolationism is Bill Gates. His 2021 book “How to Avoid Climate Disaster” focuses exclusively on technological innovations demonstrating the inadequacy and dangers of climate isolationism [25]. In this book, Gates openly acknowledges that he does not “have a solution to the politics of climate change.” Rather, he professes that new and existing technologies can solve the climate crisis, all that is needed is more investment in technological innovation to speed up the pace [25]. Gates also describes solar geoengineering as a “cutting edge, ‘Break Glass in Case of Emergency’ kind of tool” that is valuable to have in case things get so bad that there are few other options. He says “There may come a day when we don’t have a choice. Best to prepare for that day now.” Gates singular focus on technological innovation is characteristic of climate isolationism and represents a trend of privileged tech-savy men, the so-called climate dudes who think they can swoop and solve complex problems that others have spent decades attempting to address [33].

The prevalence of climate isolationism can also be attributed to a male-dominated climate and energy leadership that continues to prioritize scientific and technological expertise to inform climate policy [21, 53]. Like many other aspects of society, the science, politics, and economics of climate and energy have been dominated by privileged white-male leadership which has tended to be technocratic, reductionist, patriarchal, and top-down [19, 60]. The technological optimism that is characteristic of climate isolationism is also linked to masculinity as the colloquial phrase “boys and their toys” represents [43].

The dominance of science and technology discourse among individuals, organizations, and policy is associated with a long-entrenched resistance or hostility to acknowledging the politics of science and technology [12, 69]. Science and technology are often considered apolitical, while climate actions focused on economic inequities, social injustices, and concentrated corporate power are often avoided because they are viewed as politically charged.

The technical focus of climate isolationism requires calls for increases in funding for technological innovation from both public and private funders funnelling capital investments toward tech firms [44]. The focus on technology also obfuscates and diminishes the potential for transformative social change [3], and the capital requirements for technology innovation distracts and limits the possibilities for investing in social innovation, social infrastructure, and social justice [63].

**Climate Isolationism and Climate Fundamentalism**

Climate isolationism is characterized by a narrow, technocratic way of considering the climate crisis—as an isolated threat that is separate from other issues. Within this framing, the dire impacts of climate change justify a simplistic and targeted approach that ignores many societal complexities—including
the distributional justice issues of who is benefiting from climate action and inaction, and who is being harmed most. In energy policy, a similar, related concept of “climate fundamentalism” has been defined and introduced by Shalanda Baker in her book Revolutionary Power: An Activist’s Guide to the Energy Transition [8]. Baker defines climate fundamentalism as “the narrow focus on advancing climate and clean energy policy while failing to account for justice concerns or, more insidiously, deliberately delaying justice considerations.” In her book, Baker describes how a climate fundamentalism approach to the energy transition replicates and reinforces structural inequality, and she calls for ambitious clean energy policies grounded in equity [8]. While these two terms, climate isolationism and climate fundamentalism, are referring to the same phenomenon, I have applied “climate isolationism” to discourse, science, practice, and policy, while Baker has defined climate fundamentalism as explicitly focused on climate and energy policy.

To counter the prevalence of both climate isolationism and climate fundamentalism, social justice, economic justice, and racial justice need to be centered in all climate and energy policy. Conversely, to respond effectively to the crises of social injustices, renewable energy and resisting fossil fuels have to be integrated into all social policies. Appreciating the value of this kind of integrative thinking is a critical part of moving beyond narrow climate decision-making.

Reframing the Problem

Climate justice leader and human rights attorney Colette Pichon Battle calls on all of us to reframe our understanding of the problem [10]. “Climate change is not the problem; climate change is the most horrible symptom of an economic system that has been built for a few to extract every precious ounce of value out of this planet and its people, from our natural resources to the fruits of our human labor. This system has created the crisis.” [10]. This perspective is shared by multiple scholars who have critiqued how climate experts and sustainability transition researchers have failed to engage in any significant critiques of capitalism and the financialization of society. [20, 46]. Until more climate experts and key climate decision-makers with power and influence over climate policy are able to reframe their own understanding of the crisis, and move beyond climate isolationism, societal responses will continue to be inadequate and both climate risks and social injustices will continue to worsen. Without this essential reframing, well-intentioned climate decision-makers will continue to inadvertently perpetuate inequities and exacerbate disparities in health, wealth, and opportunity.

One example of reframing the problem beyond climate isolationism is energy democracy, a growing social movement that envisions a fossil-fuel-free future in which individuals, households, and communities rely on a regionally appropriate diverse mix of renewable energy with local ownership, local control, and local benefits [75]. Highlighting all the social justice benefits of redistributing power, literally and figuratively through the renewable transformation, energy democracy is centered on social justice and investing in vulnerable communities. The climate crisis is often not even mentioned within energy democracy discourse [60]. Climate mitigation and the decarbonization that results from moving to a renewable future are co-benefits of energy democracy decision-making rather than the primary driver for change. Energy democracy connects the renewable transformation with redistributing political and economic power, wealth, and ownership to create a more just and equitable world [15]. The energy democracy frame recognizes the social potential for co-creation and co-ownership of a renewable future that is much more than a simple substitution of energy technologies [18]. Rather, the renewable transition provides an opportunity to reverse the economic oppression associated with concentrated wealth and fossil fuel reliance by empowering local energy production and control [13].

Three kinds of innovative activities are central to the energy democracy movement: resisting the legacy energy agenda that continues to support fossil fuels, reclaiming energy decision-making so that the public interest is prioritized over corporate interests, and restructuring energy systems to maximize distributed local and regional benefits [14]. A key feature of energy democracy is the critical recognition that “how” renewable energy is deployed—that is, who is included, who is excluded, and how the benefits are distributed—matters a lot. To leverage the interconnected social justice benefits, renewable energy has to be explicitly linked to investments designed to meet the needs of families and communities rather than large corporate interests [14]. Doing so requires moving beyond climate isolationism and the narrow carbon accounting and the technological framing that has dominated climate policy so far.

The transformative principles of energy democracy provide a valuable lens to guide participation, governance, and leadership in other areas related to climate decision-making.

Conclusions

To advance climate justice, humanity must move beyond climate isolationism and leverage the interconnectedness of the climate crisis with other social injustices for transformation. The broader social changes that are needed require massive public investments in social innovation centered on social justice to complement continued investment in technological innovation. Climate scholars and activists need to
expand their focus beyond decarbonization and greenhouse gas emission reductions and link all efforts with the social, economic, financial, and political change required to end fossil fuel reliance and disrupt and redistribute the power of corporate interests. Transformation requires persistent, consistent focus on four things: (1) explicitly revealing problematic power structures that are perpetuated by status quo policies, practices, and priorities at multiple scales; (2) resisting fossil fuel interests and the perpetuation of fossil fuel reliance at every opportunity; (3) prioritizing and centering social justice, economic justice, and the redistribution of political power to enable massive public investments in people and communities; and (4) linking climate and energy policy directly to all other policies including housing policy, transportation policy, economic policy, fiscal policy, health policy, food policy, education policy, and criminal justice reform. Taking back power from corporate interests, billionaires and other polluter elites require coordinated, collective action occurring at every scale—from the local to the global. Now that we are in an era where “all politics is climate politics” [4], new forms of interconnected and holistic public investments are essential to reduce the current and future suffering around the world.

Declarations

Conflict of Interest The author declares no competing interests.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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