Coaxing Climate Policy Leadership

Steve Vanderheiden

With the failure of the international community to negotiate a successor treaty to the Kyoto Protocol in late 2011, and with little prospect of U.S. ratification of any treaty framework that includes binding greenhouse emission targets, hope for a sustainable and effective international climate policy appears dim. As of 2012, only Australia, New Zealand, and the European Union continue to endorse binding post-Kyoto greenhouse emissions targets, with countries representing half the emissions controlled under Kyoto rejecting any further binding mitigation commitments in the absence of a treaty framework that includes the United States. Further, the remaining commitments are likely to be tested by political and economic turmoil that strains the ability of the governments to maintain them. While the "roadmap" that emerged from the seventeenth session of the Conference of the Parties (COP-17) of the 1992 UN Framework Convention on Climate Change (UNFCCC)—held in Durban, South Africa—calls for a post-Kyoto treaty to be negotiated by 2015 and to take effect by 2020, ongoing reluctance by China, India, and the United States to accept binding emissions caps threatens to frustrate progress toward any such future agreement. Given the rapidly closing window of opportunity to begin reversing current trends of increasing global emissions and to eventually stabilize atmospheric concentrations of greenhouse gases at levels that would prevent the dire consequences predicted by "business as usual" trajectories, significant mitigation action remains urgently needed, with climate change adaptation programs becoming increasingly important.

As observers have noted, this stalemate in international policy development shifts the onus to ground-up rather than top-down actions, including policy at the national and subnational domestic level as well as private actions undertaken by civil society actors. In the near future policy leadership may be widely diffused, residing with nongovernmental organizations, private corporations, and local

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communities, rather than with states. Such efforts can affect larger emissions trends at the margins, but to solve the problem itself an international policy framework is still needed. As others have stressed in recent exhortations for more leadership from such key actors as the United States, in order to bring about such a framework the disparate and competing interests that have thus far produced only an international climate policy impasse must be aligned through the exercise of effective leadership.[1] My aim here is to explore the decision structure from which such leadership might potentially emerge and from which a fair and effective climate policy framework might gain requisite international support.

In what follows, I identify several conditions for and obstacles to effective international policy leadership with a view toward creating the conditions for that leadership to emerge, and suggest how such an overtly strategic analysis might address some key unexplored territory in climate ethics. First, I sketch the nature and role of leadership in international climate policy negotiations, defining leadership as the ability to induce action by other parties, and to subsequently generate further and reciprocal action by followers. Next, I analyze the current decision structure related to national action on climate change, showing how leadership might help to overcome resistance to cooperation. I then suggest the use of conditional promising as a means for inducing climate policy leadership by either the United States or China. By transforming the decision structure from one in which the exercise of such leadership carries high risks and promises few rewards into one with lower risks and higher probabilities of success, this approach casts leadership as an essential element for mobilizing international cooperation in protecting the climate system. Rather than viewing such leadership as a spontaneous and persuasive power that need only be summoned by would-be leaders and is thus independent of actions by potential follows, this approach understands leadership as a power to trigger cooperation that in some cases can be induced by pledges of reciprocal action.

Rethinking Leadership

The impasse over the main terms of an effective international climate policy agreement can be understood in part as having resulted from a failure of leadership. Although the UNFCCC called on developed countries to "take the lead" in combating climate change, the United States in particular has shirked that commitment, refusing even to follow other signatory nations in accepting binding

mitigation targets, let alone to lead them in doing so. In advance of the 2007 COP-13 meetings in Bali, UN Secretary-General Ban Ki-moon called on the United States and China to "play a more constructive role" in climate policy negotiations.[2] The results of the 2008 U.S. presidential elections gave many people renewed hope that America might finally eschew the climate policy obstructionism that characterized the George W. Bush administration. Awarding President Obama the 2009 Nobel Peace Prize, the Norwegian Nobel Committee remarked that "the USA is now playing a more constructive role in meeting the great climatic challenges the world is confronting." However, the renewed effort at multilateral diplomacy for which Obama was recognized never materialized. The president's late-hour effort to salvage a deal from the 2009 COP-15 meetings resulted in the Copenhagen Accord, which abandoned multilateral diplomacy for an end run around the established UNFCCC process and generated a nonbinding pledge that includes no binding targets. Surely, this was not the leadership that the secretary-general had called for or that the Nobel Committee had anticipated.

Even if potential leaders such as the U.S. president had acted differently, an effective international policy may not have emerged. It is also unclear that others could have made a difference, had they been in the relevant leadership positions. My aim is not to scrutinize recent policy history or impugn particular actors as having failed to lead, except insofar as this might yield insights into how such leadership might emerge in the future. Rather, attributing ongoing disagreements over international climate policy to a failure of leadership trades on the definition of leadership itself, which involves inducing others to act in ways to which they are not currently inclined or to accept policy terms toward which they are not currently disposed, and introduces what I call the *problem of leadership*. As explained below, the problem arises when cooperative action by some potential leader becomes necessary for securing the reciprocal cooperation of others, but the prospects for that exercise of leadership are affected by potential followers. Apart from the terms of an effective and presumably fair international climate policy framework capable of gaining the assent of the world's nations and their governments, my aim here is to explore how the powers related to leadership can sometimes be used to overcome policy divisions, as well as the role that leadership might potentially play in securing such an agreement.

Moreover, contrary to the presumption that leaders act from the sheer force of will to overcome existing obstacles to cooperation, leadership can itself be enabled or enhanced by potential followers, and in many cases must be if it is to successfully

emerge.[3] While the powers vested in particular leaders depend on such institutional authority as well as personal skills and traits, the decision of when to draw on such leadership resources as political capital and moral authority as well as the efficacy of their deployment are context-dependent, and influenced by those seeking to enhance and direct or frustrate leadership powers over a given issue area. One may, for example, improve the chances of a U.S. president opting to lead on a particular policy proposal by "priming" the policy community to coalesce around a favored option,[4] helping to build the congressional majorities needed to adopt the measure, and/or by dividing and weakening its expected opposition. Potential leaders can be led, and their powers of leadership positively affected, in the same ways that followers can be: the external basis for their continued resistance to some desired action can be undermined or the expected rewards for undertaking that action can be improved. Policy leaders are not immune to the force of the incentives that comprise the decision structure within a given issue context. Indeed, effective leadership is quintessentially about acting within such a structure.

As Henry Shue notes in his call for U.S. climate policy leadership in an earlier issue of this journal, "the American failure of political leadership is one major factor that is crippling efforts to negotiate multilateral action at the international level," and he offers ethical reasons for the United States to lead but no political prescriptions for how it might do so.[5] Others have likewise called on the United States, and sometimes also China, which recently surpassed the United States as the world's largest emitter of greenhouse pollution, to exercise more constructive policy leadership in international climate politics.[6] The status of the United States and China as major greenhouse polluters and their historic reluctance to accept binding emission reduction targets make their participation vital. The transformation of these states from policy laggards to willing cooperators is a necessary condition for the success of any effective international scheme. Yet the same features that warrant efforts to call for greater cooperation from these two countries in developing international climate policy also make them potentially effective policy leaders, given their influence on the decision structure faced by other states. While I think it possible that China might be able to serve this leadership role on its own, and while joint action between the two powers could be quite effective toward this end, my focus will be on the leadership powers held by the United States.

The question here, then, is how the United States might be induced to take on this leadership role in the development of international climate policy. The reasons *why* it should act on climate change mitigation, reducing its domestic

emissions significantly and soon, are distinct from but related to the *how* question. As Shue notes, the fact that the United States *could* make a difference in avoiding serious future harm generates "a Good Samaritan reason why we ought to be the ones to perform urgent action now." Shue grounds these remedial obligations in the capacity of a major contributor to climate change to mitigate its emissions, which would hold "even if [the United States] bore no prior responsibility" for contributing to the problem.[7] However, adding prior responsibility to these capacity-based considerations underscores and strengthens a state's remedial obligations. That it would be wrong or unjust for the United States to refuse to act on decarbonization imperatives, let alone fail to lead other nations in taking on their own commitments, shapes the decision structure in which U.S. climate policy leadership might emerge, but does not in itself bring about that leadership. Recognizing and acting on one's responsibilities may be a necessary condition for leadership to emerge, but it is an insufficient one, especially given the entrenched interest-based and ideological opposition to climate policies in contemporary American politics and government, and the certain costs and uncertain risks that international policy leadership entails. However, ethical obligation is relevant to *moral authority*, an essential feature of leadership, and one that might be wielded on behalf of cooperative action on climate change, and that must be exercised in the service of defensible ends. Only when acting to advance collective goals can states wield moral authority, exerting power on behalf of ethically defensible ends.[8] Thus, the climate justice imperatives that require U.S. participation in international efforts to mitigate climate change also enable it to exercise a leadership role in those efforts. Because its potential shift from shirking its responsibilities to undertaking them could trigger international cooperation through the moral authority of leadership, the reasons noted by Shue regarding *why* the United States should act also suggest *how* it might acquire the moral authority needed to lead other states toward mutually beneficial cooperation by accepting its fair share of burdens toward this cooperative effort, and thus the capacity to effect change. In international politics, leading by example can pressure followers into contributing their fair share toward collective goals, but such an outcome depends on the right example being set by the leaders themselves. Only if the United States can be induced to take on its full commitments can its action generate the moral authority needed to compel others to do the same.

Rodney Bruce Hall describes moral authority as an "ideational power resource" that states can acquire by cultivating it in their international relations, and that

they can exercise on behalf of various goals and projects.[9] As a form of power, it exhibits the features that Talcott Parsons identifies in defining power as a "generalized capacity to secure the performance of binding obligations by units in a system of collective organization when the obligations are legitimized with reference to their bearing on collective goals."[10] In the context of climate change, those goals are identified by the UNFCCC, which calls on the world's nations to "protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities."[11] Climate policy leadership, as opposed to mere power, aims to move reluctant parties toward accepting a fair and effective international climate treaty—one that accomplishes the stated goals while observing the normative constraints articulated in this key passage—rather than allowing an impasse over its terms to continue to frustrate the development of international regulatory efforts or forcing unfair terms on parties that are unable to resist them. However, leadership need not be either initiated by parties that end up acting in a leadership capacity or monopolized by them. Economic or political power resources may be combined with moral authority in identifying and empowering potential leaders, and such leaders may be partially vested with the capacity and direction to lead by potential followers, who can affect the costs and benefits of leadership.

The Problem of Leadership

The incentives working against national action on climate change present what Stephen Gardiner calls a particularly "wicked" collective action problem, pitting the world's states as well as generations against one another.[12] Any national government contemplating unilateral domestic mitigation policy action faces the prospect of taking on the full costs of its carbon abatement program while enjoying in return only a fraction of the benefit generated by such an effort, measured in terms of avoided climate-related harm, which is shared among all countries and people. Those costs include not only direct expenditures on carbon abatement, due to upgrades in manufacturing facilities, energy and transportation infrastructure, and more efficient buildings and appliances, but also the pass-through effects of such costs, such as higher energy prices, diverted investment capital, and loss of trade competitiveness. For countries responsible for only a small proportion of current global emissions, heroic efforts to reduce domestic emissions would

likely confer few if any discernible benefits, and these would likely pale in comparison to the significant domestic costs of undertaking such ambitious action. Governments pushing for domestic emissions reductions would surely meet with public resistance, partly as a result of this cost and benefit structure, undermining their popular support and jeopardizing any climate policy gains they might achieve. Major polluters, such as the United States and China— responsible for 18 and 23 percent of current global carbon emissions, respectively[13]—may be large enough to be able to affect the global climate through their domestic climate policy actions, as Shue notes, but they still face the dilemma of concentrated costs and dispersed benefits characteristic of so-called commons tragedies.[14]

For the United States, this disjuncture between the costs and benefits of domestic mitigation has provided the decisive rationale for refusing to participate in the Kyoto Protocol. In 1997 the Senate passed the Byrd-Hagel Resolution by a vote of 95–0, clearly signaling its unwillingness to take on any binding emissions targets that did not also apply to China and India. This sentiment was echoed by the George W. Bush administration in 2001, when it withdrew from the treaty framework altogether.[15] In addition to rejecting the risks of taking costly action that could put U.S. industry at a disadvantage against competitors from states in which emissions were not capped under Kyoto's framework, both the Senate and the administration cited domestic economic costs as a reason for rejecting the protocol, making clear that collective action issues directly precipitated both decisions. While it is obviously possible for nations to take on unilateral mitigation efforts—take, for example, the EU and Australia's carbon pricing programs—the collective action problem makes such efforts considerably more costly. Moreover, those costs are often political as well as economic, as indicated by the public reaction against Prime Minister Julia Gillard's Labor government for its role in adopting the carbon tax in Australia.

Such are the expected costs of unilateral state action on climate change mitigation, which any government must weigh against expected benefits when considering unilateral action as a policy option. Failing to do so, at least in democratic states in which governments periodically face the electorate in plebiscites, would likely spell the end of the mitigation program as well as that government's term in office, regardless of how popular such policies might be abroad. Unless the effects of such action include the successful pressuring of other states to follow suit, which is a kind of leading by example and which magnifies the climate impact of any domestic mitigation efforts, the domestic costs are likely to well

exceed domestic benefits, even if overall benefits are well in excess of the overall costs. This introduces a new consideration to the dilemma noted above, and one that suggests a means by which the force of the dilemma may be dissipated and the role of leadership in climate politics clarified. Agents contemplating such action might ask: *What if by my action I could lead others to act with me?* If my action serves as the catalyst for others to act similarly, then the benefits that result include not only the effects of my individual actions but also those others that follow from it. In making cost-benefit calculations, all the mitigation effects that result from one country's leadership might be counted against its costs, thereby reducing at least one important psychological obstacle to action. Moreover, insofar as others follow the leadership initiative of a country such as the United States in pricing carbon with a view toward reducing domestic emissions, costs associated with a loss of trade competitiveness vanish, as comparative disadvantage only follows when trade rivals refuse to adopt similar carbon pricing mechanisms. While such considerations may or may not provide the tipping point needed for a U.S. administration to attempt climate policy leadership, greater assurances that other countries would reciprocate U.S. mitigation commitments would surely reduce both the costs and risks associated with undertaking such leadership action.

Leadership from Conditional Promising

In an analysis of the ethics of joint action, Robert Goodin asks whether one agent can ever be excused from acting as he ought to because of the unwillingness of another to act similarly, in cases where both actions are needed in order to bring about some good outcome.[16] Consider, he suggests, two persons coming upon a child trapped underwater in a wrecked car, whereby both persons would need to work together in order to rescue the child from drowning. As Goodin argues, no one would be required to engage in a futile effort to rescue the child by acting alone, so the obligation of either to act appears to require that the other is also willing. If either one were to express his *own* unwillingness to do his part in rescuing the child in advance of a refusal by the other, Goodin suggests, he would act wrongly. But, Goodin asks, if one potential rescuer refused to act first, would the other be exonerated from engaging in futile lone action? If *ought* implies *can*, Goodin notes, he may, as the unwillingness of others to engage in joint action with us affects the possibility of our successful action. In order to avoid the counterintuitive implication that each potential rescuer's unwillingness

might thereby excuse the other, at least where neither signals an unwillingness to act first, Goodin proposes a potential solution to the problem. If the ethical imperative in cases of joint action is, as he puts it, "you ought to do it, if sufficiently many others will also do it," then each potential rescuer is obligated to conditionally promise "I will if you will" and at least one must promise "I will if (you will if I will)."[17] The former promises reciprocal action if one offers to take the initiative and act first in rescuing the child, and the latter promises to initiate that action when reciprocal action has been promised by others.

Absent this expected reciprocity, the costs of any agent acting on his own are high, as others are likely to free ride on any benefits that are provided by a single action; and if one follows Goodin in stipulating a threshold of cooperation needed to provide any such benefit, then unilateral action becomes even more ill-advised. On the other hand, offering to reciprocate the actions of others comes at a very low cost. Modifying Goodin's solution slightly in order to accommodate multi-person joint actions, each can offer "I will, if sufficiently many others will to bring about the desired end" with little risk, since either an insufficient number of others will make the same promise of reciprocity, in which case no action has been committed, or enough others will make the same promise, in which case the promised action will not be futile, as it will be sufficient to produce the desired outcome so long as these promises are kept. Once enough potential cooperators have pledged their reciprocity, some leader can step forward with a version of Goodin's "I will if and only if (you will if I will)" pledge to initiate the cooperative scheme.

One potential obstacle to successful cooperation remains if benefits produced through the cooperation of some are available to others regardless of their role in providing them. If some can free ride on the efforts of others they will be tempted to do so. Because free riding in commons tragedies involves some parties taking unfair advantage of others by accepting benefits of a cooperative scheme while refusing to contribute their fair share of the costs, thereby diminishing those benefits available to others, it violates the terms of fair play.[18] Since the objectives of climate policy leadership include not only specified outcomes (avoiding dangerous climate change) but also identify normative constraints (a fair allocation of burdens among various parties), leaders must aim to prevent free riding, whether or not it has the effect of degrading the collective good in question. Where would-be free riders cannot be prevented from enjoying the benefits of the good in question, as is the case with climate change, leaders might seek to make contributions compulsory or otherwise punish those shirking their shares

of provision costs by mobilizing the collective enforcement power of cooperating parties in pressuring would-be free riders to cooperate.

In cases where the "mutual coercion" option is not readily available and none can be excluded from enjoying the good, does the threat of free riding undermine the provision of that common good, as standard game theory analysis supposes? That is, if all states and people enjoy whatever climate change mitigation others undertake to provide, are the incentives for wide participation in a climate protection regime undermined? They may not be. Suppose that the benefits of cooperation would not be increased by additional action beyond some threshold of sufficient contribution toward provision of a collective good, so that noncontributors beyond the threshold would neither add to nor detract from the good's provision. For example, a lighthouse could be built and maintained with some amount of financing, beyond which further benefits would not obtain through additional contributions. Could enough potential cooperators still be induced to make the conditional offers of reciprocity required for bringing about the desired outcome? Under such conditions, it would be worthwhile for parties to offer conditional cooperation, since at worst insufficient others would likewise offer theirs, in the spirit of "nothing ventured, nothing gained"; and the outcome of being a contributor to a public good that others free ride on is somewhat better than no good, even if it is less good than getting the same good without contributing. At least as long as the conditional offer to cooperate is binding—that is, one cannot promise to do one's part, then back out if enough others similarly promise to reach the necessary threshold—the opportunity to free ride should not deter cooperation. Conditional offers to cooperate might be slow in coming, as each bides his time, hoping that enough others will pledge their reciprocal contributions first so that free riding remains an option to him, but all still prefer cooperation as opposed to a failed scheme, and so would not hold out indefinitely. That parties may experience continuing temptations to break their promises to cooperate, even after the cooperative scheme is initiated, suggests that commitments must also be made toward the mutual enforcement of a climate treaty's terms, and not just regarding each party's decarbonization targets.

Overcoming Obstacles to Cooperation

In the real world of jealousy and envy rather than rational calculation, the threat posed by free riders has a stronger hold on many than is supposed in game

theoretic analysis. As Richard Arneson observes, the incentives to free ride can often undermine cooperative schemes of the kind described above, in which participants would be better off with limited cooperation but some free riding, as the desire for fair play can lead some to reject schemes that allow free riding to occur. To this end, he describes two motives for defecting from mutually beneficial cooperative schemes. The first can be seen in the *nervous cooperator*, who "desires to contribute his assigned fair share of the costs of supplying B [some public good], provided that enough other persons also contribute to keep the scheme viable. He fears that other individuals will fail to cooperate, that the scheme will collapse, and that B will not be supplied regardless of his own contribution." Here, the potential contributor's fear of a less than fully reciprocated contribution leads to defection from the scheme, as free riders threaten to make the efforts of contributors count for naught. The other is on display in the *reluctant cooperator*, who "desires to contribute his fair share to the cost of supplying B, provided that all others (or almost all others) also contribute their fair share. He fears that in fact it will not be the case that all or almost all individuals will contribute their assigned fair share. In this situation, if he contributes he will be assisting the provision of the fruits of cooperation to people who do not contribute their fair share. Accordingly, he declines to contribute."[19] Here, the cooperative scheme could be viable even in the face of free riding, and would be individually as well as collectively rational in advancing the interests of contributors as well as free riders, but the threat of others taking unfair advantage of contributors undermines the scheme. Both nervousness and reluctance are often seen in failed cooperative schemes, which, as Arneson suggests, often fail not from the absence of a sense of fair play among the majority of potential contributors—as with free riding in standard collective action problem analysis—but rather from fair play's ability to overwhelm the self-interested motives against which it is opposed.

How does this relate to the dilemma surrounding national action on climate change? If the world manages to avoid dangerous climate change, all will benefit from that averted hazard, albeit unequally. As with Garrett Hardin's grazing commons, defection by significant polluters from the cooperative scheme needed to maintain the climate system against degradation threatens to undermine benefits produced by the cooperation of others, first through the direct effects of pollution resulting from uncapped emissions and then from breakdowns in cooperation as free riders gain competitive advantages against participants in the scheme. For the same reason that Hardin's rational herdsmen are reluctant

to limit the size of their own herds unless all others take on similar commitments, states are, in Arneson's terms, often nervous or reluctant cooperators in deciding whether to adopt unilateral or multilateral decarbonization efforts outside an international treaty framework in which all major polluters undertake similar commitments. The inability to control free riding or to coerce universal cooperation leaves many as bystanders to the process, neither participating nor signaling their willingness to be led, with the effect of reinforcing status quo momentum against participation. This analysis illuminates the causes of the underprovision of carbon abatement programs, but also points the way to a potential solution to its core dilemma.

Can leadership play a role in overcoming this impasse, and, if so, how? It can, but not in the straightforward fashion by which leadership is often characterized, wherein leaders act on their own and against the tide, staking out a position and moving former opponents over to their side through the force of persuasion. Suppose that, instead of justifying its opposition to or withdrawal from the Kyoto Protocol framework by reference to China's and India's refusal to accept binding emissions caps, the U.S. government had made a conditional promise: "We will, if China and India (and relevant others) will." This kind of commitment should be relatively easy to make, particularly given skepticism about the prospects of other countries following suit, as this would allow for the staking out of some moral high ground without the associated costs of claiming that same ground through unilateral action.[20] If the scheme falls apart, other states would be held responsible, even though those countries behaved no differently than the United States.

The United States did not make such a conditional promise, and likely will not, though other parties have made conditional commitments to more ambitious emissions targets if the United States would join in an international climate treaty framework.[21] In its deeds if not its words, the United States has thus signaled that it would prefer the failure of international climate policy development (and therefore dangerous climate change) to an international treaty framework in which all are required to do their fair share to mitigate climate change. This is obviously an ethically indefensible position, but that is not what is at issue here. Suppose that the United States continues to resist calls to do its fair share in avoiding climate-related harm, much less for it to lead others toward solutions to the problem, and suppose other countries consequently avoid undertaking costly but potentially effective domestic mitigation actions. The status quo persists. But

now suppose that countries around the world, one by one, begin to make conditional offers of reciprocity: they promise "I will, if you will." Each commits to the sufficiently ambitious domestic mitigation targets necessary to avoid dangerous climate change if enough other states adopt and meet similar targets, agreeing to implement necessary abatement programs provided that others states, including the United States, likewise agree to participate. Perhaps the threshold for the scheme to go into effect is set at 75 percent of global emissions, so that either the United States or China could continue to hold out without causing the scheme to collapse, but one of the two would have to participate in order to bring its terms into effect.

That is to say, suppose that a sufficient number of the world's states that are responsible for a significant share of global greenhouse emissions offered to enter into a cooperative scheme, but only if some key state was to take the initiative and lead them toward a solution to the threat of climate change. Surely the European Union would commit early to the scheme, given that it has already internally committed to a 20 percent reduction target by 2020, offering its conditional cooperation as an inducement for the United States or China to lead in this sense. Once a set of countries representing 57 percent of global emissions had made such conditional pledges—which would require near-universal participation among developed and large developing states—there would be the opportunity for either the United States or China to add its 18 or 23 percent of global emissions to the total and thus bring the treaty into effect (at 75 percent), and this in turn would put pressure on both to act in order to avoid being isolated as the lone major holdout. Two states would thus have good reasons to accept fair terms of cooperation, lest one of the two be the first to accept terms that were acceptable to the remaining states (that is, more fair to all), leaving the lone holdout with the disadvantages of remaining outside looking in. Perhaps these two powers would make a pact to refuse participation together, thereby jointly leading the world toward future ecological collapse. Perhaps they would join together, acting in unison to lead the world toward the other, more hopeful future. If either was to join without the other, the remaining uncooperative state (if only one decided to join the initiative) would be marginalized and isolated in its continued intransigence, raising the potential costs of ongoing defection for both.

This solution involves noncooperative game theory analysis. The cooperation that results from inducing leadership is essentially self-enforcing, since it would then trigger the set of reciprocal commitments that form the basis for a fair

and effective climate treaty framework. In such a scenario, participating countries keep their promises because of moral motives concerning integrity and trustworthiness or from fear of reprisal and reputation costs for promise breaking. To call it self-enforcing obscures the crucial role played in the enforcement of its terms by norm diffusion created through an international climate regime constructed around ethical principles, initiated by a series of conditional pledges of reciprocity followed by an act of induced but committed leadership. Although final enforcement authority remains with individual parties, all participants have a strong interest in maintaining the cooperative scheme, and thus in enforcing its terms, through the various resources they control. Failing to comply with the terms to which states voluntarily consent through their participation would alienate a given state from the international community, inviting recrimination of the kind that strong leadership and effective cooperation continues to provide over time.

As Hugh Ward has shown, schemes to protect the global commons are often a kind of repeated noncooperative game, in which states respond through their domestic regulatory actions to what other states have recently done or failed to do, which "suggests that solutions enhancing the environmental quality of all the nations concerned may be attained through conditional cooperation in which each nation cooperates by reducing its emissions as long as the other nation has also done so in the past."[22] The continued cooperation of each is conditioned on the continued cooperation of others, with each self-enforcing terms of its own cooperation but retaining the option of withdrawing from the scheme if it falls apart. Ward's solution works well for maintaining existing schemes of cooperation, but lacks the ability to initiate them where they do not currently exist, as with climate change mitigation. His analysis suggests but does not pursue the kind of conditional commitment suggested above, which is designed to set incentives to induce leadership and thus to establish the scheme itself, which thereafter can be maintained in the way he describes, or through more robust if informal collective enforcement capacities. With the moral authority of leadership requiring enforcement of fair terms of cooperation in mitigating climate change, participants would presumably be willing to use a range of power resources, not just threatened defection, to enforce those commitments. They could also use those resources to foster international cooperation in the ways that Ward identifies as essential to the maintenance of international regimes, investing them with the capacity of normative force, or moral authority. They can do this, he writes, "by

encouraging trust and longer time horizons; by lowering the incentives to freeride in any particular round through normative, legal, and economic means; by generating incentives to maintain institutional structures that would be destroyed by freeriding; and by generating possibilities for issue interlinkage which were not previously available."[23]

Conclusions

By now, it should be clear what ethical considerations play a role in this putatively strategic analysis. Climate ethics furnishes the ends toward which such exercises in leadership may be oriented, but also provides the constraints around which the cooperative scheme that it initiates and maintains can be designed. As with ethics more generally, climate ethics must be concerned with what to do, not merely with which outcomes to endorse or what allocation of burdens is just or most fair. To this end an analysis of obstacles to the construction of fair terms of cooperation in international climate policy can illuminate key features of the path to both. Shue's call for climate policy leadership suggests that this role would require the United States to "do more than one's fair share to compensate for the noncompliance of others," taking on greater burdens in an effort to move others to action.[24] With some kinds of cooperative endeavors, this form of leadership can be effective in overcoming contributors' dilemmas. However, this view of leadership merely recasts the burden allocation issue familiar to scholars of climate ethics, and does not explore how such magnanimous action might lead others toward a solution for all rather than render their contributions unnecessary.

Given that leadership involves wielding moral authority on behalf of ethically defensible ends, the question of how much each state must do is relevant to leadership, but peripherally. At the core of leadership is the dynamic by which it induces reciprocal actions on the part of followers, moving all from impasse to cooperative solution, exercising a form of power that is vindicated only by the fairness of the terms that it entails. While recent calls for greater U.S. (or Chinese) international climate policy leadership may be right that a self-initiated and self-directed drive toward constructing a fair and effective climate regime would be ideal, critics are probably also right in their skepticism about the prospect of such a spontaneous role reversal occurring. Likewise, claims to climate policy leadership by the European Union lack an account of how such a leadership example affects the decision structure in which others may be induced to follow.[25] More promising

is the form of leadership described above, where nominal leaders emerge as the result of incentive shifts, triggering the fair and effective cooperative scheme that others have defined in advance. Not only do ethical considerations bound this scheme in advance, as the kind of power that it involves is legitimate only when used on behalf of just outcomes and processes, but these fair terms also emerge from that manner in which each party must formulate its conditional promise, as good faith offers of reciprocity cannot contain objectionable terms of cooperation. Goodin's rescuers could never agree to work together if either offered the other a scenario in which "I will, but only if you do most of the work and take on most of the risks," as this would be transparently unfair, and would not suffice to absolve the party that offered it from blame for the scheme's collapse. By jointly devising the scheme's terms, through promises of reciprocal action that all would undertake, a contractualist hypothetical disciplines the form that each offer must take. Leaders in cooperative schemes of this kind can no more dictate the terms that others will offer them than those that they will likewise need to offer others, as both are defined in terms of their mutual acceptability. While the approach taken above looks purely instrumental—as concerned only with the means of bringing about cooperation, rather than either its ends or terms—it is necessarily concerned with all three, and aims to bring them together in a constructive and mutually-reinforcing manner.

NOTES

[1] Jeffrey Marlow, "E.U. Looks to U.S. for Climate Leadership," *New York Times* (online edition), June 3, 2009.

[2] Elisabeth Rosenthal, "UN Chief Seeks More Climate Change Leadership," *New York Times* (online edition), November 18, 2007.

[3] Karlsson et al. examine the "demand side" of climate policy leadership by surveying perceptions of potential leaders but stop short of proposing strategies for inducing such leadership. See Christer Karlsson et al., "Looking for Leaders: Perceptions of Climate Change Leadership among Climate Change Negotiation Participants," *Global Environmental Politics* 11, no. 1 (2011), pp. 89–107.

[4] See, e.g., Jon A. Krosnick and Donald R. Kinder, "Altering the Foundations of Support for the President through Priming," *American Political Science Review* 84, no. 2 (1990), pp. 497–512.

[5] Henry Shue, "Face Reality? After You!—A Call for Leadership on Climate Change," *Ethics & International Affairs* 25, no. 1 (2011), p. 17.

[6] See, e.g., Robert Repetto, *America's Climate Problem: The Way Forward* (New York: Routledge, 2011). Also, see notes 1 and 2.

[7] Shue, "Face Reality?" pp. 19–20.

[8] See Steve Vanderheiden, "Leadership, Moral Authority, and Global Climate Change," in D. A. Hicks and T. Williamson, eds., *Leadership and Global Justice* (New York: Palgrave Macmillan, 2012), pp. 80–82.

[9] Rodney Bruce Hall, "Moral Authority as a Power Resource," *International Organization* 51, no. 4 (1997), p. 597.

[10] Talcott Parsons, *Sociological Theory and Modern Society* (New York: Free Press, 1967), p. 308.

[11] United Nations Framework Convention on Climate Change, art. 3, principle 1 (New York: United Nations, 1992).

[12] Stephen M. Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change* (New York: Oxford University Press, 2011), chap. 1.
[13] U.S. Department of Energy, Carbon Dioxide Information Analysis Center; cdiac.ornl.gov/.
[14] Garrett Hardin, "The Tragedy of the Commons," *Science* 162, no. 3859 (1968), pp. 1243–48.
[15] After specifically naming China, India, Mexico, and Brazil among developing countries excluded from binding emissions targets under Kyoto Protocol terms, the Senate resolved that "the United States should not be a signatory to any protocol to, or other agreement regarding, the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997, or thereafter, which would (A) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period, or (B) would result in serious harm to the economy of the United States." In defending his 2001 decision to formally withdraw from the protocol, President George W. Bush echoed the same two concerns.
[16] Robert E. Goodin, "Excused by the Unwillingness of Others?" *Analysis* 72, no. 1 (2012), pp. 18–24.
[17] Ibid., p. 24.
[18] As I have argued elsewhere, fair terms of cooperation are essential features of an effective climate treaty as necessary conditions for all parties to voluntarily accept their roles in it. See Steve Vanderheiden, *Atmospheric Justice: A Political Theory of Climate Change* (New York: Oxford University Press, 2008). Here, one might add that unfair terms also diminish the moral authority of leadership wielded on behalf of initiating such a treaty framework.
[19] Richard J. Arneson, "The Principle of Fairness and Free-Rider Problems," *Ethics* 92, no. 4 (1982), pp. 622–23.
[20] This analysis considers the incentive effects of merely pledged reciprocal cooperation, though not of conditional commitments to increase efforts if others join in the cooperative scheme. Underval et al. have modeled the effects of the EU making a conditional commitment to cutting its emissions by 30 percent rather than the 20 percent to which it has already committed, and found that such a commitment would significantly lower the costs for other nations (the United States, Japan, India, and China) to respond with stronger reciprocal commitments, even if it could not guarantee such a result. See Arild Underdal et al., "Can Conditional Commitments Break the Climate Negotiations Deadlock?" *International Political Science Review* 33, no. 4 (2012), pp. 475–93.
[21] The EU, for example, has unconditionally pledged a 20 percent reduction from its 1990 emissions by 2020, but has conditionally promised a 30 percent reduction by that date if other developed countries take on similar commitments. Likewise, Australia has unconditionally committed to a 5 percent reduction from 2000 emissions by 2020, but conditionally committed to a 25 percent reduction if a global climate agreement is reached that stabilizes atmospheric carbon at 450 ppm or lower, and to a 15 percent reduction if that agreement falls short of the 450 ppm target. Copenhagen Accord, Appendix 1; unfccc.int/meetings/copenhagen_dec_2009/items/5264.php.
[22] Hugh Ward, "Game Theory and the Politics of the Global Commons," *Journal of Conflict Resolution* 37, no. 2 (1993), p. 229.
[23] Ibid., p. 230.
[24] Shue, "Face Reality?" p. 23.
[25] See, e.g., Sebastian Oberthür, "Global Climate Governance after Cancun: Options for EU Leadership," *International Spectator* 46, no. 1 (2011), pp. 5–13; and Bertil Kilian and Ole Elgström, "Still a Green Leader? The European Union's Role in International Climate Negotiations," *Cooperation and Conflict* 45, no. 3 (2010), pp. 255–73.