Climate-related insecurity, loss and damage

Jonathan Herington, Kansas State University (jherington@k-state.edu)

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Abstract

The harms of climate change are deeply uncertain. Though climate change will render most individuals more vulnerable to harm, many individuals will not actually suffer climate-related harms (or will suffer only minor harms). In this paper, I argue that vulnerability to harms is itself a harm, because it undermines our enjoyment of the good of security. After some brief remarks on the concept of security, I give three reasons for thinking that depriving an individual of the security of basic goods harms them: (i) it has a strong contingent connection to fear and anxiety, (ii) it directly undermines their ability to make reasonable plans, and (iii) security may reasonably be valued as an end in itself. This suggests that one of our goals in determining climate policy ought to be mechanisms which ensure the security of basic goods.

At the 2013 Conference of Parties in Warsaw (COP-19), the parties to the United Nations Framework Convention on Climate Change (UNFCCC) established a mechanism to address the loss and damage associated with climate change (Conference of Parties, 2013). Broadly speaking, "loss and damage" refers to the residual impact of climate change after mitigation and adaptation efforts have been put in place (UNFCCC Secretariat, 2013, p. 8).[1] Thus, though the residents of low-lying island states at risk of inundation may adapt to rising sea levels through migration, the loss of their sovereignty, physical environment and cultural connection to their

[1] Though this is the way in which loss and damage is characterized in the Technical Paper (UNFCCC Secretariat, 2013), it is important to note that, because the risk of loss and damage is always relative to a particular degree of climate change, and mitigation affects the particular degree of climate change, it might be more accurate to specify "loss and damage" as the residual harms of a particular degree of climate change given a particular policy of adaptation.

land are not something which an adaptation policy can resolve. Since 2013, the Executive Committee of the Warsaw International Mechanism (WIM) has slowly worked to assess the economic and non-economic harms of these unavoidable, irreversible losses (Conference of Parties, 2016; UNFCCC Secretariat, 2016). Despite some initial progress in incorporating "slow onset" events (e.g. inundation) into the notion of climate risk, the WIM process has essentially stalled (Mace & Verheyen, 2016). Of particular concern is the task of establishing whether individuals or communities ought to be compensated for instances of irreversible loss.

In considering this task, one important facet is whether the mere risk of climate-related loss constitutes a harm, regardless of whether or not a loss actually occurs. As the establishing Technical Paper notes: "…individuals and society do not face just one scenario of loss and damage but instead loss and damage should be understood as having a range of possible magnitudes, each with an associated, although often unknown, chance of occurring" (UNFCCC Secretariat, 2013, p. 9). Indeed, given that there exists a background degree of risk, and climate change merely incrementally raises this risk, it may be extremely difficult to identify particular losses which are directly caused by climate change. Thus, even if climate change places most individuals at greater risk of loss, very few individuals may actually suffer a climate-related loss.

Nonetheless, many of us have the intuition that merely being subject to grave risks is a kind of harm. In this paper, I argue that being subject to the risk of climate-related loss is a harm, because it undermines an individual's security with respect to basic goods (food, water, health, etc.). Importantly, if the subjective or objective security of basic goods directly contributes to an individual's wellbeing, then individuals who are at risk of climate-related loss, but luckily never experience such losses, will nonetheless be harmed by climate change. The harm of climate-related insecurity may therefore provide an additional justification for

mechanisms which insure individuals against climate-related losses (e.g. Rowling, 2015; UNFCCC Secretariat, 2015).

In what follows, I lay out the case for the harm of climate-related risks. I begin by arguing for the view that whilst climate change will increase most individuals' risk of harm, only a small percentage of the world's population will actually experience losses identifiably caused by climate change. Next, I sketch a conception of individual security – as a high probability of fulfilling one's basic needs – and distinguish its objective, subjective and affective dimensions. I go on to show how possessing each of these dimensions of security may contribute to an individual's wellbeing, regardless of whether an agent actually fulfils their basic needs. I therefore conclude that merely being subject to the grave risk of a climate-related loss may be sufficient to be harmed by climate change.

Uncertainty of climate-related loss

At the heart of the debate over the appropriate policy for responding to climate change is deep and pervasive uncertainty. This is true at the global level, where there is uncertainty over the extent of warming and its impact, but it is especially true at the level of human individuals. Loss and damage is important only in so far as it harms people (UNFCCC Secretariat, 2013, p. 7), and thus any understanding of climate-related loss must be attentive to the uncertainty experienced by individual humans as well as national populations. We can identify four reasons why the harms to people from climate-related loss are deeply uncertain.

First, there is uncertainty over the degree of climate change given particular mitigation pathways. In considering the change in global mean surface temperature (Δ^0C) by 2100 given a "business as usual" concentration pathway (RCP6), the latest Intergovernmental Panel on Climate Change (IPCC) report considers it merely 'likely' (i.e. probability >66%) that the

change will be between +1.4^{0}C and +3.1^{0}C (Stocker et al., 2013, p. 89). Moreover, the probability distribution over values of Δ^0C is 'fat-tailed', such that values of Δ^0C greater than +10^{0}C have a non-negligible probability of occurring (Pindyck, 2011; Weitzman, 2011). The specific impact on each regions' climate – including regional variation in precipitation, evaporation and storm cycles – is even more uncertain (see Stocker et al., 2013, p. 105). The actual degree of climate change experienced in particular regions, even given a fixed emissions pathway, therefore ranges over a broad sweep of values.

Second, there is uncertainty over the extent of climate-related loss given each value of Δ^0C. For instance, a Δ^0C of 5^{0}C could retard global economic production by anywhere between 5 and 10% of global gross domestic product (Stern, 2007, p. 143). When considering non-economic harms, the IPCC is even less confident, expressing impacts in extremely qualitative terms. For instance, in considering the human health impacts of climate change, the IPCC tentatively suggests that a business as usual model will lead to a 'greater likelihood of injury, disease, and death due to more intense heat waves and fires' and that 'the magnitude and severity of negative (health) impacts are projected to increasingly outweigh positive (health) impacts' (IPCC, 2014, p. 1920). In this respect, the degree of loss which will actually be inflicted by climate change is extremely difficult to determine, and may (if we are extremely lucky) amount to a negligible or beneficial impact upon global wellbeing.

Third, there is uncertainty over the degree to which particular adaptation policies will ameliorate the impact of a given value of Δ^0C. Consider, for instance, the impact of climate migration policies on human health. The impact of these policies on healthcare systems is determined by the complex drivers of human migration and the extent to which receiving countries will maintain the political will for humanitarian migration policies (IPCC, 2014, p. 20). On the other hand, a wealth of existing data in the social determinants of health suggest,

with very high confidence, that securing access to basic health services and alleviating poverty are the best avenues for ameliorating climate-related health impacts (Costello et al., 2009). Precisely how we synthesize the various risks and strengths of policy in different areas will have an enormous impact on the eventual outcome for population health.

Fourth, there is uncertainty over precisely *which* individuals and communities will actually be harmed by the residual impacts of climate change. The possible losses of climate change are calculated, not at the level of individuals, but at the level of populations (often global or regional populations). In this respect, many individuals who are members of these populations – whilst subject to increased *risk* of harm – will not actually be harmed.

The cumulative effect of these four sources of uncertainty is a pervasive indeterminacy over the extent and location of the actual harms which climate change will cause. This is important, in so far as it may undermine the case for a systematic, global response to climate change. Being subject to a risk of harm, so the thought goes, does not directly harm an individual, and only undermines their future wellbeing in so far as the harm actually occurs. It may therefore be tempting to suggest that the vast majority of individuals will not actually be harmed by climate change, and consequently, efforts to reduce climate-related vulnerability do not benefit them. Indeed, as skeptics of the IPCC and climate mitigation strategies argue, it may be that mitigation and adaptation measures harm such individuals, in so far as they divert resources away from other important social goals. If this is true, then the large-scale allocation of resources and attention towards climate mitigation, adaptation and compensation for loss and damage may be unjustified.

I argue that this line of reasoning is mistaken. Even assuming that most individuals will not suffer climate-related losses, the vast majority of individuals will nonetheless be harmed by climate change because it exposes them to a grave risk of loss. This risk of loss undermines an

individual's wellbeing because it undermines their security with respect to basic goods (food, water, health, etc.). Thus, if the security of basic goods contributes to an individual's current wellbeing, then individuals who are at risk of climate-related harms, but who luckily never experience climate-related damage, are nonetheless harmed by climate change.

The concept of security

The concept of security has largely been neglected by contemporary analytic philosophy. Whilst a historically important philosophical concept (see, Hamilton, 2013; Waldron, 2006), and of interest to theorists in the continental tradition (Agamben, 2005; Foucault, 2004), it has received little attention within contemporary analytic moral and political philosophy (see Herington, 2015). I believe, however, that its continuing political relevance and prima facie importance to individuals, make it a promising way of capturing the harms of being exposed to risk. To begin with, there are three under-recognized features of the concept of security.

First, we should understand security as a relation between an individual and a particular good. Strictly speaking, we can talk of the security of *any* good: from the security of an individual's access to clean water to the security of an individual's enjoyment of a luxury yacht. There is a special sense, however, in which the concept of security is concerned, not with risks to luxury goods, but with the risk of severe deprivation and/or death. In what follows, I therefore focus on the concept and value of the relation with respect to an individual's enjoyment of her basic needs. Precisely which goods constitute an agent's set of basic needs is a controversial question (see, for e.g., Braybrooke, 1987; Doyal & Gough, 1991), but in broad strokes we can define them as those goods necessary for the pursuit of a very wide range of an agent's ends (Brock, 2009, p. 65; Griffin, 1986, p. 43). In this respect, an individual's set of basic needs will closely track related phenomena such as her set of basic capabilities (Nussbaum,

2000), her human security (King & Murray, 2001), and whether or not she is living in poverty (Alkire, 2002).

Second, the oft-repeated distinction between objective and subjective security obscures a three-way distinction between an individual's: (i) affect of security, (ii) the belief-relative security of their basic needs, and (iii) the fact-relative security of their basic needs. Whilst there is a contingent connection between an individual's fact-relative and belief-relative security s, and that individual's affect of security (see below), we ought to recognize that these are distinct. As we shall see below, the affect of security – a feeling of tranquility or freedom from anxiety – may be one important way in which an agent's current wellbeing is improved by the security of basic goods (see Herington, 2015; Rothschild, 1995).

Finally, the security of a good captures the extent to which an individuals' enjoyment of that good is robust to a wide range of ways in which the future could turn out. Security is thus a *modal* property – one which is as much concerned with what happens in the actual future as what happens in a wide range of (perhaps all) possible futures. There are many ways of capturing this concern for the robustness of goods in the future (e.g. modal distance, insensitivity to luck, etc.), but by far the simplest is the probability of enjoying that good. Importantly, whether or not an individual *actually* enjoys her basic needs at the relevant point in the future is irrelevant to the security of those needs. Given I reside in a wealthy, well governed municipality, I may have a very high degree of security with respect to my access to clean water, and yet actually lose that access next week due to a confluence of highly improbable events. Likewise, I may have a very low degree of security with respect to my freedom from physical violence, and yet luckily avoid actual violence. What is ultimately

relevant to my security is merely the probability, at the present moment, that I will fulfil my basic needs.[2]

Given these distinctions, I define the security of an individual at *t*, as the *probability* at *t* that the subject will enjoy her basic needs in the future. Thus, the security of an individual's enjoyment of a basic income (e.g. US$8,000 per annum) is the probability that they receive at least $8,000 per annum in the future. Or the security of an individual's access to sufficient clean water is simply the probability that they will have access to sufficient clean water (even if there is some probability of also enjoying abundant access). In this respect it is easy to see how climate change undermines the security of basic goods for all (or almost all) individuals within a population: regardless of whether they actually fail to fulfil their basic needs in the future, climate change reduces the probability that each individual will fulfil those needs. This obviously reduces our future expected wellbeing, but this lack of security with respect to our basic needs may also reduce our current wellbeing.

Value of security

It's common to think that whilst enjoying a good makes you better off, enjoying that good *securely* makes you better off still. Consider the following case:[3]

> Imagine an individual, Ananya, who is a poor, landless subsistence farmer in the drought prone district of Andhra Pradesh, India. Given a moderate degree of climate change, she has a high probability of being deprived with respect to at least one of her basic needs at some point in her life. The risk of drought, storms, new disease vectors, and mass emigration in her district are extremely high – and endanger her access to sufficient food and water, her health and her close familial relations. Now suppose that, despite these overwhelming odds, Ananya is never actually deprived of any of her basic needs. The rains come just when they

[2] Astute observers will note that I am ignoring temporal variability in my discussion of security. Where temporal variability is relevant, we incorporate it by including temporal consistency within the specification of the good to be secured. For example, "access to sufficient fresh water" is best specified as "access to 5L of water per day" rather than "access to 150L of water a month", since access to an abundance of water on one day does not compensate for being unable to access fresh water on another. This accounts for concerns regarding temporal consistency.

[3] The case is merely illustrative, but typical of the risks faced by agricultural workers in India. See Yambrou and Nelson (2010).

> are needed, the dust storms pass miraculously close, she and her family are never afflicted by these new diseases, and her community does not experience mass emigration.

I venture that most people would judge that Ananya has been harmed by the risk which climate change poses to her basic needs, despite the fact that she never experiences any actual climate-related loss. Moreover, I think most people will make this judgement on the basis that the security of Ananya's basic needs is an important good for her, and that climate change undermined that security. However, precisely *why* security makes you better off is difficult to explain, since though it is easy to see how security is instrumentally relevant to how well off you are in the future, it is more difficult to see why it makes you directly better off (see, Arneson, 2010, p. 346). I believe, however, that there are three reasons for thinking that the security of basic needs directly contributes to an individual's wellbeing. If these arguments go through, then the mere imposition of climate-related insecurity can harm an agent, regardless of whether a climate-related loss actually befalls the agent.

First, the affect of security makes an individual better off because freedom from fear and anxiety is a classic component of wellbeing. The connection between psychological quietude and security is deeply embedded in the word itself, derived from the Latin *securitas*, which for Roman and Medieval scholars denoted a kind of stoic tranquility (Hamilton, 2013). Given the powerful impact of fear and anxiety on individual wellbeing, a disposition towards freedom from these affects was widely recognized as a component of the good life. Indeed, for Cicero, it was the "object of supreme desire" (quoted in Rothschild, 1995). Likewise, most modern theories of wellbeing would claim that psychological quietude contributes to your wellbeing at each moment in time, and hence, all other things being equal, feeling secure improves your wellbeing. In this sense, climate-related vulnerability (e.g. greater risk of crop failure, lower life

expectancy, etc.) directly harms an individual in so far as those kinds of vulnerabilities engender fear and anxiety.

One might object that this argument fails to make an elementary distinction between our subjective and objective senses of security. Many individuals may be unaware that they are at risk of climate related loss, and so, the objection goes, will not suffer a loss with respect to the affect of security. Of course, this objection is right to point out that the lack of a necessary connection between the affect of security, our beliefs about security and the fact of our security. Yet the lack of a necessary connection between these senses of security is not itself a decisive reason to reject a strong contingent connection between climate related risks and the affect of security. Neither do individuals need a highly developed theory of the origin of the risks to their basic needs in order to fear the lack of them. All that needs to be shown is that climate-related risks (e.g. an increase in extreme weather, increasing poverty, decreases in crop yields) reliably decrease individuals' enjoyment of the affect of security. That there is such a connection is highly plausible.

Second, belief-relative security contributes directly to wellbeing because it is enables the formation and pursuit of complex life plans. Believing oneself to be at great risk can reduce our ability to make difficult or complex decisions by continually occupying our deliberative faculties with strategizing on how to reduce these risks (Banerjee & Duflo, 2012; Wolff & de-Shalit, 2007). In circumstances where one or more of an individual's basic needs is at persistent risk, all of their short- and long-term plans must include consideration of this risk. Indeed, risks to *basic* goods appear to swamp other considerations in complex planning situations (Shah, Shafir, & Mullainathan, 2015). If Ananya's access to clean water is not secure, and she knows this to be the case, then all, or almost all, of her plans must take this fact into account. This may lead her

to pursue goals and aims which neglect her long term interests and ends, because her ability to see the realization of those ends is imperilled by her lack of security with respect to her basic needs. Thus, given a context of severe and pervasive risk to one's basic needs, one's plans are likely to be focused on immediate short-term interests.

Moreover, these kinds of risks to our basic needs appear to make the cognitive process of planning more difficult. As Mani et. al. (2013) show, being at grave risk of impoverishment has a significant impact on cognition. For instance, in their study of poor farmers whose harvest is at risk of failing (thus impoverishing them for the coming year) they noted markedly diminished cognitive function relative to after their harvest has successfully been completed. The mechanism by which risks to basic needs impede cognitive function is not totally settled, but intuitively we can understand that the introduction of such risks to our basic needs will require that our limited cognitive capacity is devoted to those risks in any planning task.

> Preoccupations with pressing budgetary concerns leave fewer cognitive resources available to guide choice and action. Just as an air traffic controller focusing on a potential collision course is prone to neglect other planes in the air, the poor, when attending to monetary concerns, lose their capacity to give other problems their full consideration. (Mani et al., 2013, p. 976)

Thus, more than simply being forced to make complex trade-offs with respect to their basic and higher order ends, agents who lack security must also budget their cognitive resources carefully. Unsurprisingly, given we are cognitively limited creatures, this kind of persistent cognitive loading is likely to have a serious impact on our ability to formulate and revise complex plans.

In a similar vein, Stephen John (2011, p. 63) has claimed that security of "vital needs" contributes to current wellbeing because such a presupposition is a necessary condition for making any "reasonable plan" at all. Drawing on work by Bratman (1987), John claims that each of us has a fundamental interest (at each moment in our life) in being the kind of agent

who can plan for our future selves. Being unable to plan at a particular moment *t*, does not just undermine our future wellbeing, but also undermines our wellbeing at *t*. Consider the life of an agent who cannot make plans, and thus is at the mercy of vicissitude, but who luckily has their desires fulfilled. Plausibly, we regard this person's life as diminished and lacking – in part because we view the exercise of practical agency throughout our life as an important part of our wellbeing (see, for instance, Bradford, 2013; Hurka, 1996). If a lack of security with respect to your basic goods undermines your ability to make reasonable plans, then you are plausibly made worse off regardless of whether or not you luckily fulfil your basic needs.

Third, fact-relative security might be valuable for its own sake, because it captures the distinct value of avoiding risk itself. On this view, the wellbeing of an individual is diminished by insecurity even if they are never aware of the risks and the relevant harms never materialize. There are several ways of arguing for this conclusion. To begin with, some individuals may simply have a preference not to be subject to grave risks (Finkelstein, 2003). This preference is not just an instrumental preference – whereby we prefer *ex ante* to be free from risk because it is instrumental to the actual fulfilment of our basic needs – but is supposed to refer to an intrinsic preference, whereby we prefer *ex post* to have been free from risk. Thus, if Ananya prefers the secure and actual satisfaction of her basic needs to the insecure but actual satisfaction of her basic needs, then she seems to have an intrinsic preference for security. The fact that many of us have such preferences is plausible (see Buchak, 2013; Halevy, 2007; Oliver, 2003). Problematically, however, this view does not require that Ananya possess belief-relative security, merely that her preference for fact-relative security is satisfied. This relies upon a kind of anti-subjectivist theory of preference satisfaction, which allows that an agent can be made better off by the satisfaction of a preference even if they will never realize that preference has

been satisfied (Heathwood, 2006). I am admittedly skeptical that this theory wellbeing is correct, and thus set the idea of intrinsic preferences for security to one side.

A more promising approach may be to appeal to the notion that the wellbeing of badly-off possible persons has special *moral importance* relative to the wellbeing of well-off possible persons. This argument relies on the prioritarian claim that wellbeing has diminishing marginal moral value; i.e. that an increase in the wellbeing of a badly-off individual has greater moral value than an equivalently sized increase in the wellbeing of a well-off individual (Parfit, 2002). We might extend this prioritarian insight beyond tradeoffs between actual individuals, to encompass tradeoffs between *possible* individuals (O'Neill, 2012). Thus, when considering the moral value of particular distributions of wellbeing amongst possible outcomes, we place special emphasis on those distributions which improve the worst possible outcomes. This is a controversial thesis, especially as applied to *possible* persons (see Otsuka, 2012, 2015), but if it is true then we have reason to place an emphasis on the security of basic goods, since expanding the enjoyment of initial increments of wellbeing by all possible persons will have greater moral value than maximizing the probability-weighted average of wellbeing across those possible persons.

Finally, ensuring fact-relative security of basic goods may be an important way in which we can show respect for possible persons. Consider an argument by analogy to Rawls' argument for the choice of political structures behind the veil of ignorance. In Rawls' original position, the decision-makers have no information about which of the possible members of society they will actually be and so elect to enshrine a system which maximizes the position of the worst off member of society (Rawls, 2001). Whilst individuals often possess more information than in the original position (viz, some probability distribution over the possible outcomes), they cannot be sure of the precise ends of their possible selves in each outcome,

particularly if the possible futures are at great remove from their current selves. If the importance of basic needs is derived from their role in promoting each individual's opportunity to pursue their conception of the good, then ensuring that individuals in any state of the world can still pursue their ends may itself be justified. If this argument is successful, then climate vulnerability may harm an individual by endangering the ability of some of their future possible selves (i.e. those actually affected by climate-related harms) to realize their conceptions of the good.

These claims regarding fact-relative security involve some controversial assumptions about the nature of wellbeing, moral value and political obligation. Nonetheless, there is a strong contingent connection between lacking fact-relative security of basic needs and lacking belief-relative and affective security. Indeed, for most ordinary human agents living in ordinary human circumstances, we might think that the fact-relative security of our basic needs is a necessary condition for the robust maintenance of belief-relative security and an affect of security. In this respect, even if these arguments for the intrinsic value of fact-relative security fail to go through, there may still be a strong contingent connection between risks of climate-related loss and direct cognitive and affective harms to individuals.

Individual Security and the Harm of Climate Risk

We thus have three reasons for thinking that the security of basic needs contributes (contingently or constitutively) to individual wellbeing. Moreover, the value of security is not merely derivative of the value of fulfilling basic needs, but is derived from the affective, cognitive and objective harms of being subject to grave risks. In this respect, the mere imposition of climate related risks upon an individual may harm that individual. Moreover, we have reason to believe that the greater the imposition of risk the greater the harm inflicted on individuals. This suggests two important considerations for climate change policy.

First, policies designed to compensate for loss and damage may benefit more individuals than currently recognized. Climate risk insurance schemes (e.g. Rowling, 2015; UNFCCC Secretariat, 2015), are primarily motivated by the grave economic losses which befall communities actually affected by climate-related natural disasters (e.g. hurricanes, droughts, etc). Yet, under most feasible mitigation and adaptation strategies, a far broader class of individuals will experience risks to their basic needs. If insecurity is a genuine harm, then insurance mechanisms which provide security of basic needs are likely to benefit most individuals, regardless of whether they actually experience a loss. In this respect, mechanisms which insure communities against loss and damage do not just benefit individuals who suffer actual losses, but the much larger population of individuals who are at risk of climate-related loss.

Second, if this account of the value of security is successful, then it also has implications for our choice of climate mitigation and adaptation policy. In particular, if security has special value, then it is possible that we should prioritize policies which raise the probability of enjoying at least basic needs, even if such policies do not maximize overall expected wellbeing. There is a great deal of uncertainty here, but this suggests that adaptation schemes which raise the risk of catastrophe (e.g. radical geoengineering schemes) may be contraindicated in all but the most catastrophic of climate scenarios. It may be preferable, given moderate-range climate change, to invest in modest but expansive schemes designed to alleviate risks to the enjoyment of basic needs by all individuals. Whilst the degree to which security is protected given different policies depends on a very large number of factors, we should at least be attentive to possibility of making a tradeoff between the security of basic needs and the minimization of expected climate-related harms.

The ultimate impact of my argument on the WIM policy process is uncertain. Compensation for those who suffer actual catastrophic losses (e.g. small island states) has been extremely controversial, and has pushed the WIM to the periphery of the UNFCCC process (Mace & Verheyen, 2016). Expanding the notion of loss and damage to include everyone who is subject to the harm of climate-related insecurity would therefore appear to be politically infeasible. Nonetheless, taking seriously the harm of insecurity, highlights that very few individuals will be wholly unharmed by climate change. In so far as the WIM policy process is focused upon compensation for loss and damage which cannot be ameliorated by adaptation mechanisms, we ought to treat seriously the notion that almost all individuals are subject to some degree of loss from climate change. Thus, ceteris paribus, the WIM process ought not focus solely on compensation mechanisms which require that recipients demonstrate actual loss or damage. Rather, we ought to contemplate compensation for those who are merely subject to a grave risk of loss or damage, even if they are lucky enough to avoid its materialization. Indeed, a WIM process which recognizes our shared insecurity may turn out to be more politically feasible. The broader the base of individuals who can see themselves as affected by climate change, the more likely it is that a shared commitment to address this challenge will emerge.

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