ABSTRACT: While climate change poses significant harms, we continue to lack an enforceable decarbonization program. This lack of policy comes from not only disagreement about what a just policy is, but also a continued emphasis on state sovereignty. Maintaining traditional, Westphalian notions of state sovereignty creates a significant problem for climate regulation, as we will inevitably encounter a problem with non-compliant states. One way to address this issue is to use the transboundary nature of climate change to call the sovereignty of the non-compliant nation-state into question. By focusing on the impacts climate change has on individual rights and utilizing “progressive” visions of sovereignty as legitimacy, such as those offered by Allen Buchanan and David Luban, I argue that the facts surrounding climate change demand significant limitations to the concept of sovereign freedom. Moreover, I explore the possibility that this limitation could actually necessitate a move to political cosmopolitanism and the placement of sovereignty in a single, global authority. Ultimately, while the move to political cosmopolitanism is consistent with the moral arguments that underlie my argument, it is not required and I offer reasons for preferring a framework that maintains the nation-state as the locus of sovereignty, albeit a weaker one. In closing, I show this framework has the ability to deal with the problem of non-compliant states by legitimating action to coercively enforce decarbonization programs, even if a state is not a party to any treaty.
1. Climate Obstructionism and the Problem of Non-Compliant States

It seems difficult to go more than a week without finding some new report related to the threats of climate change, and often such reports tell us that things are happening at an accelerated rate. However, in the face of this threat, we still lack a global program of decarbonization.\(^1\) While some states have started to take their own measures, a piecemeal program is likely not sufficient. Additionally, such a reliance on individual states without some degree of coordination and enforcement among them, results in not all states participating (either at all or at appropriate levels). In fact, some states potentially see it in their benefit (albeit, likely only a short-term benefit) to not participate in decarbonization programs, as they get the collective benefit of less dangerous impacts from climate change due to other states decarbonization and they do not face the potential economic costs of changing their infrastructure and consumption patterns. Thus, some global institution seems needed to provide a coercive mechanism to get all states to engage in reasonably appropriate decarbonization programs.

However, a global program of decarbonization seems lacking due to a variety of forms of climate obstructionism. While there are a variety of forms this might take, ranging from local to global levels, I want to focus specifically on what seems to potentially be the most serious threat at the global level: obstructionism rooted in appeals to sovereign freedom. I consider this the most serious threat, given that it seems to be grounded in normative principles many find defensible in international politics. Thus, while the political theorist need not take the denier of climate science seriously (as that is a factual dispute and one that seems easily settled by scientific consensus), sovereignty-related obstructionism must be addressed since it has its basis in a normative matter.

Here, I take sovereignty-related obstructionism to exist in two primary types: refusal to even enter into an agreement about decarbonization or refusal to comply with whatever agreement one does in fact enter into. I take the actions of the United States Senate prior to the Kyoto negotiations, as a primary example of the former, and Canada’s entry into, but later withdrawal from the Kyoto Protocol to avoid significant financial penalties, as a primary example of the latter.\(^2\) While other states might by annoyed by such outright unwillingness of one country to participate unless their

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\(^1\) While I am focused on decarbonization, and thus concerned primarily with mitigation, I acknowledge that adaptive measures are also important to the discussion. While adaptation can go along with any mitigative program, I take it that we lack the technologies (and the time to develop new technologies) to rely solely on adaptive technologies, and thus require decarbonization to a fairly significant degree.

\(^2\) In the case of the United States, I am referring to the Senate’s unanimous passage of the Byrd-Hagel Resolution noting that they would not ratify any treaty that “would result in serious harm to the economy of the United States” (United States Senate, Byrd-Hagel Resolution, 105th Congress, 1st Session, S. Res. 98). In the case of Canada, prior to their withdrawal they were facing around C$14 billion, which was a primary motivation for their action, along with the fact that they claimed the treaty no longer was effective due to how few emitters it covered [see Peter Kent, “Statement by Minister Kent,” 12 December 2011, Foyer of the House of Commons; available on-line at <http://www.ec.gc.ca/default.asp?lang=En&n=FFE3686D-1&news=6B04014B-54FC-4739-B22C-F9CD9A840800> (Accessed 6 January 2012)].
demands are met or another country’s decision to change their mind about their participation, the current system of international relations and global governance seems to have no mechanism to resolve this. Moreover, the current systems actually seem to give credence to the claims grounded in sovereign freedom.

This primacy of state sovereignty has its both historical and normative roots in the Treaty of Westphalia. It is a view that states as a matter of principle are to be free from external interference and left to make their own determinations about what is best for them. From this, we have built a system that gives states significant priority as a matter of principle, and relies on any transnational issues being addressed via voluntary treaty systems (which, like Kyoto, tend to include mechanisms for exiting the agreement). Within such a system, states are provided with a right to be free from external interference, without prior and continued consent (i.e. states possess a right of non-intervention). This has in fact been codified in Article 2 of the UN Charter, which clearly explodes any and all forms of external intervention, except in those extreme cases authorized by the United Nations Security Council under Articles 39-51 of the Charter. Given that the threats of climate change would not qualify under the “extreme cases” of Articles 39-51, should any nation engage in climate obstructionism, it would seem that it is part of its sovereign prerogative and thus come with it a right of non-intervention. Thus, any attempt to coercively enforce a decarbonization program on such a state would violate its sovereignty.

While the examples above link the problem of obstructionism and non-compliance to a particular treaty (in this case the Kyoto Protocol), it is more important to engage the issue as a matter of non-compliance with any moral obligations imposed on states by the threat of climate change. Assuming states bear moral responsibility to engage in decarbonization programs, it would seem that many states fail significantly in fulfilling these obligations. This failure is further amplified due to the transboundary nature of climate change and the fact that its harms will be felt disproportionately, with those emitting the most less likely to feel significant impacts. However, if states do indeed have legitimate claims to sovereignty in the traditional Westphalian sense (i.e. that no other state as a right to interfere in the domestic affairs of regulating private actions within the jurisdiction of another), then it seems that those countries who are

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3 United Nations, Charter of the United Nations, 24 October 1945, 1 UNTS XVI; available on-line at <http://www.un.org/en/documents/charter/index.shtml> (Accessed 21 March 2015). My claim here is based primarily on the explicit nature of Article 2.7: “Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.”

4 For the purposes of this paper, I take this assumption to be true and will not say more about the issue. While the particular approach one takes to assigning responsibility in the case of climate change might impact the specific limits to sovereignty, I take it that the general framework offered here would still be applicable. Moreover, since this argument will focus on minimal responsibilities related to human rights, rather than more expansive responsibilities that might be tied to climate change as seen as a matter of distributive justice, I take it that there would be less impact to the account here based on the specifics of responsibility one holds.
fulfilling their moral obligations with respect to decarbonization have no legitimate claim to use coercive measures or influence those states who are not fulfilling their moral obligations with respect to decarbonization.

One way to address this problem is to simply attack the claim that those states currently engaged in decarbonization do not have a legitimate right to coerce others to pursue decarbonization. In trying to justify the regulation of the domestic affairs of another country, via some coercive element (e.g. a carbon tariff, general sanctions), one might simply argue that carbon emissions and their regulation cannot be conceptualized as a purely domestic issue. Thus, states have no sovereign claim in this domain (i.e. impacting atmospheric conditions), and consequently coercive interference is justifiable. Steve Vanderheiden offers a clear example of such a move:

Climate policy, it would seem, cannot justifiably be described as purely an internal matter, because GHGs emitted anywhere have the same effects regardless of their geographic origin and therefore have the potential to harm those residing outside of the nation-state’s borders. This “spillover” effect turns what might otherwise be an exclusively domestic concern into one in which other states become justifiably interested parties.5

When conceptualized this way, sovereignty-based obstructionism to global decarbonization looses its force (albeit theoretically, not necessarily practically). However, there would still remain significant questions about the thresholds for when states become “justifiably interested parties,” as it would seem odd to think that if one state has significantly low emissions other states would be justifiably interested parties to the point that external interference could not be justified. This seems to point to the idea that some matters of carbon emissions would in fact be covered under a states sovereign freedom, while other matters would not, as opposed to simply noting that a state as no sovereignty over something like carbon emissions. Thus, if we want to continue to think of the state as the primary hub of collective action in addressing climate change, we need an account of the why, when, and how sovereignty is limited and when states can legitimately use coercive mechanisms to achieve compliance with a global decarbonization program. To simply say that climate change is a transboundary problem and thus sovereignty-grounded obstructionism and non-compliance is not legitimate, does not go far enough in developing the norms that govern claims of sovereign freedom, both generally and specifically in climate matters.6

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6 I do not mean to imply here that Vanderheiden does not go far enough in his analysis, The quote offered appears in the early stages of his discussion on the issue as a motivating fact for deeper analysis. While recognizing the type of human rights account I base my arguments in this paper on, Vanderheiden focuses more on claims of justice (see *Atmospheric Justice*, 84-104) and thus his discussion with progressive notions of sovereignty requires a different approach than what I offer here. Ultimately, I take it that we are generally in agreement about the degree to which sovereignty is limited.
Assuming states will, and should, continue to play an important role in global politics (something I will return to in Section 5), it seems an obvious avenue for responding to climate obstructionism and non-compliance is to provide an alternative account to the traditional Westphalian sovereignty (and even more recent popular notions of sovereignty), which could then be used to legitimate external coercion in the face of a country’s failure to introduce appropriate decarbonization measures. Admittedly, developing a full account would also require a detailed examination of what is meant by external coercion, since more traditional modes of sanctions or military action seem ill-suited for addressing the regulation of carbon emissions. While important, that task will be saved for another time, though I will make some extremely brief remarks in Section 5 that point to a possible approach here. As such, the remainder of my discussion here will focus solely on why and how sovereignty ought to be construed as limited by the impacts of climate change (Sections 2 & 3) and how we might go about identifying the degree of such limitations (Section 4). After addressing these primary concerns, I will briefly explain why this does not undercut state sovereignty to such a degree that it calls for a singular, world state (Section 5).

2. Sovereignty, Legitimacy, and Human Rights

Following a period of controversial decisions to both engage (e.g. Kosovo in 1999) and not (engage (e.g. Rwanda in 1994) in humanitarian intervention, the UN Secretary-General Kofi Annan made a plea to the international community to reach a consensus on a set of norms that balanced respect for sovereignty with respect for human rights. When does the violation of the latter allow for a violation of the former? Or, in the context of this project, do what degree to violations of the latter limit sovereign freedom? In response, the International Commission on Intervention and State Sovereignty (ICISS) was formed by the Canadian government. The ICISS report, titled *The Responsibility to Protect* (R2P), put forward a vision of sovereignty that included with it a responsibility for states “to protect their own citizens from avoidable catastrophe.” Viewed sovereignty in this manner, allowed the R2P doctrine to demonstrate clear limitations to sovereignty, as it goes on to establish clear instances in which states that fail in their responsibility to protect, loose their claim their non-intervention. If sovereignty implies a freedom from external influence/intervention, then this clearly shows a limitation to sovereignty. Unfortunately, at least for our purposes here, the norms established for limiting sovereignty by R2P and current international law, do not seem to provide a fruitful avenue for thinking of climate change as limiting sovereignty, as they focus on harm modeled after things like genocide, as opposed to any human rights violations.

However, a vision of limited sovereignty embodied in the R2P doctrine is one that has been developed by a variety of contemporary political theorists and

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philosophers, and one I will seek to apply in the context of addressing climate change.\(^8\) Here, it is important to stress that our concern is with a wholly normative (\textit{de jure}) understanding of sovereignty, as opposed to a mere descriptive (\textit{de facto}) one.\(^9\) Taking this approach, we are interested in identifying when a state’s claim to sovereignty is morally acceptable and correlative when other states would lack a legitimate claim of interference in the decisions of the first state. By providing these conditions, we can identify the limits of sovereignty within the environmental domain.

While there exist a diverse set of options regarding the grounding of state legitimacy, one that lines up with the vision embodied in the R2P doctrine and can serve as the foundation of our framework is that state possess legitimacy, and thus a claim of normative sovereignty, if any only if it properly respects human rights (where these might be operationalized in a variety of ways).\(^10\) This view is exemplified by Allen Buchanan, who argues that a state is legitimate “if and only if it is morally justified in exercising political power,” and that the exercise of political power is morally justified “only if it meets a minimal standard of justice, understood as the protection of basic human rights.”\(^11\) Moreover, Buchanan goes on to add that this view of legitimacy cuts across borders and requires that “we take seriously the project of ensuring that all persons have access to institutions that protect their basic human rights.”\(^12\) Thus, legitimacy requires not only a domestic focus, but also a concern that others are able to have their rights protected, as well.

\(^8\) For example, see Andrew Altman and Christopher Heath Wellman, \textit{A Liberal Theory of International Justice} (Cambridge: Oxford University Press, 2009), 1-10; Bernd Krehoff, “Legitimate Political Authority and Sovereignty: Why States Cannot be the Whole Story,” \textit{Res Publica} 14 (2008), 289-299; and Christopher Morris, \textit{An Essay on the Modern State} (Cambridge: Cambridge University Press, 1998), particularly 204-217. However, this is not only a contemporary claim. The idea that sovereignty is limited has its roots in natural law theorists like Hugo Grotius and the modern liberal tradition beginning with John Locke.

\(^9\) This distinction is made clear by Krehoff: “Sovereignty can be used descriptively to point out the power and recognition a state actually enjoys (its \textit{de facto} authority), but it can also be used normatively to point out either the rules that ought to be applied according to valid law, or the conditions under which we consider sovereignty to be justified from a moral point of view” (Krehoff, “Legitimate Political Authority and Sovereignty,” 288-289).

\(^10\) For others who adopt this view, see particularly, Krehoff, “Legitimate Political Authority and Sovereignty,” 283-297; Morris, \textit{An Essay on the Modern State}, 136-171, and Joseph Raz, \textit{The Morality of Freedom} (Oxford: Oxford University Press, 1986). Charles Beitz also ties legitimacy to the protection of human rights in his practice-account of human rights; see his \textit{The Idea of Human Rights} (Oxford: Oxford University Press, 2009). It also seems to me that such a view can potentially be reconciled with recent arguments that legitimacy is grounded in democratic governance, provided an argument can be made demonstrating that democratic governance is necessarily implied by whatever set of basic rights one applies.

\(^11\) Allen Buchanan, \textit{Justice, Legitimacy, and Self-Determination: Moral Foundations for International Law} (Oxford: Oxford University Press, 2003), 145. It is also important to note that this justification of political power applies at all levels, and thus would also legitimate any international institutions created with the aim of upholding basic human rights. Consequently, if my linking of climate change to human rights is successful, this view not only limits sovereignty at the national level, it would grant legitimacy to a global institution created to enforce a global decarbonization program.

\(^12\) \textit{Ibid.}, 267.
This proves particularly useful for thinking about climate obstructionism, since it now opens the door to saying that a state who does not properly respond to the threat of climate change (assuming we can show this to be a matter of basic human rights), lacks legitimacy. Buchanan makes this explicit in a recent paper on the legitimacy of international institutions:

In some instances, the harms are so important that the state’s failure to see that they are prevented impugns its legitimacy. This would be the case, for example, if states refused to construct and support international environmental regimes that took reasonable steps to mitigate the effects of global warming. For example, suppose it is true, as seems likely, that an effective global, institutional response to global warming will not occur without the support of the USA. If the USA staunchly refuses to cooperate in global institutions that were needed to cope effectively with the problem of global warming, this could undermine its legitimacy. A state that persisted in acting in this grossly irresponsible way (one that predictably thwarted all reasonable efforts to prevent very serious harms to its own citizens) would forfeit legitimacy.  

However, we might worry that Buchanan’s emphasis here on the error of the United States being related to harms faced by its own citizens presents a vision of sovereignty that only limits sovereignty and legitimatizes coercive measures to promote decarbonization in the case of states whose own citizens’ human rights are threatened. However, it seems the more common scenarios with climate obstructionism involve countries whose failures to reduce carbon emissions will lead to far more harms to citizens of other countries, rather than their own. Consequently, on one reading we might think that since those states are still protecting their own citizens’ human rights, it would seem that they still have a prima facie claim to legitimacy.

In response to such cases, we might stress that Buchanan’s above statement about the requirement to make sure others have the needed institutions to protect their human rights, and use that the point out that at least in the case of climate change regardless of the impacts one’s own citizens, a state’s legitimacy will also be bound by non-citizens ability to have their human rights protected, which would include the regulation of all carbon, since the atmosphere knows no bounds. Additionally, once we turn to the role of human rights in thinking about legitimacy and claims of sovereign freedom, we can turn to the work of David Luban to see why it is that a compliant state would clearly have a right to coercively interfere in the affairs of an obstructionist or non-compliant state, as a means of protecting its own citizens rights, which is necessary for maintaining its own legitimacy. If this is in fact a legitimate action, then the other state does not have a claim of sovereign prerogative with respect to this matter and

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thus its sovereign is limited via the basic rights of non-citizens. Luban arrives at this conclusion by noting that “[h]uman rights are the demands of humanity on all humanity,” and consequently not only does a citizen have a claim against their own state to protect their basic rights, but they also have claims against other states to protect their rights as well.\(^{15}\) Thus, a state would only have legitimacy when it acts in ways that do not threaten anyone’s human rights, and thus its sovereign freedom only extends to decisions that do not impact human rights protection.

To help elucidate the point, consider Luban’s example of two nations, one of whom as excess food and another that is starving due to drought. In such a case, even though the first country did not cause the drought, they have the means to protect not only the human rights of their citizens, but also the human rights of the second country’s citizens. Thus, for Luban, the first country has an obligation to help the first, and if they fail to do so, coercive measures to force their compliance would be legitimate.\(^{16}\) In such a case, we can say that if the former country chooses to not provide the excess food, it would not be a legitimate exercise of their sovereignty, because it would go against the grounds of legitimacy: the protection of human rights. Thus, the sovereign freedom of the first country is limited with respect to what they can do with their food.

We now have an understanding of the link between legitimacy and limitations on sovereign freedom that not only applies to cases where a state’s actions harm their own citizens, but also cases where on state (perhaps through no fault of their own, particularly if in the case of climate change it is actually pursuing its own program of decarbonization) cannot protect its citizens interests and needs other states to act. Thus, a state’s sovereignty can be limited in two senses. First, it is limited by the claims its own citizens have against it to protect their individual rights. Second, it is limited by the claims non-citizens have against it to protect their rights (when their own state cannot or will not). Consequently, to be acting in the scope of legitimate sovereign freedom (with a correlative freedom from interference), a state must not engage in activities that demonstrate a lack of respect for basic human rights worldwide. To do others, shows one to be acting in a manner not protected by sovereignty as accounted for here, and thus legitimizes coercive action by outside forces (be they other states or global institutions). To put it differently, a state only possess a realm of sovereign freedom that governs possibilities for action that do not in some way compromise individual’s basic human rights. Thus, we have put far more normative constraints on sovereignty than the traditional Westphalian conception.

These two ways in which individual rights limit sovereignty is particularly useful in the case of climate obstructionism. Consider the fact that climate change is the result of carbon emissions, which are typically the result of citizens’ private actions. Moreover, these actions are not done with the intent of harming others. Consequently, we might think it odd to claim a state’s sovereignty is limited given they lack a direct responsibility for harms that might occur, and thus they have a right to continue to

\(^{15}\) Ibid., 174.
\(^{16}\) Ibid., 177-178.
pursue policies in their interests since they aren’t directly or intentionally harming anyone. However, the model offered here, makes it clear that the direct cause of the harm is not necessarily relevant to the claims that limit legitimate exercises of state sovereignty. Moreover, even if a state is able to protect its citizens from climate change, if it is also in its power to protect those in other countries when their home countries cannot (which seems to be the case when the home country implements decarbonization policies, but the other nation does not), then they have an obligation to do so. Thus, their domain of free action is limited; in other words, their sovereignty is limited and they do not have a basis for continued obstruction or non-compliance. This supports the claim that since we need shared collective action to address climate change and avoid violations of individual rights (something I will discuss in more detail below), then a state’s sovereignty is limited by whatever decarbonization program(s) are required of it according to the moral demands a climate policy rooted in human rights. Thus, under such a policy, coercive action against climate obstructionism and non-compliant states is wholly legitimate, and any global decarbonization program has normative force.

3. Linking Climate Change and Human Rights

While the understanding of limited sovereignty offered in the previous section can prove useful in dealing with scenarios in which individuals basic human rights are at risk, whether through state, private, or even natural actions, some might reject the applicability of such a paradigm to the case of climate change. Many in fact have sought to engage this topic as a matter of justice and the proper distribution of resources, as opposed to a matter of basic human rights. However, we can in fact provide a powerful link between climate change and human rights, which can then be used to think about how it would limit sovereignty in a manner that legitimizes coercive responses against climate obstructionists. In doing this, we must make sure to be clear about how this connection is made. Not only do we need to be able to show that the harms of climate change should be seen as human rights violations, but we must also clearly articulate how to identify when a failure to act demonstrates a loss of legitimacy (and hence a lost claim of sovereign freedom). To do this, will depend on the link between climate change and human rights.

When trying to claim climate change constitutes a violation of basic human rights, it is most helpful to take up the broader link between human rights and the environment. It seems clear that in examining generally accepted human rights (e.g. the right to basic health), the environment plays an important instrumental role by providing the underlying conditions necessary for the fulfillment of these rights. Consequently, one might say that since I need certain environmental conditions to have my moral claims met, I have a moral right to those environmental conditions, as my interest in having my moral claims met would constitute a sufficient interest for generating a right. However, this leaves the following question unanswered: is this moral right to those environmental conditions distinct from other identified human rights or is merely a component of other rights? The two options represent the approaches existent in the literature that directly link human rights to climate change.
The first defends a generic “environmental right” that while related to other human rights is distinct from them, and then shows that the effects of global climate change infringe on this right.\(^{17}\) The second defends the claim that the effects of global climate change violate other established human rights, such as rights to health, food, and so on.\(^{18}\) However, these approaches should not be understood as mutually exclusive. It is possible to defend a generic environmental human right and show that climate change infringes not only this right, but other basic rights as well.\(^{19}\)

While both approaches yield the practical benefits that come from linking climate change to human rights, it is vitally important to clarify exactly what right(s) are involved, as this will alter the scope of resultant duties. For example, if climate change is merely a violation of rights to basic health and subsistence, then there might not be any obligations for keeping the environment in any specific condition or GHG reductions if basic health and subsistence can be met through technological advancements. However, if one holds that there is something like a human right to self-determination or a right to one’s homeland, then there might be strong obligations to protect certain geographies through massive attempts at mitigation and aid directed at adaptation in those areas, in order to avoid cases of environmental refugees whose right to self-determination is infringed.\(^{20}\) Moreover, if one understands climate change as violating a more general environmental human right, this might entail obligations of sustainable development and strong environmental protections that might not exist as components of other established rights.

Fully discussing these matters is beyond the scope of the current investigation.\(^{21}\) All that is essential here is that a link between climate change and human rights can be defended. While the particular thresholds or contexts for the harms that result in the

\(^{17}\) cf. James Nickel, “The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification,” *Yale Journal of International Law* 18, no. 1 (1993): 281-295; Tim Hayward, *Constitutional Environmental Rights* (Oxford: Oxford University Press, 2005); Richard Hiskes, *The Right to a Green Future: Environmental Rights and Intergenerational Justice* (Cambridge: Cambridge University Press, 2009). It should be noted, however, that while all three offer defenses of a generic environmental human right (e.g. a right to an adequate environment) none offer a focused discussion on how the effects of climate change infringe upon that right.


\(^{19}\) Vanderheiden seems to take something akin to this route in his recent book by talking of both “environmental rights” and how climate change violates a right to basic health, see *Atmospheric Justice*, 240-252. Additionally, in a footnote in one of his articles, Caney gives the impression he is doing the same thing as Nickel and Hayward, which would place him under this combined approach (see Caney, “Human Rights and Global Climate Change,” p. 21). However, I take other rights to be doing all the work in Caney’s account and thus confine him to the second approach.

\(^{20}\) Wellman and Altman, drawing from the Universal Declaration of Human Rights, talk of such a right as a genuine human right, which could then be used in this type of argument; see their *A Liberal Theory of International Justice*, esp. 2-3 and 10-42.

\(^{21}\) I take up a more detailed examination of these issues in another paper, “Climate Change and Human Rights: An Argument for Using Capabilities” (unpublished draft).
loss of legitimacy (and thus where the exact limits of sovereignty fall) might change under the particular approach one takes, each still allows for climate change to be placed within the notions of legitimacy and limited sovereignty offered here, and provide us with the cases in which intervention in a state’s affairs is wholly legitimate. Consequently, we have an answer to the question of why sovereignty is limited. The next section will offer a framework for how we can begin understand the degree of these limitations.

4. Identifying the Bounds of Sovereignty through Climate Vulnerability

Having shown in the previous section how any claim to sovereignty is limited by a state’s ability and willingness to protect human rights, both at home and abroad, and that climate change presents a legitimate threat to human rights, we can now turn out attention to the question of how to go about identifying how far sovereign freedom extends in the realm of carbon regulation. Essentially, our question here is how would one go about identifying when a state’s obstruction or non-compliance with some decarbonization program goes against the normative account offered above and is thus not a legitimate exercise of its sovereignty. Or, from the other direction, under what scenarios are coercive measures to implement a decarbonization program against obstructionist or non-compliant states legitimate. While I will not be able to spell out all the details and specific limits here, as that would depend on the particular human rights account one adopts, I simply seek to offer a method for determining the limits of sovereignty with respect to decarbonization. This method could then be brought into political discussions, as well as data analysis to help better identifying when to take appropriate action against states.

It is important to keep in mind that when dealing with climate change, we are typically addressing harms that are, to some extent, temporally distant from us (though this is becoming less and less true). Thus, when we talk about the harm of climate change, we are really talking about the harm of particular future climate scenarios. As such, if we are going to think about climate change as limiting sovereignty, we are essentially looking at a future climate scenarios and asking which scenarios fall in the domain of legitimate sovereign action (i.e. those scenarios that do not have significant violations of human rights) and those that limit the choices a sovereign state can legitimately make (i.e. those with violations of human rights stemming from a failure to be able to respond to climactic changes). Evaluating climate scenarios in this way, we can say that a state that acts in a manner that sets us down the path of the latter, acts illegitimately, and it is appropriate to coercive enforce some type of decarbonization program on them.

At this stage, an immediate worry might be brought up that such a view is only looking at the collective emissions, and thus will not be useful for identifying when a particular state has overstepped its sovereign prerogative. Here, the thought is that

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22 The initial remark here is meant to point to the idea that many of the impacts have been traditional framed around the issue of future generations. However, there are already felt impacts from climate change, thus even current generations are facing the potential for threats to their human rights.
while you can show me which scenarios would lead to human rights violations and raise questions about legitimacy, it is not clear you could say that Country A’s refusal to pursue decarbonization (or more decarbonization) is a cause for it to lose its legitimacy since some other nation could make up for that difference, while still protecting its own citizens human rights. Admittedly, for this account to fully work, we would need some account of how to properly divide up responsibility related to decarbonization and adaptation. I take it that this could either come directly from the particular human rights account one adopts, or come from some alternative account of responsibility. For the time being, I will assume that such responsibilities and roles can be identified under various climate scenarios. Moreover, it seems that with a human rights approach, there would be clear cases (at least with major emitters) where we could in fact identify that other country’s would be unable to pick-up the slack and thus those major emitters would be exceeding their sovereign freedom, regardless of if we think it is a proper distribution of responsibility.

So how do we go about identifying such scenarios? I offer the following as a test for whether we are dealing with a scenario that limits sovereignty (i.e. a scenario where there are human rights and there is no legitimate claim to pursue actions putting the globe on such a path). If we are dealing with the immediate present we would simply examine the current environmental conditions within each state and ask whether those conditions allow individuals’ human rights to be protected given reasonably available adaptive technologies. Clearly, if upon examination individual’s rights are being fulfilled, then no state’s sovereignty is limited, other than to make sure they do not engage in new actions that diminish the environmental conditions allowing for the fulfillment of individuals’ rights. If we can identify individuals whose rights are not being fulfilled due to environmental factors, we would ask ourselves whether there are available adaptive technologies that could fulfill their rights. If so, then whatever state possessing those technologies has its sovereignty limited by the claims made against them by the individuals’ basic rights. Thus, in such cases, a state cannot use sovereign prerogative to refuse to provide (or in some circumstances sell) certain technologies to those individuals or their state.

That said, it seems our primary interest is in analyzing future-oriented scenarios in order to identify what types of pathways are legitimate exercises of sovereignty freedom and to what extend decarbonization is required by states. In engaging with future-oriented scenarios, we must recognize that we are relying on various projections and assumptions about what the world will be like and build this into our model. Consequently, we have to operate with models that project future conditions—climatic, environmental, but also institutional (both economic and political). Not only are institutional assumptions necessary for making environmental ones, but these are also essentially for identifying whether a projected future rights violation is caused by a failure to pursue decarbonization now or by a future failure to implement reasonably available appropriate institutions or adaptive technologies. This proves significant since limitations to sovereignty in the present only seems justifiable to avoid those scenarios that will outstrip adaptive capacity, as these are the only scenarios where the moral fault lies wholly in the present.
For example, treating future conditions as roughly a continuation of the current status quo (e.g. no robust climate policies, reliance on carbon intensive sources for energy, little regulation, continued population growth), we can project future environmental conditions based on our current trajectory and assess whether individuals in the future will likely have their human rights protected. Since this scenario is based on the current institutional conditions, we can consider those social and political institutions available to use presently, coupled with some reasonable expectation for technological advancement given the institutional context (and the incentives for development within that context). In examining this future, we might find that there will be a relatively low reduction of carbon emissions and if the limit of available adaptive measures were at some level X (where X is the maximum degree of adaptive capacity under that scenario), there would be a violation of individuals’ human rights. Moreover, such a case would point to the need for emission reductions in the present to respond to that violation, since that would be the only way to maintain legitimacy. However, if the maximum degree of adaptive capacity where instead Y, then the violations that might occur would not be related to our failure to engage in decarbonization programs, but instead a failure of future institutions to maintain their legitimacy by taking the necessary means to protect human rights.

This way of looking at climate scenarios can be easily modeled via the idea of adaptive capacity and climate vulnerability (i.e. the chance of having adaptive capacity outstripped). While there are numerous indices determining countries’ adaptive capacity and climate vulnerability, work by Gary Yohe and his collaborators offers an extremely helpful analysis using Antoinette Brenkert and Elizabeth Malone’s Vulnerability-Resilience Model (VRIM). Yohe et al. note that the VRIM uses multiple measures for both countries’ sensitivity to environmental stresses and their adaptive capacity, which then produce its vulnerability index. Coupling these vulnerability indices for countries with possible temperature changes based on the IPCC’s old A2 and B2 scenarios, Yohe et al. “offer mapping portraits of relative vulnerability to climate change.” Additionally, these portraits are made using two different climate sensitivities (1.5 °C and 5.5 °C), representing the lower and upper bounds of estimates.
at that time. These scenarios and climate sensitivities were chosen, as they are “not-implausible” and offer “glimpses of exposure to relatively modest and potentially severe climate change.”

Yohe et al.’s work shows that while developing countries are at significant risk from climate change, the developed world is not immune either. When looking to mid-century, their models show that with a climate sensitivity of 1.5 °C both the A2 and B2 scenarios show little to no vulnerability throughout most of the world, though parts of Western Africa, the Middle East, and Eastern Asia show modest vulnerability (Figure 1 left-side), pointing to the unlikeliness of significant human rights violations. Thus, it would seem that there is no limitation on sovereignty with respect to this path. Yet, if climate sensitivity is on the higher end (Figure 1 right-side), then most of the world faces at least modest vulnerability, with much of Africa and Asia facing moderate vulnerability.

However, if we extend projections to the end of the century, Figure 2 shows that on the low end of climate sensitivity with the A2 scenario, some countries will face extreme vulnerability (showing a high likelihood of human rights violations) with most facing at least modest vulnerability, this time pointing to a limitation in sovereignty (and thus a need to think about what time-scale we need to think about limitations of sovereignty under). Worse, the high end of climate sensitivity shows that on either the A2 or the B2 scenario most of the world would be facing extreme vulnerability by 2100.

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26 Ibid.
27 Ibid., Figure 4.
Thus, under these scenarios, there would be significant violations of individuals’ human rights, and states would be under an obligation to not allow such scenarios to come into being. Thus, any state who acted in a manner that moved us toward these scenarios would be acting illegitimately.28

Figure 2. Global Vulnerability for Varying Degrees of Warming in 210029

From this, we can generalize two types of scenarios and ways to approach bringing climate modeling into the political discussion: those in which the fault for any human rights violations lies in the environmental conditions of the future (i.e. cases were adaptive capacity is outstripped) and those in which the fault lies in the failure to implement the proper institutions and/or technologies (i.e. cases were adaptive capacity is not outstripped). Making such a distinction allows us to determine whether the moral fault, and the failure to protect human rights, lies in the present and is related to decarbonization, or lies in the future. In the former, we can claim that a state’s sovereignty is limited in the present, insofar as it must not engage in actions that lead to that climate scenario. In the latter, we can claim that a state’s sovereignty is limited only in the future, insofar as it must engage in the implementation of the

28 I am fully aware that the lack of certainty surrounding the proper value of climate sensitivity, raises difficulties here. However, if the model shows that there are places with high levels of climate vulnerability under either the lower or upper bound (for example Northern and Eastern Africa on the A2 scenario), would give strong arguments to legitimizing action against any country obstructing a pathway away from that scenario.

29 Yohe and others, A Synthetic Assessment, Figure 5.
appropriate institutions or adaptive technologies in the model that will prevent individuals’ basic rights from not being met.

Drawing from this, we can summarize three distinct cases and ways that climate change limits the sovereignty of states. For ease, I will assume we are dealing with a world consisting only of three states, A, B, and C:

**Limited Sovereignty with Respect to Adaptation in the Present:** Environmental conditions are such that climate change has already started affecting the planet. While there have yet to be impacts resulting in human rights violations in A, countries B and C do face conditions resulting in human rights violations. Both countries possess the relevant adaptive technology to address the harms, but only B is willing to (and does) implement them. Country C for whatever reason does not implement them, and thus its citizen’s rights are severely threatened.

**Limited Sovereignty with Respect to Mitigation in the Present:** A, B, and C are currently implementing policies that put the planet on course for climate scenario 1 (CS1), which would create a future where the adaptive capacities of A and B would be outstripped, resulting in human rights violations. To avoid this, each country has a moral duty to adopt a set of policies that will collectively produce climate scenario 2 (CS2). This future would avoid the harm of CS1. However, only countries A and B follow through with the appropriate policies, and this produces CS1*, which still results in the harms of CS1.

**Limited Sovereignty with Respect to Adaptation in the Future:** A, B, and C are currently implementing policies that put the planet on course for climate scenario 1 (CS1), which would create a future where the adaptive capacities of A and B would be outstripped, resulting in human rights violations. To avoid this, each country has a moral duty to adopt a set of policies that will collectively produce climate scenario 2 (CS2). This future would avoid the harm of CS1. However, if only two countries follow through with their moral obligations, instead of facing CS2, they will face CS2*, which will no longer outstrip the adaptive capacities of A and B. In response, only A and B put the relevant policies in place, while C fails (either due to unwillingness or inability) to implement the proper regulations. In the future, A implements the appropriate adaptive technologies, while B fails to do so (due to unwillingness).

In all of these cases, we want to know if the actions of the states were legitimate, since if the action is not legitimate it would demonstrate that that state was not free to act in the manner it did and thus its sovereignty is restricted. In the first case, it seems fairly straightforward that C’s action is not legitimate, based on the argument in the previous sections. Thus, C’s sovereignty is limited insofar as this action cannot be said to be in the realm of sovereign possibilities. Consequently, if C’s sovereignty is limited, it would seem to allow the possibility that A and/or B could legitimately try to interfere in the affairs of C, to prevent this illegitimate exercise of power.
The second case proves slightly problematic. As the facts are presented, again it appears that C has engaged in illegitimate action, and thus C’s sovereignty must be limited to exclude this action as a possibility. However, we might question whether A and B could have, recognizing C’s failure to act, instituted stricter policies to compensate for C’s failure. If it is possible they could have done this, then it seems as though C has engaged in a legitimate exercise of sovereignty (and therefore sovereignty would not be limited here). Yet, if we allow for such claims, then it seems that the limitations of sovereignty might not fully line up with the normative demands of differentiated responsibility; thus, a state would be able to legitimately obstruct in some cases, even when they are acting against their moral obligations. Even so, such a scenario would at least legitimize a minimal degree of coercively imposed decarbonization.

5. A Call for a World State?

At this point, and given the role the above framework placed on collective actions and the various climate scenarios, one might think that this would lead to the conclusion that the only way to properly protect human rights with respect to climate change is to have a singular world state that avoids the worries of differentiated national emissions. Thus, sovereignty would be shown to be so limited that currently existing states actually lack any legitimate sovereign freedom. However, even if this framework did in fact show that states have literally no freedom in the domain of carbon emissions, all that would demonstrate is that a conception of state sovereignty no longer includes the atmospheric domain. It would not necessarily imply that there is no legitimate national level sovereignty. Consequently, while a world state might be consistent with this approach to sovereignty, insofar as its legitimacy would be grounded in the same normative claims, it clearly is not required.

Recognizing this, one might instead raise the worry as a more practical matter. That is, given that we have clearly established normative limits to state behavior, the only way to enforce them is via a world state. While this is something that deserves far more consideration that I can give here, it seems to me that even if it might be easier or more efficient, it is not necessary to have a world state as the vehicle for enforcement. It seems that the imposition of some combination of sanctions, carbon taxes/tariffs, or trade bans could potentially put enough pressure on an obstructionist or non-compliant state to enter into compliance. Since these are coercive measures, their implementation requires legitimacy, which is then provided by this account. Imagine a scenario in which China agrees to enter into a global decarbonization treaty, but the United States for some reason deems it unfair and refuses to sign. Assuming the failure of the United States in this case would lead to a pathway of human rights violations, those countries part of the program would be justified in enforcing the standards of decarbonization on the United States. Consequently, China could impose certain taxes or trade bans that put enough economic pressure on the United States to consent to the required carbon reductions (since even if there is an economic impact from that it would be seen to be less than the impact from the taxes and trade ban from China).

Moreover, it seems to me that there are good reason to want to maintain the national-state as the primary locus of sovereignty in international affairs. For one, it
seems that given geographic differences, it seems easier to be properly responsive to those living in varied circumstances when we allow governance by those who live within those same circumstances. Essentially, there seems value within the various national identities, both in governance, but also in terms of the general ability to structure diverse ways of life. There is a worry that any move to a more centralized world state, might push against the national level commitments we find important. Given the fact that we can maintain these relationships in a valuable way, while still giving up some power to properly respect all person’s human rights, it seems fitting to keep that balance.

6. Concluding Remarks

Ultimately, this way of looking at limiting sovereignty, aims to keep the best of both worlds – the role of the nation-state in international politics and a fair respect for human rights. By setting it up in the manner presented, it might not sway those obstructionist and non-compliant states, but it at least provides a defense for any actions that might be conducted against them (be it in the context of trade, sanctions, etc). Moreover, the ability to include questions of adaptive capacity and climate vulnerability, not only gives clear metrics and points of departure for political debate, it also stresses the role of not just decarbonization, but also adaptive technologies. If a state wants to use its sovereign prerogative to not enter into a program of decarbonization, we might just use this to then show that their free choice to do that, now limits their choice regarding their ability to sell certain technologies, since now they might have to transfer them for free to maintain their legitimacy. If anything, the hope is that it is at least a new direction to legitimize responses those states who consistently fail to put forward good faith efforts in the development of an international climate treaty.