

# Climate Displacement and Territorial Justice

ANNA STILZ *University of California, Berkeley, United States*

**T**his article develops an account of territorial justice to understand what is owed to people at risk of climate displacement. I argue that the aim of territorial justice is to secure a globally recognized status, the status of being an equal common possessor of the earth. As a common possessor, every inhabitant of the globe has a claim to a “place” in the world where they can access minimally just material conditions and political institutions, securely pursue their located practices, and exercise self-determination together with others. I apply this theory to generate prescriptions for a just policy response to the risk of climate displacement. Where possible, I argue that a just response should focus on mandatory global taxation to support in situ adaptation. In cases where relocation becomes inevitable, I outline the implications for how just relocation regime should be structured.

## INTRODUCTION

**B**y contributing to climate change, industrialized states are shrinking the supply, and changing the character, of the world’s habitable spaces (Arneth et al. 2019). These changes increase the threat of environmental displacement. A recent paper predicts that, by 2070, temperature increases under a business-as-usual scenario could leave 30% of the globe’s population outside the “human climate niche” that people have occupied for millennia (Xu et al. 2020). Estimates vary, but modeling by the World Bank suggests that, without prompt climate action, more than 216 million people could be forced to migrate by 2050 (World Bank 2018).

To understand the impact of climate change on migration and land use, consider three categories of cases. First, many people may find the lands on which they live no longer habitable and may need to migrate to other areas within their countries. The majority of people forced to move by climate change are expected to fall in this internal displacement category (McAdam 2012; World Bank 2018). A second category is one where victims may need to migrate across borders. Many small island states are forecasted to become uninhabitable by mid-century. These people face the risk of permanent displacement and loss of their citizenship, territory, and political institutions. Third, there are communities that will not lose their land but where changes in the environment are occurring so rapidly as to place strain on their way of life.


Since climate change compromises the earth’s habitability, it raises the question of *territorial justice*.

When is the distribution of the earth’s spaces just? What does the international community, and especially high-emitting states, owe to victims of climate change in these three categories? (I define a “high-emitting state” as a state that has engaged over time in emissions activities beyond the level required to provide a decent life to its citizens.) When might people justifiably raise claims to settle in and/or govern new areas or to be compensated by other communities for the reduced habitability of their land? When should such claims be rejected, because the affected persons’ share of territory is already an equitable one?

This article elaborates an account of territorial justice that can guide our thinking about these matters. I argue that territorial justice aims to secure a globally recognized status, the status of being an equal common possessor of the earth. As a common possessor, every inhabitant of the globe has a claim to a “place” in the world where they can access minimally just material conditions and political institutions; securely pursue their located social, cultural, and economic practices; and exercise self-determination together with others.

I then apply this theory to generate prescriptions for a just policy response to the risk of climate displacement. The policy implications of my territorial justice approach differ from two dominant discourses, both of which focus primarily on relocation as the solution to the risk of climate displacement. The first is the *climate refugee approach*. Reacting to the fact that climate migrants fail to qualify for protection under the Refugee Convention, some observers have proposed identifying individuals as “climate refugees” and granting them special relocation rights (Biermann and Boas 2010; Byravan and Rajan 2010; Docherty and Giannini 2009; Lister 2014; Risse 2009).

A second dominant policy discourse is the *migration-as-adaptation approach* (Barnett and Webber 2010; Black, Kniveton, and Schmidt-Verkerk 2011; McLeman and Smit 2006; Moor 2011). Migration scholars

Anna Stilz , Kernan Robson Professor, Department of Political Science, University of California, Berkeley, United States, [astilz@berkeley.edu](mailto:astilz@berkeley.edu).

Received: September 25, 2023; revised: March 05, 2024; accepted: August 19, 2024. First published online: October 09, 2024.

note that households facing environmental stress often adopt an income diversification strategy that involves sending a family member to perform wage labor outside the community. Building on this practice, advocates of migration-as-adaptation argue for internal and cross-border (often temporary or circular) labor migration policies for individuals from climate-impacted areas.

While not denying that migration has a role to play in addressing climate displacement risk, I argue that the central plank of a just policy response should be mandatory global taxation to finance *in situ* adaptation. People have a right to occupy the places central to their lives, and where these places can be made habitable at reasonable cost, they should not be required to migrate to secure their basic interests (Draper 2022a; Oberman 2011). My account therefore grounds a positive duty to underwrite the global conditions of habitability for all.

This focus is largely novel in the climate displacement literature, where international duties to support *in situ* adaptation have not been extensively discussed. Some proponents of climate relocation hold that while in the Global North, refugee crises “may be prevented through adaptation measures...climate-induced migration might be the only option for many communities” in the Global South (Biermann and Boas 2010, 61; see also Byravan and Rajan 2015, 25). Others mention possible duties to support people who wish to remain in place (Lister 2014, 623) or to help prevent refugee crises (Docherty and Giannini 2009, 381–2), but they do not theorize these duties and their moral foundations in detail.

The final section of the article acknowledges that there are cases where relocation will become inevitable, and I outline how a just domestic and international regime should be structured to handle these scenarios. Here I argue that an individualized right to migrate is insufficient to secure people’s status as equal common possessors of the earth. Instead (1) climate displacees must have the power to relocate *as a community*, (2) relocation processes must meet demanding criteria of *procedural fairness*, and (3) the international community should *redistribute* territory to provide displaced communities a sufficient opportunity for self-determination.

## EQUAL COMMON POSSESSION

The theory of territorial justice developed here is broadly Kant-inspired, though I do not attribute it to Kant himself, presenting it instead as my own freestanding view. For Kant, right in general requires that we stand in relations of mutual independence with others whom our actions affect. A person enjoys independence when she is secured against constraint by another person’s will. This means each person should dispose of some *space* within which to securely set and pursue their own purposes, consistently with the rights of others to do the same under a universal law (Pallikkathayil 2010). Securing mutual independence requires constituting a political community: we

must organize our society so that each individual enjoys the requisites of independent social relations with others.

Kant is clear that the demands of right not only apply domestically but also extend beyond the state. In particular, Kant argues that our relationship as *co-users of the earth* gives rise to requirements of justice. Because the earth is a closed sphere, Kant holds that our acquisition of the earth’s land must be based on the idea of “original possession in common” (Kant 1999, 6:262), a “rational idea” of “community of all nations on the earth that can come into relations affecting one another” (Kant 1999, 6:352). Note here that “possession” is not equivalent to a property right: many “possessors” in law—e.g., the renter of an apartment, or someone who occupies a seat at a theater—have duties not to damage the things in their possession (American Law Institute 2020). Common possession is thus compatible with humans’ duties of stewardship towards animals and the biosphere.

I interpret Kant as calling upon the earth’s inhabitants to constitute a recognized *juridical status*—the status of common possessor of the earth—with accompanying legal norms that would secure people’s mutual independence in matters involving land and territory. Each individual has an equal moral claim to independent use of the earth, a claim potentially impacted by others’ activities involving it, so these activities must be justified to others whose independence might potentially be compromised by them. A “thin” global political community is required to secure the territorial preconditions of independence for all.

Though we all possess the earth in common, respect for peoples’ jurisdiction over particular territories is required by our common possession. This is because Kantian independence requires the protection, for all, of three fundamental territorial interests: in occupancy, basic justice, and self-determination (Stilz 2019).

(1) *Occupancy*: Occupancy draws attention to the way in which respecting others as independent equals requires underwriting their stable use and possession of a geographical space. Individuals’ central life projects are often bound up with specific geographical locations, so that interference with people’s use of these places undermines the lives they have built. Geography and climate affect the economic and subsistence practices people take up, making it difficult for them to pursue these practices in a very different place. Religious, cultural, and recreational activities often have territorial components: think of how dog-sled racing belongs in the Arctic and surfing in coastal areas. Finally, people form personal bonds and enter work, religious, and friendship arrangements in part because they expect to remain spatially arranged in certain ways. When others can interfere, at will, with our residence and use of a particular location to build our lives, our freedom to set and pursue our own purposes is not secure.

Because individuals’ central life projects depend on the stable use of specific geographical locations, respecting them as independent equals requires

guaranteeing their *occupancy rights*. An occupancy right, as I conceive it, is an individual right that comprises three main elements:

- (a) A moral liberty to reside permanently in a particular place and to make use of that area for social, cultural, and economic practices, so long as these practices do not harm or wrong others or threaten their fundamental territorial interests;
- (b) A moral claim against others not to move one from that area, to allow one to return to it, and not to interfere with one's use of the space in ways that undermine one's located practices; and
- (c) A moral claim against others to protect and maintain the background conditions for forming stable located life plans and to restore these conditions if disrupted, so long as doing so does not impose unreasonable burdens on their morally significant interests (Draper 2023).

Recognizing individuals as bearers of occupancy rights enables them to frame their projects without threat of being uprooted or interfered with in ways that undermine the lives they have built (Buxton 2019; De Shalit 2011).

I conceive occupancy as an individual right, though part of the justification for the right is that it facilitates our access to social practices and to the physical spaces in which they unfold. Occupancy rights are grounded in individuals' interests in enjoying security in their central life commitments and in being the agent in charge of controlling and revising these commitments. Occupancy rights are not collective rights of a group to preserve their sociocultural practices over time. This will become important later, when I consider whether sociocultural change in response to environmental instability is compatible with respect for occupancy rights.

(2) *Basic Justice*: For individuals to be mutually independent, they must also be part of a state that affords them basic protections. Note that by "state," I do not necessarily have in mind a centralized, Weberian, bureaucratic institution. Any institution that engages in binding collective rule-setting and can enforce its determinations in disputes will count as a "state," in my sense, even if it looks different from the nation-states we are familiar with. Arguably, "states" in this broad sense (political rule-setting institutions) are required to specify and guarantee the protections necessary for individuals to relate as independent equals. To wield power rightfully, the state must respect what I call *basic justice*: it must aim at protecting the mutual independence of its own members, and respecting the independence of nonmembers, on a reasonable understanding of what that value means. This requires a willingness to respect certain essential personal rights, including:

- a) *Security rights*: to freedom from torture, slavery, arbitrary imprisonment, and severe threats to personal integrity.

- b) *Subsistence rights*: to an economic minimum capable of meeting basic needs;
- c) *Core personal autonomy rights*: to freedom of conscience and thought, personal property, and the freedom to form family relationships; and
- d) *The preconditions of collective self-determination*: to free expression, free association, and public political dissent.

To relate to others as an independent equal, each individual must have access to a state that meets requirements of basic justice.

(3) *The Right to Collective Self-Determination*: Finally, if we are to treat people as independent equals, we must give them the opportunity to rule themselves through institutions that reflect their own values and commitments. Groups with common political commitments should have the right collectively to determine their future, so that the political institutions that rule individuals properly reflect the judgments of the people they govern.

Given that all political communities feature deep disagreements, can political groups share common commitments? I think so. In modern societies, it is unlikely that a group might share a commitment to enact specific laws or promote shared values. But it is more common that most members of a political group will share a second-order commitment to associate together in institutions that they accept as a legitimate way to enforce justice among themselves (e.g., to recognize Parliament or the Constitution as a source of valid law). When people endorse the constitutional order that governs them, even when they disagree with particular government decisions, they will not view the implementation of these decisions as the hostile impositions of an alien power.

To illustrate the commitment I have in mind, consider the 2004 US election: I voted for Kerry. But though I did not vote for Bush, I believed that the candidate chosen through our democratic procedures should be the one to assume office, even if that was not the person for whom I voted. My aim that Kerry win was nested within a more fundamental shared commitment that our constitutionally chosen candidate should take power. Because I shared this commitment to the United States mode of decision-making, Bush and his policies were not simply imposed on me, as they might have been if, say, a foreign country had invaded and installed Bush in office. Rather, Bush's assumption of office was something I saw myself as having reason to accept and support.

Collective self-determination, on my account, is a group right. But it is valuable because it serves individual interests in establishing social order through our own free agency and in being ruled in a way that partly reflects our values and convictions. Members of a collectively self-determining group can appropriately see themselves as co-authors of their coercive institutions. Though "authorship" is an interest of individuals, it can be furthered through membership in a political group, to the extent the individual affirms participation



in that group. Though no individual's personal priorities can be mirrored in every decision, there is an important, second-order sense (via shared commitments to their political order) in which individuals' judgments are often instantiated in their institutions. When the state reflects its citizens' shared commitments, in complying with it, they are not subjected to an alien will. Rather, citizens comply independently: they see reason to comply, since they affirm their state's standing to enforce justice on their behalf. For that reason, Kantian independence requires that where feasible and consistent with basic justice, groups with common political commitments be allowed to govern themselves.

To sum up, our basic duty of Kantian right—the duty to secure the mutual independence of all as common possessors of the earth—has territorial implications. It requires us to secure people's individual rights to occupancy and basic justice and their collective right to self-determination. I now suggest that this account provides us building blocks to articulate a theory of global territorial justice. The key idea is that the three fundamental territorial interests I described apply universally: if the system of territorial states is to be justified, these interests must be guaranteed for everyone. A state's sovereignty over its own territory is limited by the condition that others' rights to possess a territory in which to realize occupancy, basic justice, and self-determination for themselves are fulfilled.

While I cannot offer a full defense of this account here, it is worth considering some objections. In a paper showing that some climate displacees can be accommodated within the normative logic of the 1951 Refugee Convention, Matthew Lister argues that climate displacees are not wronged when they must leave their homes and place-based lives. Lister cites the Yupiks of Alaska, who “now face very significant challenges to their traditional way of life due to decreasing ice coverage, melting permafrost, and related erosion” (Lister 2014, 623).<sup>1</sup> He holds that there is no duty on either the United States or the international community to mitigate such challenges, since “in any society, it may be that unproblematic developments tend to render particular ways of life difficult or impossible” (Lister 2014, 624). The Yupiks have no claim to “be able to continue or enjoy any particular way of life, so long as all people have a range of good lives open to them” (Lister 2014, 624).

I believe the Yupiks are wronged by having to give up their place-based lives due to climate impacts. Climate change is not a natural disaster: it is created through human agents' emissions activities. Since 1990, it has been clear to policymakers that continuing

high emissions would lead to land degradation, sea-level rise, and displacement. Policymakers' failure to regulate high-emitting activities is destroying the Yupiks' comprehensive life projects—their occupations, relationships, and religious and cultural practices—and displacing many from their homes. Destroying someone's comprehensive projects has a radical impact: it severely harms them in ways that are difficult to compensate, and it undermines their autonomous ability to direct their life according to their own values and commitments.

Occupancy rights are grounded in the significance, for people's autonomy and well-being, of enjoying security in their comprehensive life projects and agency over revising them. Comprehensive projects organize many of our choices, give meaning to our lives and provide a standard for their success, and integrate our plans over time in a way that constitutes a distinctive narrative identity. Careers and occupations; family, friendships, and other significant personal relationships; and religious and cultural activities are good examples. Many basic liberties—like freedom of occupation, the freedom to marry, and freedom of religion—protect our control over such core identity-related features of our personal lives, where interests in autonomy and independence are of great weight.

To argue that the Yupiks have a right that policymakers restrict emissions, we must compare the strength of the Yupiks' interests in maintaining their comprehensive life projects against others' countervailing interests in being free from any duty to lower emissions. Others do have a very strong interest in not restricting carbon emissions necessary to lead decent lives. But there is no equivalently weighty interest in the wasteful energy use patterns of wealthy societies (e.g. in favoring fossil fuels over renewables, and maintaining inefficient vehicles, appliances, and homes). When policymakers fail to restrict excessive emissions, contributing to the destruction of the Yupiks' located lives, I believe the Yupiks are wronged.

Lister further argues that “international society does not owe” (Lister 2014, 626) climate displacees a remedy for loss of collective self-determination. Rather, “what is plausibly owed to those displaced by climate change is a right held by individuals, to be able to be full members in a polity that respects them and allows them sufficient autonomy” (Lister 2014, 627). But international law recognizes rights of collective self-determination: article 1 of both 1966 human rights covenants declare that “all peoples have the right of self-determination,” by virtue of which “they freely determine their political status and freely pursue their economic, social, and cultural development” (United Nations 1966). While the scope of the self-determination right is contested (particularly with regard to internal minorities), the claim of an entire state's population to independence from foreign rule is regarded as a clear case (Cassese 1995, 59; Hannum 2011, 49).

Denying that international society owes respect to collective self-determination would have counterintuitive consequences. Suppose that in 1945, instead of

<sup>1</sup> Lister also cites Midwestern farmers challenged by drought. But since the farmers' claim to compensation may be diminished if they are responsible for contributing to climate change, the Yupiks represent a cleaner case, due to their low-emission lifestyles. While Lister focuses on whether foreign states should compensate the Yupiks, I leave open whether the responsibility of compensation, if there is one, should fall on the domestic state or international community.

restoring occupied territory to the German people, the US had simply annexed their zone of occupation, turning it into an additional state of the union (Stilz 2019, 92). Since the US occupation occurred through a just use of force, I assume it did not violate individual rights. Further, so long as the US governed legitimately in the wake of annexation, protecting the former Germans' human rights and granting them full democratic citizenship, it is not clear how the US takeover would violate the rights of individuals. So unless we acknowledge collective rights to self-determination, it may be difficult to explain on wholly individualist grounds why the violation of a people's political independence through involuntary annexation is wrong. Yet if there is a right to collective self-determination that protects a people's political independence, it is unclear why that right should not also matter to the morality of climate displacement.

Might a duty to respect occupancy prove too demanding, ruling out normal government practices, such as the use of eminent domain? Occupancy rights are violated only when a person is moved in a way that destroys their comprehensive life projects. But not all forms of involuntary relocation undermine people's comprehensive life projects. Suppose the state condemns my apartment building to build a new highway, forcing me to move a few streets away, where I can still maintain my family and personal ties, work in my job, and attend my church. My occupancy rights are not violated here, since my comprehensive life projects remain fully intact. Occupancy creates no presumption against "local" uses of eminent domain, so long as they are justified by an adequate public purpose and so long as displacees are compensated for the attendant disruption and infringements of other rights, e.g., property.

Other uses of eminent domain—e.g., World Bank-funded dam projects—do involve large-scale evictions that destroy people's livelihoods, undermine their relationships, and damage cultural and social practices (Cernea 2000; Penz, Drydyk, and Bose 2011). Such evictions contravene occupancy rights, creating a presumption against them. Since rights are not absolute, the contravention of occupancy rights may not always make these projects all-things-considered impermissible. Like other theorists, I distinguish between the *violation* and the *infringement* of a right (McMahan 2009; Thomson 1990). A right is *violated* when its contravention is impermissible. But a right is *infringed* when it is all-things-considered permissible to contravene the right. While you have a right that I not kick your leg, it is permissible for me to contravene your right if by doing so I can save four people's lives. Where the good at stake to others vastly outweighs the harm to a rights-bearer, it is sometimes permissible to infringe their rights. Note that this does not mean their right ceases to matter morally. Typically, the infringement of the right will leave a "moral residue" in the form of a duty either to satisfy the rights-grounding-interest in some other way or to compensate the rights-bearer. It is the fact that the action infringed a *right* that explains these residual duties.

Involuntary displacement may sometimes be justified despite infringing occupancy rights. This will be so if (a) displacement serves a truly overriding public purpose, (b) which cannot be achieved without displacement, and (c) harms to the relocatees' comprehensive life-projects are minimized or compensated, by restoring their livelihoods, personal ties, and community infrastructure, as much as possible (Penz, Drydyk, and Bose 2011, chap. 7). Displacement to promote development necessary to escape poverty may meet this high bar of justification.

Would occupancy rights rule out environmental regulation? Increased environmental standards may mean that coal mines close, devastating nearby communities and threatening people with relocation. Do these people have a right to continue mining, so as not to disrupt their life projects? No: people have no right to maintain life projects that harm others, as coal-mining does by contributing to climate change. Out of respect for their autonomy and well-being, we ought to respect people's morally permissible life projects. But interference is justified when people harm others (Mill 1998; Raz 1986). To the extent that government regulation aims at preventing harm, it is warranted.

While they have no right to continue mining, I believe members of these communities do have a right that the state mitigate economic dislocation in their region, through public investment, retraining, and social safety nets, so that residents are not forced to move to earn a livelihood: this allows them to maintain their other located life plans. Similar proposals for special assistance to communities heavily impacted by climate policy are made by advocates of a "Just Transition" (International Labour Organization 2016).

Finally, would accepting occupancy rights commit us to Nozick-style libertarianism, ruling out government redistribution? No: while occupancy confers a claim to secure use of a place, it is not a property right. Occupancy rights are not direct rights to the land itself: instead, they are generated insofar as moral duties to *persons*—to respect their independence, autonomy, and well-being—create a derivative requirement not to interfere with their residence and use of an area to build their lives (see Scanlon 1976 for a similar argument for a "primitive right of non-interference"). Though they lack private property, children, nonproperty owners, and homeless people possess occupancy rights. Occupancy does not include all incidents associated with property: it confers no right to exclude others whose access is not disruptive to occupants' life projects, no right to sell or transfer the land, and no right to income. These incidents of property depend on legal conventions that must meet appropriate criteria of distributive justice. So there is no reason why accepting occupancy rights should limit redistribution of income or wealth.

While occupancy and self-determination rights remain controversial among theorists of global justice, I believe my arguments provide sufficient support to make it worth developing the policy implications, for climate displacement, of a theory that attributes occupancy, basic justice, and self-determination rights to all.

Should this territorial justice theory ground plausible policy prescriptions, this would provide an additional reason for embracing it.

Let me highlight two dimensions of my account of territorial justice. This first is a *recognition dimension*. Refusing to recognize people's claim to a place on earth they can use for the ways of life and political institutions they value has historically been a way of marking them out for inferior status, through settler colonialism or imperialism. Global protection of the fundamental territorial interests thus provides important recognition of everyone's equal standing.

Second, territorial justice also has a *distributive dimension*. My account grounds duties to ensure that all people enjoy the territorial preconditions of mutual independence. Often, people can stand in relationships of mutual independence only if goods are distributed in particular ways, since inequalities can give dominant individuals or states unacceptable control over the lives of others (Scanlon 2018). Not all inequalities in territory compromise independence: if a territorial inequality (say, the lesser fertility of their land) does not lead Group B to become dependent on Group A in ways that threaten domination for them, this inequality is not a matter of justice-based concern. But where an unequal distribution of territory facilitates intergroup relations of domination, exploitation, and control, my account provides reasons to redistribute territory to mitigate these dependent social relations. This is a general duty of global territorial justice, requiring the provision to all of the necessary territorial bases for mutually independent social relations. (The duty holds even in cases where a group becomes dependent through imprudent policymaking, since the fundamental territorial interests of younger generations should not be compromised by their ancestors' choices.)

To see what I mean by "necessary territorial bases of independence," consider an analogy to domestic justice. Though a motorcycle enthusiast might prefer a new Harley-Davidson over a right to healthcare, most theorists believe that the state is not required, as a matter of distributive justice, to provide each citizen with a voucher to buy the goods they most want. Rather, citizens should be provided with standardized goods and protections. Plausibly, this is because those goods and protections are necessary social bases for relations of mutual independence with others. Someone who lacks healthcare, education, or protection against unemployment is vulnerable to domination. Someone who lacks a Harley-Davidson is not placed in a similar position of vulnerability.

Analogously, the aim of territorial justice should be seen as providing the standardized protections necessary to support mutually independent relations among those who live on the earth. Of course, there are many ways a territorial distribution can create problems of dependency; my view has implications for several issues (e.g., distribution of the earth's supply of water). Yet I focus here on the concerns raised by climate displacement, saving the view's broader implications for future work.

Clearly, my account of territorial justice—which requires securing occupancy, basic justice, and independent self-determination for all—is achievable only in the long run. Many powerful states today (e.g., China) fail to realize basic justice or collective self-determination for the populations they govern. In the present, my view seeks to guide the actions of *compliant states* toward the achievement of this ideal. (For those who are skeptical, the next section provides reasons why I believe some liberal democracies will have incentives to be compliant in the foreseeable future.)

To guide the actions of compliant states, it is necessary to assess their feasible policy options, as I do below. Still, even if full territorial justice cannot be immediately achieved, input from a theory of territorial justice is necessary in formulating plausible policy prescriptions. To address the risk of climate displacement, compliant states should adopt those policies that (a) offer the most urgent short-term improvements in territorial justice and (b) do not rule out the fuller achievement of territorial justice in the future (Simmons 2010; Stemplowska and Swift 2012).

## ADAPTATION

What are the policy implications of this account? What is the best strategy for fulfilling the territorial interests of people at risk of climate displacement, like Guatemalan farmers affected by droughts and unpredictable storms, or the inhabitants of Kiribati, a Pacific atoll nation vulnerable to climate impacts? Should we assist people in securing these interests where they now live? Or should we instead enable them to relocate? Should this question be answered solely by cost comparison between the two options, or are there other relevant considerations?

Most existing proposals focus on relocation. Biermann and Boas hold that those affected by sea-level rise, extreme-weather events, and drought and water scarcity should be considered "climate refugees" and enabled to relocate (Biermann and Boas 2010, 67; for another broad climate refugee definition, see Docherty and Giannini 2009, 372). Other climate refugee proposals focus more narrowly on relocation due to sea-level rise (Byravan and Rajan 2010; Lister 2014; Risse 2009).

Many migration scholars, however, have criticized the climate refugee proposal, arguing that since migration has multiple drivers, it is too difficult in practice to pinpoint the causal impact of climate change on a person's decision to migrate (Draper 2022b; McAdam 2012). Since climate change exacerbates economic, social, and political factors that already influence migration, there is often no good answer as to whom to count as a "climate refugee." Some argue instead for the adoption of labor migration policies for climate-impacted areas. Those affected by slow-onset degradation of land often send a household member to work elsewhere as a risk management strategy to provide income for the family (Barnett and Webber 2010; Black, Kniveton, and Schmidt-Verkerk 2011;

McLeman and Smit 2006; Wyman 2013). Remittance income makes vulnerable families, and the communities they live in, more resilient and able to navigate disruptions associated with environmental change, and they may finance the sending community's adaptation in place. Remittances can support households, fund investment projects, and allow for a safety net for natural disasters (Gemenne and Blocher 2017). Advocates of migration-as-adaptation support labor migration from climate-vulnerable areas, often through temporary, seasonal, and circular work programs (Black, Kniveton, and Schmidt-Verkerk 2011; Moor 2011).

I believe it is wrong to prioritize climate migration over adaptation *in situ*, where this is possible at a reasonable cost with international support. I am not arguing that people should be *forced* to stay—as I explain later, a Climate Visa program also has an important role to play in combatting displacement—but I *am* arguing that people should not be required to move unless adaptation in place is infeasible for them. Mandatory international adaptation funding must be the central plank in any just policy response to climate displacement, since without it, migration measures will be unjust. So long as adaptation costs are reasonable, the international community should bear the burdens required to support people choosing to remain in their homes, even if relocation would be less expensive. Adaptation costs may become unreasonable, however, if they (a) consume scarce resources without restoring a territory's long-term habitability or (b) become so burdensome as to jeopardize other people's interests in leading a decent life within their own territories.

I believe the international community should prioritize adaptation funding over relocation initiatives because adaptation in place better protects people's fundamental territorial interests in occupancy and self-determination. First, people have a right to stay in their homes: they should be supported in staying if they wish, and they should not be required to move. Involuntary relocation often violates people's occupancy rights. It may mean drastic changes to their livelihood, it may detach them from the social organizations in which they are invested, and it often weakens—or even severs—their bonds with family, friends, and neighbors. In Kiribati's case, it will mean the loss of lands essentially connected to I-Kiribati cultural practices.

Note that these harms depend on displacement being *involuntary*. When I freely choose to migrate, I autonomously revise my life plan by adopting new comprehensive goals that involve living somewhere else. Yet when people are forced by other agents or circumstances to give up the people, communities, and social practices around which they have built their lives, these losses are not easily replaced. Research on involuntarily relocated populations has found that these populations experience negative outcomes (Cernea 2000). The costs are especially high for Indigenous peoples and those with resource-connected livelihoods, who may find it difficult to adjust to life in a new place. One should not have to leave one's community—

setting aside one's commitments, relationships, and projects—to secure one's prospects for a decent life.

Second, involuntary relocation also threatens collective self-determination. Kiribati is a sovereign country: to require its inhabitants to relocate is to rob them of their homeland and citizenship. These losses are not easily monetizable, and they are not usually reflected in cost-benefit analyses.

Third, people's ability to undertake planned migration varies with their level of advantage: the poorer, older, less educated, less employable segments of the population are usually least able to migrate (Leckie 2014). Migrants tend to have capital and skills of interest to destination countries, and they are not among the poorest people from their home areas (National Academies of Sciences, Engineering, and Medicine 2016). Women also tend to be less mobile than men, in part due to care expectations. A climate adaptation strategy that prioritizes relocation risks advantaging high-skilled strivers, while imposing significant costs on those less able to move (Schewel 2020; Zickgraf 2021).

Indeed, climate change is expected to *lessen* people's ability to migrate in parts of the world, especially in agricultural regions, where decreased productivity may deplete the capital people need to move, resulting in “trapped” populations (Borderon et al. 2019; Cattaneo and Peri 2016; Hoffmann et al. 2020). Some scholars claim that “environmental change is equally likely to prevent migration as it is to increase it” (Black et al. 2011). A climate strategy that prioritizes relocation overlooks the *immobile*, who may become trapped in undesirable places to live, losing their ties to advantaged family, friends, and community members.

Finally, relocation often requires host communities (many of whom have little or no responsibility for climate change) to bear unshareable non-monetary costs. Relocation means providing people a new place, and this requires redistributing territorial occupancy, granting land-use or cultural autonomy rights, perhaps redrawing political boundaries in ways that affect prior occupants. These nonmonetary costs are not easily redistributed—they fall on particular host communities, who must give up part of their land, adapt their place-based projects, and endure greater scarcity of resources to accommodate the climate-displaced. For example, Kiribati has acquired land that may in the future be used for migration to Fiji. Yet many local Fijians worry that the arrival of these climate migrants could prove detrimental to them (Leckie 2014, 72). The Fijians' agricultural practices differ significantly from the I-Kiribati's, and the area's resources are already under strain. Erosion, currently a problem, will worsen with an influx of up to 100,000 new inhabitants (Ellsmoor and Rosen 2016). Although fish is a major component of the I-Kiribati diet, fishing rights are reserved for indigenous Fijians, so traditional practices would need to be revised to accommodate the newcomers, with resulting impacts on the Fijians' way of life.

Here I assume that the inhabitants of a host community have valid moral complaints only about harms to *comprehensive social, economic, and political practices*



that are not unjust. Thus, a racist who values living in a whites-only environment has no claim not to have his plans set back through the migration of, e.g., new Hispanic residents to his neighborhood, since a commitment to a whites-only environment is an unjust commitment. But the projects of Fiji's inhabitants are morally permissible projects: livestock-herding, traditional fishing, and other Fijian sociocultural practices do not violate duties of justice. The sudden relocation of 100,000 I-Kiribatis might impair prior occupants' ability to sustain these practices.

In these scenarios, a host community that has difficulty maintaining their practices due to an influx of climate displacees may have a moral complaint about these impacts. This is so even if the displacees have weightier interests at stake, interests that should tip the balance if there are no alternatives to relocation. The hosts' complaint is especially strong when, like the Fijians, they bear little responsibility for climate change. Most accounts of climate responsibility emphasize that (a) those who have contributed most to climate change or (b) those who have the greatest ability to pay should bear the burden of accommodating climate displacees. But Fiji is neither a historic high emitter nor a wealthy state. So a relocation strategy may compromise the territorial interests of communities with little responsibility for climate impacts.

The reason for prioritizing internationally funded *in situ* adaptation—where feasible—is that it minimizes unjustified burdens (including on relocatees, the immobile, and host communities), and it channels the costs of mitigating climate displacement risk to those who have the most reason to shoulder these costs. My approach therefore supports instituting new global taxes to support *in situ* adaptation, and I say more below about how such a taxation scheme should be structured.

One might respond that those who propose climate migration measures are not necessarily opposed to prioritizing adaptation *in situ*: perhaps they see relocation as a response to situations where adaptation is impossible. Yet relocation proposals are not limited to scenarios where adaptation is physically impossible or prohibitively costly. Biermann and Boas extend climate refugee status to people facing extreme weather events, drought, and water scarcity (Biermann and Boas 2010, 64). While they require richer, high-emitting countries to support climate resettlement schemes (Biermann and Boas 2010, 76), they do not propose international support for adaptation *in situ*. But people facing drought might prefer support for irrigation systems and heat-tolerant crops rather than a right to relocate. Likewise, those facing extreme weather events might prefer disaster-resilient housing, warning systems, and public shelters. Many social scientists stress that the harm caused by disasters is mediated by a community's infrastructure and socioeconomic condition. Other proponents of climate relocation schemes do mention the possibility of duties to help people remain in place (Lister 2014, 623) or to combine relocation assistance with preventive measures to decrease forced migration (Docherty and Giannini 2009, 360). But to date, little has been done

to theorize the moral foundations for international duties to support adaptation or to propose feasible schemes for institutionalizing these duties.

Perhaps Biermann and Boas assume that due to constraints of political will, it is unrealistic to assume international adaptation support will be provided. But such a "realistic" focus on climate relocation is premature and may lead to injustice. Even if it were true that international duties to fund adaptation were unlikely to be met, a just policy response might still require adaptation funding, and it might be important to know this (e.g., to criticize the failures of wealthy states). Second, it is unclear that international adaptation funding is in fact infeasible. Support for many *in situ* adaptation measures is not more costly than financing climate resettlement, and as I argue below, states have strong prudential reasons to provide adaptation support, making compliance potentially feasible.

Likewise, migration-as-adaptation advocates typically do not insist that high-emitting states provide adaptation funding alongside labor migration visas (Black, Kniveton, and Schmidt-Verkerk 2011). Instead, the UK Foresight report argues that temporary, circular labor migration policies provide a "win-win" strategy to address skill shortages in Global North countries, while enabling communities in the Global South to enhance their environmental resilience through migrant remittances (Black et al. 2011, chap. 8; for an argument that adaptation support should accompany migration, see Draper 2022a).

But unless adaptation funding is included, labor migration programs will be unjust. True, people sometimes waive their occupancy rights by deciding to migrate elsewhere. But this decision must be made under fair background conditions to have this moral effect (Scanlon 2000, 258). Individuals' interests in their located life plans and in being the agent in charge of revising these plans ground background duties of justice on others to respect and protect their occupancy rights (Oberman 2011; Stilz 2019). Where people are denied their occupancy rights because of others' failure to discharge their duties, they have a complaint of injustice, which cannot be set aside by providing them migration opportunities. Nor do people waive their occupancy rights when they migrate in this situation, since they are not choosing against fair background conditions (which normally would include an option to stay).

To avoid these grave injustices, mandatory international adaptation funding must play a central role in any just policy response to climate displacement risk. Yet while there are currently several international organizations involved with adaptation funding, none are built on mandatory contributions: they rely on an unstable combination of government pledges, private sector funds, and taxes on carbon credits, and these funds are insufficient to meet extant needs, leaving an adaptation funding "gap."

Mandatory adaptation funding should not preclude migration options for those facing climate impacts. Like Draper, who argues for a pluralist response, I believe that a just climate displacement policy requires a range



of measures. Wealthy and high-emitting countries should also institute Climate Visa programs for areas suffering from land degradation. Since labor migration may significantly alleviate disadvantage, it provides an effective means to enhance people's adaptive capacity (Oberman 2015). If real opportunities to remain *in situ* are provided, labor migration visas can enable those at risk of displacement to shape their adaptation choices according to their preferences, pursuing opportunities abroad if they wish (Draper 2022a). Climate Visas should be structured, not as temporary guestworker programs, which are designed to create a vulnerable, exploitable workforce with limited social protections, but as programs that recognize a secure right to remain on the host state's territory.

Over the long term, ecological shifts are likely to make some existing territorial practices untenable. Changes in precipitation and glacial retreat in mountain areas are already threatening the traditional livelihoods of mountain herders due to the lack of good pasturage (Gentle and Thwaites 2016; Ingty 2017). By 2070, pastoral herding in mountain areas may become inviable. These territories may remain habitable but unable to support previous ways of life.

How should adaptation processes be designed to manage these realities, while giving due weight to people's interests in occupancy and self-determination? If current residents' life revolves around pastoral herding, must this option continue to be made available to them? Is that even possible, given environmental instability?

Scholars of adaptation distinguish between "incremental adaptation," which involves adjusting to environmental change in ways that preserve *status quo* practices, and "transformative adaptation," which involves shifting social practices onto new pathways (Kates, Travis, and Wilbanks 2012). A just adaptation process should involve (a) a mix of both incremental and transformative adaptation and (b) should occur through the autonomous decisions of a community and its members. So long as these conditions are met, even drastic changes in their territorial practices need not threaten people's interests in occupancy and self-determination.

To accommodate territorial interests, transformative adaptation should occur gradually, and incremental accommodations should be provided to older generations to continue the located life plans to which they are already committed. Often, older generations will not have the skills or training to take up, e.g., new livelihoods. But young people, still developing their located life plans, can shift into these livelihoods. Right now, older generations in mountain societies are making incremental changes to maintain their herding practices: moving livestock to new grazing grounds, shifting to animals tolerant to low-quality pasturage, and channeling water to specific areas. Simultaneously, younger generations are choosing not to become herders, turning instead to tourism and community forestry.

So long as this transformative process occurs gradually, no one's occupancy rights are violated, since everyone's interests in leading the located lives they

have already built are fully respected (Patten 1999). True, younger generations will build located lives different from those of their forebears. These descendants have a claim to a sufficiently wide range of valuable options from which to choose, and they also have a claim not to suffer interference with their lives once built. But the descendants have no claim that the set of options from which they choose be the same as those their ancestors once enjoyed. We are all born into lives that must inevitably differ from our ancestors'.

To respect self-determination, individuals and communities must be in charge of how to reshape their territorial practices in the face of environmental change. Major shifts should occur through community decisions, e.g., to devote what were formerly pasturelands to community forestry. Shifts should also respect individuals' rights to occupational choice. If these conditions are met, transformative adaptation need not threaten territorial interests in occupancy and self-determination.

Who should bear the costs of funding adaptation? There is now an extensive climate justice literature on responsibility for costs (including adaptation costs) associated with climate change (Caney 2005; 2010; Moellendorf 2014; Page 2012). That literature divides over two questions: first, which agents should bear the burdens—individuals, firms, or states? Second, should the distribution of burdens take account of *historical* emissions? Or should fair burden sharing be based on forward-looking considerations, such as agents' greater wealth or capacity?

While I cannot defend a comprehensive conception of climate responsibility here, I believe any adequate conception will attribute some responsibility to states as corporate agents, perhaps alongside high-emitting individuals and firms. True, there is reason to require individuals and firms to bear the costs of their excessive emissions through carbon taxation or a duty to purchase emissions permits, and these revenue streams might be used to partly offset global adaptation costs. But these monies are unlikely to fully rectify climate harms, since these forward-looking policies do not assign responsibility for the emissions of earlier generations, which will drive many climate impacts (e.g., sea-level rise) expected in the coming decades.

How are we to deal with this remainder? I believe states should be assigned responsibility for the shortfall, either (a) proportionally to their cumulative historic emissions (beyond those necessary to guarantee decent lives to their citizens), according to the Polluter Pays Principle; (b) proportionally to their per-capita income and wealth, according to the Ability to Pay principle; or (c) according to a weighted formula of both factors. Applying the Polluter Pays Principle to states' historic emissions faces challenges due to difficulties in establishing a causal link to present climate impacts, inter-generational liability, and the excusable ignorance of past governments about climate change. While I believe an account of historic state responsibility can answer these challenges (Pasternak 2021; Stiliz 2011), I cannot make that case here. If persuasive responses to

these challenges cannot be found, states' adaptation tax burdens can instead be allocated according to their ability to pay. Compared to individuals and firms, states have much greater capacity to manage a global adaptation tax scheme. States are signatories of international treaties and they have the resources, longevity, and coordination capability to initiate a global adaptation policy response. A cap should be placed on any particular state's total burdens: its payments should not compromise a state's ability to satisfy the basic interests of its own members.

Will a mandatory adaptation tax scheme prove feasible? Such a scheme would not require a world government but could be put in place through a multilateral treaty. William Nordhaus suggests combining a voluntary agreement between several countries with trade sanctions to overcome free riding (Nordhaus 2015). If a few large countries initiated an international adaptation tax scheme, they could apply a percentage tariff to the goods of nonparticipating countries, to incentivize international participation. Similar trade sanctions could be used to stabilize the agreement, penalizing countries who fail to pay their tax obligations under it.

Of course, some powerful states (such as China, now the largest carbon emitter) may refuse to participate in an adaptation treaty. (We should not prematurely rule out China's participation, since it has committed to providing adaptation funding through its South-South Cooperation Fund, and since its climate finance record is not notably worse than many liberal democracies.) (You 2023). But would such a powerful state's nonparticipation void other states' reason to cooperate?

It would not. Theories of responsibility in the face of partial compliance agree that compliant agents should continue to discharge at least their fair share of responsibility, so long as their contributions would make a difference to the victims (Miller 2011). Since providing even partial adaptation funding would prevent some climate displacement, compliant states should provide it. Yet while compliant states must provide their fair share, they need not "take up the slack" for noncompliant countries, covering the funding shortfall. Responsibility for any climate displacement caused by insufficient funding will rest with those states that refuse to cooperate.

True, the failures of noncompliant agents do create a duty for compliant agents to ensure victims are not left in a condition of dire need (Stemplowska 2016). But displacement from their territory, while a significant wrong, need not leave climate displacees in dire need if they are accepted to membership somewhere else. Compliant states therefore have a "fallback" duty to ensure that all displacees have access to a minimally just state where they can lead decent lives. But they can choose whether to fulfill this duty by providing additional adaptation funding or supporting migration solutions.

Will there be any compliant states? I think so. In the long run, increased migration flows and conflicts over scarce territorial resources will give liberal democracies reasons of self-interest to create an adaptation tax

scheme and to manage climate migration through regularized visas. Already, liberal democracies are unable to control their borders in the face of irregular migration, so they are unlikely to be able to do so in the face of further increases in movement caused by climatic instability. And in the absence of effective adaptation funding, conflicts over habitable space will prove immensely destabilizing to international peace and security (Moellendorf 2022, 140). So even if we think states will only sign onto treaties that are clearly in their material interests, this provides powerful incentives for liberal democracies to comply. True, these measures will not happen right away, and without the efforts of activists to bring pressure to bear, through dramatization, civil disobedience, and other forms of resistance. But there is reason for optimism about adaptation taxes and Climate Visas as a long-term goal.

## RELOCATION

Adaptation may prove difficult, especially over long timescales, for those threatened by sea-level rise and erosion, e.g., in coastal or delta areas or in island states. While protection structures such as seawalls and levees can safeguard some areas, these structures themselves can have damaging ecological impacts; they are expensive, and they may not work forever. So there is also a need for an institutionalized relocation regime for those permanently displaced by climate change.

The question of how a just climate relocation regime should be structured is complex and cannot be fully addressed here. But I highlight two implications of my theory for this issue. First, recall that as a matter of recognitional justice, each person should be publicly treated as having equal status when it comes to the earth. Government relocation programs often undermine this equal status. To protect against these recognitional injustices, relocation processes must meet demanding procedural criteria. Second, my account also holds that climate relocatees are owed, not just individual mobility rights, but also the right to resettle together and to enjoy the territorial preconditions for cultural and political self-determination.

Consider first the recognitional issue: decisions about who is protected and who must relocate are frequently associated with racial, ethnic, and class biases (Marino 2018; Siders 2019). Standard cost-benefit analyses prioritize *in situ* protection for dense, high-value property areas. Relocation is preferred for areas where property values are low, areas often inhabited by racial and ethnic minorities or working-class populations. Many of these groups are in these locations to begin with due to historic injustices, such as Indian Removal, redlining, or prior eras of government disinvestment (Maldonado 2018). Because climate displacement intersects with other background injustices, prioritizing relocation where it is most cost-effective will re-entrench inequalities, reserving *in situ* adaptation for privileged elites (Ajibade and Siders 2022).

Further, deciding whether relocation is warranted is not straightforward. Often pressures to migrate can be

mitigated if redistribution and social protection schemes are implemented (Marino 2015). True, there is a concern about consuming scarce resources in adaptation projects that provide only limited benefits, postponing an inevitable relocation. But given the disastrous government-mandated relocations of the past, and given the biases associated with relocation schemes, it is especially important that relocations occur only where no other durable solutions are possible (Bronen 2015).

To guard against these recognitional injustices, first, governments should be required to provide at-risk communities with periodic vulnerability assessments and to engage the community in an iterative decision-making process about whether to protect in place or to relocate (Bronen 2015). Each community should adopt clear standards (of mortality, injury to health and livelihoods, or damage to infrastructure), a breach of which demonstrates that relocation is necessary. Prior to opting for planned relocation, governments must show that these standards cannot be met *in situ*.

Second, relocation programs must be structured so that salient social identity groups are required to relocate at comparable rates. Though the entire US coastline will not be protected in the face of climate change, white, wealthy second-homeowners should be required to relocate as frequently as low-income racial minorities. This means that relocation programs must abandon their focus on property values and embrace a wider system of valuation, including the importance of place-based communities for their members. The level of *in situ* protection provided should be equalized, even in areas where property values would not justify such protection.

Finally, to respect their equal status, relocation programs must treat those vulnerable to climate impacts as autonomous deliberators, who can reason how best to cope with climate displacement. Though the state need not subsidize decisions to remain in risky areas, by providing a full suite of services there, relocation should not take place without a community-wide majority vote in favor (with membership in “the community” being defined by residence in the affected jurisdiction) (Bronen 2021). The best procedural mechanism may be to provide communities with a relocation grant, sufficient to reimburse them for the costs of moving and reconstructing social housing and community infrastructure in a less-vulnerable location and to devolve decision-making power over the relocation process to the community. Individuals should not be required to move with their community: if they opt out, they can be provided a lesser household support package, sufficient to guarantee them a decent place to live, but without their per-capita share of support for community infrastructure. With the authority to decide how to spend their funds, the community could manage its own relocation process, aided by government agencies.

To be sure, governments play an important role in determining the relocation budget and allocating relocation sites. In weighing the competing claims of several communities, governments should balance community A’s interests against first, the burdens on

the public of providing a given site or a larger budget, and second, against the opportunity cost of not providing that site or larger budget to community B instead. In making these allocation decisions, governments should trade off the competing interests of communities fairly, giving greater weight to the interests of less well-off communities. But within their allocated budget and menu of sites, affected communities should be empowered to make their own decisions.

In addition to these procedural guarantees, my account holds that climate relocatees are owed, not just individual mobility rights, but also the right to resettle together and to enjoy the territorial preconditions for cultural and political self-determination. Consider Shishmaref, an Inupiat village in Alaska threatened by erosion and storm surges. With many houses sliding into the sea, in 2016, residents voted to move to the mainland, and relocation planning is underway (Sutter 2017). The Inupiat enjoy tribal self-government, and they lead a subsistence lifestyle, hunting seals, walrus, birds, and caribou (Marino 2015). Should the US incur extra costs to ensure they are moved together to a place where they can maintain their political structures and way of life? Or is it acceptable to move them anywhere their basic rights can be secured, even if that means dispersing the community and settling them in urban housing, as more cost-effective plans to move them to Nome, Alaska might do (Gregg 2021)?

I believe the international community should bear the costs of providing the territorial preconditions of climate displacees’ cultural and political self-determination (Angell 2021; Kolers 2012; Nine 2010). (Due to the cost of secession to others’ expectations, I assume that self-determination for climate relocatees will take the form of internal autonomy rather than independent statehood.) When relocated communities ask the international community to provide territory for self-determination, they are not simply appealing to their personal preferences. Sufficient territory for cultural and political self-determination is a social basis of independence, which has special relevance to territorial distribution.

There are both freedom and equality reasons to treat territory for self-determination as a social basis of independence. To be *free*, individuals should dispose of some space within which to decide which place-related lives to lead. They will not dispose of a sphere of meaningful freedom if, as a condition of guaranteeing them a decent life, they are required to assimilate to Western-style, capitalist, urban social practices. The “generalized” approach to protecting territorial interests is not neutral (Davis and Todd 2017; Whyte 2017). It treats the land practices of one group (Westerners with a bourgeois capitalist way of life) as representative of all the earth’s inhabitants, and it attaches special burdens to those who prefer an indigenous lifestyle (Kolers 2009; Patten 2014). Privileging some people’s place-based practices in public policy fails to respect people’s claims to lead their own lives. The Inupiat have a strong interest in the freedom to use the earth in whatever morally legitimate manner they prefer, rather



than being required to assimilate into the way of life of the liberal capitalist settler state.

Second, there are also *equality* reasons for treating territory for self-determination as a social basis of mutual independence. Refusal to recognize people's claim to a place on earth they can use for the ways of life and political institutions they value has long been a way of treating them as inferiors. A state decision to deny the Inupiat opportunity for cultural and political self-determination could reasonably be seen as denigrating to them. Lest climate relocation amount to renewed colonialism, a relocation framework should see the freedoms of cultural and political self-determination as freedoms it must underwrite.

While a fair relocation framework should be designed to accommodate both Inupiat and Western practices, it cannot guarantee that the Inupiat will preserve their way of life forever. While occupancy requires that the *current* generation be afforded the opportunity to maintain their located life plans without interference, it does not require that future generations' located lives be the same as their ancestors'. So long as transformative changes occur through the autonomous decisions of Inupiat youth, such changes are fully consistent with Inupiat self-determination.

My account does not require compensating setbacks to *all* place-based projects, however. Consider the owner of a beachfront villa, faced with the loss, due to sea level rise, of her house and private beach. Is she entitled to compensation for the loss of her beachfront luxury home? Or should she be required to bear this loss herself, through private insurance? Surely not every located project is something a system of territorial justice ought to publicly underwrite, reducing others' fair shares as a result. How, if at all, do her claims differ from the Inupiat's?

Ownership of a beachfront luxury home is not a basic precondition for independence. So long as the loss of her property does not subject her to domination, or render her unable to participate in society on an equal footing, the homeowner's independence remains intact. Of course, it is acceptable for someone to devote themselves to the project of acquiring a luxury beachfront home. But this is not something a system of territorial justice should publicly underwrite, reducing others' shares of territorial resources as a result. Nor does this mean that the beachfront homeowner is owed *nothing*: a system of territorial justice should still protect her, like others, against intolerable risks to her located life plans, by underwriting her access to the area central to her comprehensive projects, if possible, and restoring the background conditions of stability for forming located life plans, if she is displaced (Draper 2023). But the protection offered may come in the form of less-costly guarantees that do not require compensating her luxury investment, e.g., rental assistance or the provision of standard social housing.

Yet loss of cultural and political self-determination is not a risk that agents should bear themselves; instead, they should be provided a fair opportunity to continue their cultural and political practices, should they wish to do so. I suggest that we understand a fair opportunity to

pursue located practices in *capability* terms. Capability theorists emphasize that due to human diversity, guaranteeing different people the same package of material resources often results in their having different abilities to achieve what they have reason to value (Sen 1992). Just institutions should therefore provide people access to a package of resources adjusted to their ability to convert those resources into relevant functionings. Since these abilities may vary across people, relocating the Inupiat may demand more land, or more expenditure, than relocating a group of urbanites would. Still, these additional expenses may be necessary to give the Inupiat the same effective freedoms of self-determination that others enjoy.

How should the costs of climate relocation be allocated? There are two kinds of costs: financial costs and territorial redistribution costs. In an ideal scenario, states would agree to norms of territorial redistribution and relocation financing, administered by an independent international authority (Wündisch 2019). This would involve quotas for territorial redistribution, based on states' GDP per capita, population density, share of uninhabited land, number of internal climate displacees, and perhaps past excessive emissions. States with high population densities or no uninhabited lands might be excused from redistributing territory, but required to make extra financial contributions, to cover resettlement costs and compensate other states for ceding their territory (Eckersley 2015, 495). Host states could identify resettlement sites, and relocatee groups could submit their ranked preferences over sites (based on cultural appropriateness, economic opportunity, or size) to the international authority. The authority could then allocate displaced groups new territories. (One method might involve a preference matching algorithm, similar to those used to allocate medical residents to hospitals [Acharya, Bansak, and Hainmueller 2022].)

Any territorial redistribution should be carried out gradually, with relocatee groups lodging claims in advance and states being granted a sizable period of time in which to resettle these groups and devolve internal territorial autonomy to them. (Receiving states may deploy techniques of "managed retreat," including bans on new development at the relocation site, voluntary buyouts for existing property owners, and generous compensation packages for any prior inhabitants who wish to move.) Since the number of cross-border displacees is likely to be small, and since receiving states would have the discretion to propose uninhabited or sparsely inhabited resettlement sites, it seems possible, given international coordination, to facilitate territorial autonomy for most climate displaced groups without imposing unreasonable costs on receiving states and their inhabitants.

Of course, such a centralized international burden-sharing scheme is unlikely. Realistically, states must be given considerable autonomy to decide how to comply with norms of territorial redistribution. One might therefore object that territorial redistribution will prove infeasible. Two significant concerns are domestic backlash and international noncompliance. Attempts

at territorial redistribution may provoke domestic resentment, which could lead to unrest, ethnic conflict, or human rights violations. And other states may be unwilling to comply with norms of territorial redistribution: it is unthinkable that, say, China would cede its territory to afford climate-displaced groups an opportunity for self-determination. (Nor, given that China fails to meet the criteria of basic justice, would it be justifiable to ask displacees to submit to its rule.) But if liberal democracies have to assume the entire burden of territorial redistribution, they might find themselves at a significant geopolitical disadvantage. Given these pragmatic concerns, an objector might argue that territorial redistribution is best abandoned.

I agree that in some cases, the correct approach will be to infringe the self-determination rights of climate displacees, where that is necessary to avoid violating other, stronger rights (such as rights of basic justice) or to prevent a terrible calamity (such as ethnic conflict, or civil war). While climate relocatees have a right to cultural and political autonomy, that right is not absolute. Still, I believe we should not abandon the aim of territorial redistribution, since even in the absence of ideal international coordination, there are scenarios where it is feasible to allow displaced groups to self-determine in new locations. And even where currently infeasible, self-determination should also inform “second-best” policies that (a) attempt to enable territorial autonomy in the future or (b) compensate displaced groups for their wrongful loss. Let me illustrate by considering three categories of cases.

First, consider the internal relocation of small self-determining groups, like the eleven indigenous tribes that received climate relocation grants from the Biden administration in 2022. These groups range from a few hundred to a few thousand people; most are planning to relocate to uninhabited or sparsely inhabited areas in the United States. There is minimal risk of domestic backlash, and here territorial redistribution requires no international coordination. It is thus feasible to enable these groups to reconstitute their self-determination in a new location, and the US has an all-things-considered duty to do so.

Next, consider the cross-border relocation of small or medium-sized groups, such as the possible future movement of Tuvalans to Australia, in the wake of the November 2023 pact that granted them the right to relocate there over time (Needham 2023). There are only 11,000 Tuvalans, and while it would be costly for Australia to redistribute territory to them, doing so is unlikely to threaten Australia’s ability to protect the fundamental territorial interests of its own citizens. Further, provided the Tuvalans were resettled on Crown lands—which make up 25% of Australia’s territory—territorial redistribution would impose minimal burdens on Australia’s inhabitants. True, there may be overriding reasons to limit Tuvalan self-governance in some areas (e.g., security or foreign policy). But since Australia is unlikely to jeopardize important political values by redistributing part of its territory, it should do so, even if other nations refuse to comply.

Of course, domestic backlash from Australia’s citizens might make territorial redistribution impossible,

even for a compliant government. In that case, the government should enact “second-best” policies, e.g., settling Tuvalans together, if possible, and recognizing some of their cultural rights without granting them political self-determination (Wündisch 2022). In addition, a compliant government should work to reduce this domestic backlash over time, engaging in civic education to change people’s opinions, and instituting gradual reforms in land use, to put Australia in a better position to grant the Tuvalans territorial autonomy in the future.

Finally, depending on the scale of future climate displacement (which itself depends on adaptation and mitigation choices), there may be cases where a displaced group’s self-determination rights must be permanently overridden. This is especially likely when a large group of climate displacees relocates across borders. It may be unreasonable to expect compliant states to redistribute enormous swathes of their territory when other states are noncompliant. Doing so might make it difficult for these states to secure occupancy, basic justice, and self-determination for their own members, or it could render these states prey to international aggression or domination. Yet even here, self-determination matters: first, a weak form of self-determination should be recognized even when a displaced group cannot be given replacement territory, e.g. through “deterritorialized” jurisdiction over maritime zones, or over the group’s educational and cultural affairs (Armstrong and Corbett 2021; Ödalen 2014). Second, when their self-determination is overridden, the international community is required to offer climate relocatees financial and symbolic reparations for their wrongful loss (Buxton 2019). The group has been subjected to a climate injustice, which should be acknowledged and compensated to the extent possible.

To conclude, I have argued that territorial justice requires guaranteeing occupancy, basic justice, and self-determination to all. This implies that the central plank of a climate displacement policy, where feasible, should be mandatory taxation to fund *in situ* adaptation. When relocation becomes unavoidable, I held that an individualized right to migrate is insufficient to secure displacees’ status as equal common possessors of the earth. Instead, relocation processes should (1) meet demanding criteria of procedural fairness; (2) ensure that displacees can reconstitute their place-based communities in a new location, if they wish; and (3) afford them independent cultural and political self-determination. While (1)–(3) are not fully achievable in all scenarios, they are feasible in some cases and should guide action in these cases. Though challenging, these safeguards are what a just climate relocation process requires.

## ACKNOWLEDGMENTS

Special thanks to three anonymous reviewers for *APSR* and to audiences at the University of Waterloo, Nova University-Lisbon, Sun Yat-Sen, Princeton, McGill, York, UC-Berkeley, UNC, Bowling Green State,

Columbia, ANU, Cardozo, and Washington Universities and to members of the MPP Work in Progress group and the Rocky Mountain Ethics Conference for comments that improved this article.

## CONFLICT OF INTEREST

The author declares no ethical issues or conflicts of interest in this research.

## ETHICAL STANDARDS

The author affirms this research did not involve human participants.

## References

- Acharya, Avidit, Kirk Bansak, and Jens Hainmueller. 2022. "Combining Outcome-Based and Preference-Based Matching: A Constrained Priority Mechanism." *Political Analysis* 30 (1): 89–112.
- Ajibade, Idowu Jola, and Ann R. Siders. 2022. *Global Views on Climate Relocation and Social Justice*. New York: Routledge.
- American Law Institute. 2020. "Restatement (Fourth), Law of Property."
- Angell, Kim. 2021. "New Territorial Rights for Sinking Island States." *European Journal of Political Theory* 20 (1): 95–115.
- Armstrong, Chris, and Jack Corbett. 2021. "Climate Change, Sea Level Rise, and Maritime Baselines: Responding to the Plight of Low-Lying Atoll States." *Global Environmental Politics* 21 (1): 89–107.
- Arneeth, Almut, Humberto Barbosa, Tim Benton, Katherine Calvin, Eduardo Calvo, Sarah Connors, Annette Cowie, et al. 2019. "IPCC Special Report on Climate Change and Land — IPCC Site." <https://www.ipcc.ch/srccl/>. Accessed August 8, 2024.
- Barnett, Jon R., and Michael Webber. 2010. "Accommodating Migration to Promote Adaptation to Climate Change." *World Bank Policy Research Working Paper*, no. 5270.
- Biermann, Frank, and Ingrid Boas. 2010. "Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees." *Global Environmental Politics* 10 (1): 60–88.
- Black, Richard, W. Neil Adger, Nigel W. Arnell, Stefan Dercon, Andrew Geddes, and David Thomas. 2011. "Migration and Global Environmental Change: Future Challenges and Opportunities." Final Project Report, Government Office for Science.
- Black, Richard, Dominic Kniveton, and Kerstin Schmidt-Verkerk. 2011. "Migration and Climate Change: Towards an Integrated Assessment of Sensitivity." *Environment and Planning A* 43 (2): 431–50.
- Borderon, Marion, Patrick Sakdapolrak, Raya Muttarak, Endale Kebede, Raffaella Pagogna, and Eva Sporer. 2019. "Migration Influenced by Environmental Change in Africa." *Demographic Research* 41: 491–544.
- Bronen, Robin. 2015. "Climate-Induced Community Relocations: Using Integrated Social-Ecological Assessments to Foster Adaptation and Resilience." *Ecology and Society* 20 (3): 36–43.
- Bronen, Robin. 2021. "Rights, Resilience and Community-Led Relocation: Creating a National Governance Framework." *Harbinger* 45: 25–45.
- Buxton, Rebecca. 2019. "Reparative Justice for Climate Refugees." *Philosophy* 94 (2): 193–219.
- Byravan, Sujatha, and Sudhir Chella Rajan. 2010. "The Ethical Implications of Sea-Level Rise Due to Climate Change." *Ethics & International Affairs* 24 (3): 239–60.
- Byravan, Sujatha, and Sudhir Chella Rajan. 2015. "Sea Level Rise and Climate Change Exiles: A Possible Solution." *Bulletin of the Atomic Scientists* 71 (2): 21–8.
- Caney, Simon. 2005. "Cosmopolitan Justice, Responsibility, and Global Climate Change." *Leiden Journal of International Law* 18 (4): 747–75.
- Caney, Simon. 2010. "Climate Change and the Duties of the Advantaged." *Critical Review of International Social and Political Philosophy* 13 (1): 203–28.
- Cassese, Antonio. 1995. *Self-Determination of Peoples: A Legal Reappraisal*. Cambridge: Cambridge University Press.
- Cattaneo, Cristina, and Giovanni Peri. 2016. "The Migration Response to Increasing Temperatures." *Journal of Development Economics* 122: 127–46.
- Cernea, Michael M. 2000. "Risks, Safeguards and Reconstruction: A Model for Population Displacement and Resettlement." *Economic and Political Weekly* 35 (41): 3659–78.
- Davis, Heather, and Zoe Todd. 2017. "On the Importance of a Date, or, Decolonizing the Anthropocene." *ACME: An International Journal for Critical Geographies* 16 (4): 761–80.
- De Shalit, Avner. 2011. "Climate Change Refugees, Compensation, and Rectification." *The Monist* 94 (3): 310–28.
- Docherty, Bonnie, and Tyler Giannini. 2009. "Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees." *Harvard Environmental Law Review* 33 (2): 349–403.
- Draper, Jamie. 2022a. "Labor Migration and Climate Change Adaptation." *American Political Science Review* 116 (3): 1012–24.
- Draper, Jamie. 2022b. "Climate Change and Displacement: Towards a Pluralist Approach." *European Journal of Political Theory* 23 (1): 44–64.
- Draper, Jamie. 2023. "Justice and Internal Displacement." *Political Studies* 71 (2): 314–31.
- Eckersley, Robyn. 2015. "The Common but Differentiated Responsibilities of States to Assist and Receive 'Climate Refugees.'" *European Journal of Political Theory* 14 (4): 481–500.
- Ellsmoor, James, and Zachary Rosen. 2016. "Kiribati's Land Purchase in Fiji: Does It Make Sense?" *Devpolicy Blog from the Development Policy Centre* (blog), January 11. <https://devpolicy.org/kiribatis-land-purchase-in-fiji-does-it-make-sense-20160111/>. Accessed August 8, 2024.
- Gemenne, François, and Julia Blocher. 2017. "How Can Migration Serve Adaptation to Climate Change? Challenges to Fleshing out a Policy Ideal." *The Geographical Journal* 183 (4): 336–47.
- Gentle, Popular, and Rik Thwaites. 2016. "Transhumant Pastoralism in the Context of Socioeconomic and Climate Change in the Mountains of Nepal." *Mountain Research and Development* 36 (2): 173–82.
- Gregg, Rachel. 2021. "Relocating the Native Village of Shishmaref, Alaska Due to Coastal Erosion." *CAKE: Climate Adaptation Knowledge Exchange*. <https://www.cakex.org/case-studies/relocating-native-village-shishmaref-alaska-due-coastal-erosion>. Accessed August 8, 2024.
- Hannum, Hurst. 2011. *Autonomy, Sovereignty, and Self-Determination: The Accommodation of Conflicting Rights*. Philadelphia: University of Pennsylvania Press.
- Hoffmann, Roman, Anna Dimitrova, Raya Muttarak, Jesus Crespo Cuaresma, and Jonas Peisker. 2020. "A Meta-Analysis of Country-Level Studies on Environmental Change and Migration." *Nature Climate Change* 10 (10): 904–12.
- Ingtz, Tenzing. 2017. "High Mountain Communities and Climate Change: Adaptation, Traditional Ecological Knowledge, and Institutions." *Climatic Change* 145 (1–2): 41–55.
- International Labour Organization. 2016. "Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All." <https://www.ilo.org/publications/guidelines-just-transition-towards-environmentally-sustainable-economies>. Accessed August 8, 2024.
- Kant, Immanuel. 1999. *Practical Philosophy*, ed. Mary Gregor. Cambridge: Cambridge University Press.
- Kates, Robert W., William R. Travis, and Thomas J. Wilbanks. 2012. "Transformational Adaptation When Incremental Adaptations to Climate Change Are Insufficient." *Proceedings of the National Academy of Sciences* 109 (19): 7156–61.
- Kolers, Avery. 2009. *Land, Conflict, and Justice: A Political Theory of Territory*. Cambridge: Cambridge University Press.
- Kolers, Avery. 2012. "Floating Provisos and Sinking Islands." *Journal of Applied Philosophy* 29 (4): 333–43.



- Leckie, Scott. 2014. *Land Solutions for Climate Displacement*. New York: Routledge.
- Lister, Matthew. 2014. "Climate Change Refugees." *Critical Review of International Social and Political Philosophy* 17 (5): 618–34.
- Maldonado, Julie K. 2018. *Seeking Justice in an Energy Sacrifice Zone: Standing on Vanishing Land in Coastal Louisiana*. New York: Routledge.
- Marino, Elizabeth. 2015. *Fierce Climate, Sacred Ground: An Ethnography of Climate Change in Shishmaref, Alaska*. Fairbanks: University of Alaska Press.
- Marino, Elizabeth. 2018. "Adaptation Privilege and Voluntary Buyouts: Perspectives on Ethnocentrism in Sea Level Rise Relocation and Retreat Policies in the US." *Global Environmental Change* 49: 10–3.
- McAdam, Jane. 2012. *Climate Change, Forced Migration, and International Law*. Oxford: Oxford University Press.
- McLeman, Robert, and Barry Smit. 2006. "Migration as an Adaptation to Climate Change." *Climatic Change* 76 (1): 31–53.
- McMahan, Jeff. 2009. *Killing in War*. Oxford: Oxford University Press.
- Mill, John Stuart. 1998. *On Liberty and Other Essays*. Oxford: Oxford University Press.
- Miller, David. 2011. "Taking up the Slack? Responsibility and Justice in Situations of Partial Compliance." In *Responsibility and Distributive Justice*, eds. Carl Knight and Zofia Stemplowska, 230–45. Oxford: Oxford University Press.
- Moellendorf, Darrel. 2014. *The Moral Challenge of Dangerous Climate Change: Values, Poverty, and Policy*. Cambridge: Cambridge University Press.
- Moellendorf, Darrel. 2022. *Mobilizing Hope: Climate Change and Global Poverty*. Oxford: Oxford University Press.
- Moor, Nicole de. 2011. "Labour Migration for Vulnerable Communities: A Strategy to Adapt to a Changing Environment." Working Paper. <https://nbn-resolving.org/urn:nbn:de:0168-ssao-380647>. Accessed August 8, 2024.
- National Academies of Sciences, Engineering, and Medicine. 2016. "The Economic and Fiscal Consequences of Immigration." Report. doi:10.17226/23550.
- Needham, Kirsty. 2023. "Australia Signs Security, Migration Pact with Pacific's Tuvalu." *Reuters*, November 10. <https://www.reuters.com/world/asia-pacific/australia-offer-climate-refuge-all-residents-tuvalu-report-2023-11-10/>. Accessed August 8, 2024.
- Nine, Cara. 2010. "Ecological Refugees, States Borders, and the Lockean Proviso." *Journal of Applied Philosophy* 27 (4): 359–75.
- Nordhaus, William. 2015. "Climate Clubs: Overcoming Free-Riding in International Climate Policy." *American Economic Review* 105 (4): 1339–70.
- Oberman, Kieran. 2011. "Immigration, Global Poverty and the Right to Stay." *Political Studies* 59 (2): 253–68.
- Oberman, Kieran. 2015. "Poverty and Immigration Policy." *American Political Science Review* 109 (2): 239–51.
- Ödalen, Jörgen. 2014. "Underwater Self-Determination: Sea-Level Rise and Deterritorialized Small Island States." *Ethics, Policy & Environment* 17 (2): 225–37.
- Page, Edward A. 2012. "Give It up for Climate Change: A Defence of the Beneficiary Pays Principle." *International Theory* 4 (2): 300–30.
- Pallikkathayil, Japa. 2010. "Deriving Morality from Politics: Rethinking the Formula of Humanity." *Ethics* 121 (1): 116–47.
- Pasternak, Avia. 2021. *Responsible Citizens, Irresponsible States: Should Citizens Pay for Their States' Wrongdoings?* Oxford: Oxford University Press.
- Patten, Alan. 1999. "The Autonomy Argument for Liberal Nationalism." *Nations and Nationalism* 5 (1): 1–17.
- Patten, Alan. 2014. *Equal Recognition*. Princeton, NJ: Princeton University Press.
- Penz, Peter, Jay Drydyk, and Pablo S. Bose. 2011. *Displacement by Development: Ethics, Rights and Responsibilities*. Cambridge: Cambridge University Press.
- Raz, Joseph. 1986. *The Morality of Freedom*. Oxford: Clarendon Press.
- Risse, Mathias. 2009. "The Right to Relocation: Disappearing Island Nations and Common Ownership of the Earth." *Ethics & International Affairs* 23 (3): 281–300.
- Scanlon, Thomas. 1976. "Nozick on Rights, Liberty, and Property." *Philosophy & Public Affairs* 6 (1): 3–25.
- Scanlon, Thomas M. 2000. *What We Owe to Each Other*. Cambridge, MA: Harvard University Press.
- Scanlon, Thomas. 2018. *Why Does Inequality Matter?* Oxford: Oxford University Press.
- Schewel, Kerilyn. 2020. "Understanding Immobility: Moving beyond the Mobility Bias in Migration Studies." *International Migration Review* 54 (2): 328–55.
- Sen, Amartya. 1992. *Inequality Reexamined*. Oxford: Oxford University Press.
- Siders, Anne R. 2019. "Social Justice Implications of US Managed Retreat Buyout Programs." *Climatic Change* 152 (2): 239–57.
- Simmons, A. John. 2010. "Ideal and Nonideal Theory." *Philosophy & Public Affairs* 38 (1): 5–36.
- Stemplowska, Zofia. 2016. "Doing More than One's Fair Share." *Critical Review of International Social and Political Philosophy* 19 (5): 591–608.
- Stemplowska, Zofia, and Adam Swift. 2012. "Ideal and Nonideal Theory." In *The Oxford Handbook of Political Philosophy*, ed. David Estlund, 373–89. Oxford: Oxford University Press.
- Stilz, Anna. 2011. "Collective Responsibility and the State." *Journal of Political Philosophy* 19 (2): 190–208.
- Stilz, Anna. 2019. *Territorial Sovereignty: A Philosophical Exploration*. Oxford: Oxford University Press.
- Sutter, John D. 2017. "Tragedy of a Village Built on Ice." *CNN*, March 29. <https://www.cnn.com/2017/03/29/us/sutter-shishmaref-esau-tragedy/index.html>. Accessed August 8, 2024.
- Thomson, Judith Jarvis. 1990. *The Realm of Rights*. Cambridge, MA: Harvard University Press.
- United Nations. 1966. "International Covenant on Civil and Political Rights." General Assembly Resolution 2200A (XXI). <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>. Accessed August 8, 2024.
- Whyte, Kyle. 2017. "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene." *English Language Notes* 55 (1): 153–62.
- World Bank. 2018. "Groundswell: Preparing for Internal Climate Migration." March 19. <https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration>. Accessed August 8, 2024.
- Wündisch, Joachim. 2019. "Territorial Loss as a Challenge for World Governance." *Philosophical Papers* 48 (1): 155–78.
- Wündisch, Joachim. 2022. "Towards a Non-Ideal Theory of Climate Migration." *Critical Review of International Social and Political Philosophy* 25 (4): 496–527.
- Wyman, Katrina Miriam. 2013. "Responses to Climate Migration." *Harvard Environmental Law Review* 37 (1): 167–216.
- Xu, Chi, Timothy A. Kohler, Timothy M. Lenton, Jens-Christian Svenning, and Marten Scheffer. 2020. "Future of the Human Climate Niche." *Proceedings of the National Academy of Sciences* 117 (21): 11350–55.
- You, Xiaoying. 2023. "Confusion Surrounds China's Pledged Climate Finance towards the Global South." *Climate Home News*, June 7. <https://www.climatechangenews.com/2023/06/07/china-climate-finance-global-south-south-south-xi-jinping/>. Accessed August 8, 2024.
- Zickgraf, Caroline. 2021. "Theorizing (Im) Mobility in the Face of Environmental Change." *Regional Environmental Change* 21 (4): 1–11.