

TOWARD A CAPABILITY-BASED ACCOUNT OF INTERGENERATIONAL JUSTICE

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ABSTRACT

In this paper, I will draw on the capabilities approach to social justice and human development as advanced, among others, by Amartya Sen and Martha Nussbaum, and seek to provide some theoretical resources for better understanding our obligations to future persons. It is my hope that the capabilities approach, properly applied, can give us a novel way of understanding our responsibilities toward future generations in a time where such an understanding is both unfortunately lacking and increasingly needed. Structurally, the paper will proceed as follows: First, I'll give a brief reconstruction of a capability-based approach to justice, examining the view's foundation and methodology. Using Nussbaum's list of ten core capabilities as a basis, I will draw on recent work by Breena Holland to establish the notion of a sustainable climate system as a necessary precondition for the enablement and protection of those human capabilities which Nussbaum argues are morally and politically central. Central to this discussion is the argument that, to a significant extent, many central capabilities are dependent on various functions of the natural environment. Finally, I will make some forward-looking applications of a capability-based account to the context of intergenerational justice and highlight some justifications for using the approach in this way. Here, I submit that the capabilities approach is well-fitted to the task of theorizing about intergenerational justice when compared to some other popular approaches. Ultimately, I argue that such an approach offers a unique vehicle for understanding the vulnerability of future people in the wake of anthropogenic climate change, as well as our obligations to refrain from harming them, insofar as possible.

Keywords: capabilities approach; political philosophy; intergenerational justice; harm; climate change.

Introduction

In recent history, much social and political theorizing about justice has focused not only on articulating and clarifying obligations of justice toward people who are sometimes spatially distant from us, but, increasingly, to those who may be temporally distant as well—future people. Global climate change presents a striking urgency in this regard, as it stands to disproportionately harm not only the most disadvantaged among our contemporaries, but threatens future people as well. Many attempts have been made to explain and defend accounts of intergenerational obligations to minimize and mitigate the effects of climate change, e.g., Rawlsian just savings and related contractarian accounts, consequentialist attempts at assessing the welfare of future persons, rights-based approaches, etc. All too often, these sorts of accounts fall prey to various application problems when fitted to an intergenerational context, and I find them wanting as a result.

In this paper, I will draw on the capabilities approach to social justice and human development as advanced, among others, by Amartya Sen and Martha Nussbaum, and seek to provide some theoretical resources for better understanding our obligations to future persons. It is my hope that the capabilities approach, properly applied, can give us a novel way of understanding our responsibilities toward future generations in a time where such an understanding is both unfortunately lacking and increasingly needed. Structurally, the paper will proceed as follows: First, I'll give a brief reconstruction of a capability-based approach to justice, examining the view's foundation and methodology. Using Nussbaum's list of ten core capabilities as a basis, I will draw on recent work by Breena Holland to establish the notion of a sustainable climate system as a necessary precondition for the enablement and protection of those human capabilities which Nussbaum argues are morally and politically central.² Central to this discussion is the argument that, to a significant extent, many central capabilities are dependent on various functions of the natural environment. Finally, I will make some forward-looking applications of a capability-based account to the context of intergenerational justice and highlight some justifications for using the approach in this way. Here, I submit that the capabilities approach is well-fitted to the task of theorizing about intergenerational justice when compared to some other popular approaches. Ultimately, I argue that such an approach offers a unique vehicle for understanding the vulnerability of future people in the wake of anthropogenic climate change, as well as our obligations to refrain from harming them, insofar as possible.

1. Nussbaum's Capabilities Approach

While Nussbaum's constructive approach to social justice represents the result of some direct criticism of the social contract tradition (and of John Rawls, more particularly), it does share some intuitive motivation with a Rawlsian approach to justice, namely, in terms of the idea that each individual "possesses an inviolability founded on justice that even the welfare of society as a whole cannot override" (Rawls 1999, 3). The outcomes that Nussbaum's capabilities approach generates bear "a close family resemblance to [Rawls's] principles of justice" (Nussbaum 2006, 69). She even goes far as to argue that her constructive view can, in many ways, be seen as a sort of extension of the social contract tradition, provided some important problems with such a tradition are considered and solved.

Building upon a capability-based approach to social economic development advanced by Amartya Sen (1995, 1999, 2009), Nussbaum's approach seeks to establish the theoretical underpinning for an account of fundamental human entitlements that "should be respected and implemented by the governments of all nations, as a bare minimum of what respect for human

dignity requires” (Nussbaum 2006, 69). She argues that the best way of providing such an account is via a discussion of essential human capabilities, that is, what people are actually able to do and be. The approach is informed, as she tells us, by the idea of “a life that is worthy of the dignity of the human being,” and, to this end, identifies a list of ten central capabilities that must be protected as primary matters of justice. The central capabilities she posits are:

Life; Bodily Health; Bodily Integrity; Senses, Imagination, and Thought; Emotions; Practical Reason; Affiliation; Other Species; Play; and Control over One’s (Political and Material) Environment (2006, 76).

Nussbaum takes these core capabilities to be the foundation and source of political principles for a decent society, and as an essential way of viewing humans as the sort of beings that possess the sort of inviolable dignity that makes them the subjects of moral and political consideration.³ Beginning with a reliance on an intuitive idea of human dignity, Nussbaum argues that each of these capabilities should be pursued for one and all as a method of “treating each as an end and none as a mere tool of the ends of others” (2006, 70) in what can perhaps be read as a subtle variation on the second formulation of Immanuel Kant’s supreme moral principle, the Categorical Imperative.⁴ The basic idea for Nussbaum is that, with respect to each of the aforementioned core capabilities, “we can argue, by imagining a life without the capability in question, that such a life is not a life worthy of human dignity” (2006, 78). Consider, for instance, a human life that is rife with the experience of discrimination on the basis of gender, race, or sexual orientation. On Nussbaum’s view, policies or actions that exemplify such practices are markedly unjust because they undermine core capabilities for various constituents of human functioning. Directly, discriminatory practices violate the seventh capability on Nussbaum’s list: affiliation, insofar as they undermine the social bases of self-respect and non-humiliation, or, in other words, “being able to be treated as a dignified being whose worth is roughly equal to that of others” (Nussbaum 2006, 77). In some cases, discriminatory practices can be seen as violations of other central capabilities as well: *Control over One’s (Material) Environment* in terms of property and employment discrimination, *Bodily Health and Integrity* in terms of vulnerability to assault on the aforementioned bases, or, in extreme cases, even *Life* itself, the first of Nussbaum’s capabilities, in terms of not being able to live a life of normal length or dignity. Before turning to the extent to which climate change is likely to undermine the capabilities of future generations, I’ll first consider the extent to which Nussbaum’s capabilities in general, as well as her correlated notion of human dignity, relate to (and in many cases depend on) the natural environment.

2. Capabilities and the Natural Environment: Modifying Nussbaum's Approach

As well as being integrally connected with each other as Nussbaum suggests, I submit that it makes sense to think of the core capabilities as being dependent on environmental factors. In much the same way as the capacities on Nussbaum's list of entitlements would appear to require the first capability (Life) as a necessary prerequisite, some level of external environmental functioning is similarly necessary for each of their actualization, and, by extension, for human flourishing. It is my contention that by making modifications to the capabilities approach to this effect, we can glean a better way of understanding and operationalizing the harms caused to both our intragenerational contemporaries and their future counterparts by climate change.

Similarly to the way Nussbaum argues that the social contract tradition ignores several unsolved problems of justice in *Frontiers of Justice*, Breena Holland (2008) suggests that this tradition, with Rawls as its most foremost exemplar, effectively ignores the natural environment as a problem of fundamental justice. According to Holland, a contract-based view holds that environmental resources are not subject to inequity in their distribution: "the natural environment, in other words, does not confer fundamental advantages of wealth and power to some and not others" (Holland 2008, 319). So, on Rawls's view, for instance, there seems to be no immediately obvious reason to address environmental issues as a matter of first moral importance or of primary (what he might call "background") justice.

Holland argues that this sort of view is mistaken, citing the notion that environmental burdens and calamities do, in fact, affect people disproportionately in ways that suggest problems of justice. She gives some brief examples of this effect:

In the United States, for example, neighborhoods with high concentrations of poor and minority residents face more severe air pollution. Similarly, residents of poor and minority communities face disproportionate exposure to risks posed by abandoned hazardous waste sites (2008, 319).

She notes that in cases such as these, unfair disadvantages are indeed conferred upon some and not others on an alarmingly unbalanced scale. For instance, a woman living in an inner-city neighborhood with an extreme pollution problem may develop severe respiratory health problems, thereby closing off the normal avenues via which she might pursue important goals. Similarly, ingesting contaminated groundwater or tainted crops could increase vulnerability to

deadly diseases, which could bring one's normal lifespan to a precipitous halt, again, closing off the prospect of one's flourishing in a particularly acute way.

These are some basic illustrative cases in which capacity for human flourishing is undermined in varying degrees by environmental burdens, some more serious than others. Holland uses cases like this to argue that matters of environmental protection and resource distribution are worthy of moral consideration and ought to be treated as part of the purview of basic claims of justice. Holland's approach treats particular environmental conditions as instrumental to human capabilities in much the same way that Nussbaum might treat shelter, nourishment, or property (as instrumental to the *Life, Health, Integrity, and Control over Environment* capabilities). Because environmental functioning at some level is required to produce any and all of these things, Holland seeks to establish these environmental conditions as an independent "meta-capability," which suffuses and orders the other morally relevant capabilities: "As long as ecological systems have the functional capacity to sustain the conditions enabling the minimum threshold level of Nussbaum's capabilities for each person," she argues, "the *ecological* conditions of justice are met" (2008, 328).

Holland's idea of an environmental meta-capability, on my view, raises a needed innovation to Nussbaum's brand of the capabilities approach, as environmental values only figure explicitly into her view via the *Other Species* capability.⁵ While Nussbaum maintains that relationships with other species are instrumental to one key aspect of human flourishing that she designates as centrally important, she fails to capture the multitude of ways in which environmental systems and processes are "indispensable to enabling all of the capabilities she advances as central to living a life worthy of the dignity of a human being" (Holland 2008, 323). Thus, some expansion of the capabilities approach beyond what is explicitly developed by Nussbaum will be necessary in order to capture the capabilities' reliance on environmental factors, and thus, I'll argue, in order to consider its treatment of justice in a world facing the ongoing threat of climate change. I'll consider some general ways in which the core capabilities rely on various environmental functions, and then I will consider ways in which these considerations might inform an inquiry about the requirements of justice for future generations.

Holmes Rolston (1988), among others, has argued for the extent to which human development can depend on the natural environment and its various functions (physical, scientific, aesthetic, etc.). These relations are often referred to in the wider environmental ethics literature discussions as "ecosystem services" or "ecological capital" in some policy discussions.⁶ Beyond being merely expressible in economic terms, many of the services a functional natural environment provides are, from the perspective of the capabilities approach,

vital for human flourishing, and thus, central to meeting the minimal requirements of justice. Some examples will help clarify the natural environment's relevance for the kinds of flourishing specifically identified by the approach—whether they be materially basic capabilities (e.g., *Life*) or more cognitively sophisticated ones (e.g., *Practical Reason*). I will proceed through some of Nussbaum's core capabilities in turn, and offer some sketches of the relevant developmental relations:

With respect to *Life*, the first capability, the dependence relation is straightforward. Human life is enabled in a multitude of ways by natural functioning. Human flourishing obviously requires the various ecological conditions needed for living a life of “normal” length, such as food, fresh water, ingredients for disease-preventing medications, and the various forms of energy needed to sustain life (e.g., those forces which are necessary to regulate body temperature and various other processes). With regard to *Bodily Health*, similar requirements can be given. The capacity to be nourished and to remain in good health requires that ecological systems function “at a level that can sustain the provision of soil, water, and atmospheric temperature that enable agricultural production and the absorption of human produced waste” (Holland 2008, 323).

Other capabilities share relations of dependence with the natural environment that are less obvious, but no less important. Consider *Senses, Imagination, and Thought*, Nussbaum's fourth capability, which the environment enables in many relevant ways. In many instances (Native American cultural practices, some Eastern religious and cultural traditions, etc.), ecological processes and their components are deeply influential where religious, cultural, and spiritual elements of human experience and expression are concerned, “making it possible for [people] to use their senses, imagination, and thought in ways that make their lives meaningful” (Holland 2008, 323). Additionally, and independently of religious and spiritual values, ecological systems and processes are often essential to people in terms of aesthetic value, also allowing people to use their senses and imaginations in novel ways, as the capabilities approach requires. Having the capacity for *Play* similarly requires natural places in which people can find the components of natural processes that allow them “to laugh, to play, to enjoy recreational activities” (Nussbaum 2006, 76).

All of these sorts of experience and expression are intimately tied to *Practical Reason*, the capacity to form and act from a conception of the good. We can describe this in practical terms by citing the importance of freedom of conscience and religious observance, insofar as these things are absolutely essential to many citizens' conceptions of the good. As an example of this, consider some recent claims made a group of Inuit citizens requesting formal reparation

from the United States for acute damages caused to their culture by the effects of climate change. In a 2005 petition, the Inuit Circumpolar Conference (ICC) argues that:

The transition of their physical environment due to the individual and cumulative effects of climate change have undercut the Inuit's ability to enjoy the benefits of their traditional way of life and property, and have imperiled Inuit health, safety, subsistence, harvest, travel. These changes are projected to accelerate, seriously threatening the Inuit's continued survival as a distinct and unique society (ICC 2005, 67).

Clearly, this petition offers that members of its group are experiencing capability deprivation as a result of warming trends, but, something more seems to be at stake here. The Inuit society's *particular* forms of engagement with the world—their specific ways of subsisting and persisting as a distinctive social and cultural group—are left vulnerable. So, not only are the Inuit's lives, health, and property threatened, but, crucially, their capabilities for practical reason—namely, their ability for self-determination and planning their lives around a conception of the good, are additionally under existential threat. Being able to “have attachment to things and people outside ourselves” (Nussbaum 2006, 76) (*Affiliation*) involves an ecosystem in which “one recognizes features of [the environment] that create a ‘sense of place’” (Holland 2008, 323). The ICC, in citing its fear of a kind of “extinction,” is lamenting a loss of this capability, as Inuit cultural identity is constitutively tied to particular kinds of intra-cultural affiliation, relations to other species, and various traditions that stem from both. These capabilities, at least for the Inuit, are inextricably tied to various environmental functions, which they seem to suggest ought be preserved such that *their cultural identity* might be preserved.⁷ Both these functions, and by extension, Inuit society itself, the claim insists, are existentially threatened by precisely the kind of ongoing environmental degradation associated with climate change.

In order to actualize many of what Nussbaum takes to be the core human capabilities, one “must have nourishment, shelter, and the other basic materials that ecological systems provide” (Holland 2008, 323-24). Furthermore, to ensure proper freedom of conscience and *Control over One's Environment*, one's ecological surroundings must retain the functional capacities to perpetuate relevant natural features as a backdrop to support human capabilities, and changes in said capacities would need to occur on time scales to which humans can adapt (a requirement which climate change directly threatens). As a solution to Nussbaum's purported failure to account for the requisite importance of functioning ecosystems, Holland suggests adding “Sustainable Ecological Capacity” as a “meta-capability” that, in various ways, enables

all the capabilities Nussbaum lists. This involves being able to live life within the context of environmental conditions that can provide “resources and services that enable the current generation’s range of capabilities; to have these conditions now and in the future” (Holland 2008, 324). These ecological functions, on Holland’s view, create the material conditions that entail the very possibility of human life and flourishing. She goes as far as to argue that it is simply “not possible to exercise the human capabilities outside or independent of functioning ecological systems” (Holland 2008, 324).⁸ Because of this integral role, the ecological meta-capability Holland proposes should be understood as more fundamental than any entitlement on Nussbaum’s original list.

Similarly to the “special importance” Nussbaum assigns to *Practical Reason* and *Affiliation* because of the role they play to “organize and suffuse all the others, making their pursuit truly human,” (2000, 82) the basic capabilities “should be made available in a form that involves the particular resources and environmental experiences that make a human life what it currently is” (Holland 2008, 324).⁹ As the potential damages associated with climate change and its effects become ever clearer to us, it is important to recognize that the natural environment’s supportive abilities are not maintained regardless of our impacts on its processes and systems. Accordingly, protection and mitigation measures will be needed to effectively ensure that the ecological conditions for capability enablement are met. When we consider the extent to which capability achievement is dependent on environmental functioning, considerations about damages which are being caused and will continue to be caused by climate change become urgent concerns from the standpoint of justice, if they were not already.

3. Intergenerational Applications of a Modified Capabilities Approach

So, what can the capabilities approach, so modified, tell us about our obligations to future generations, considering the projected damages associated with anthropogenic climate change? First and perhaps foremost, the view provides us with a usable, intuitive, and multi-dimensional notion of harms inflicted on both currently existing and future people. The capabilities approach identifies and gives substantive normative content to a threshold notion of harm.¹⁰ Taking as our starting point Nussbaum’s argument that core capabilities must be enabled to some degree in order for us to live lives that are worthy of human dignity, we may define the threshold by referencing them.¹¹ Crucially, these are the things that make us human in many relevant ways, derived from asking ourselves what we are able to do and be. As our range of capabilities falls below the threshold identified by the list, we are harmed by any such restrictions, as in cases of a loss of political voice or freedom of conscience, of one’s capacity

for health, or of one's capacity for a reasonably long and dignified life for reasons beyond one's choice or control. In cases of such deprivation, life is perhaps less or unworthy of human dignity, as this requires, on Nussbaum's account, an ample threshold level of the central capabilities.¹² If there are no strong and morally salient differences between us and future generations of people as John Nolt (2017a) and others have argued, then there does not seem to be any particular reason that capability deprivation may not constitute a considerable kind of harm for those future people as well, provided we agree that the capabilities Nussbaum identifies are of substantial moral relevance.

If we consider capability enablement as a relevant objective of our thinking about what justice requires, and view the core capabilities as central to the development and flourishing of present and future people, and if we recognize the extent to which those capabilities tend to depend on certain kinds of environmental functioning, the following considerations come into very clear focus. Because global climate change will undermine environmental functions in a multitude of ways, it also stands to drastically undermine the capability ranges of humans, thus harming them in the aforementioned way. While we are already beginning to see the adverse effects of climate change, these harms are of particular concern when thinking intergenerationally. As the results and effects of climate change will only further compound and worsen in the future (IPCC 2014), these harms will increasingly and disproportionately fall on future generations.¹³

The most materially basic capabilities—such as *Life* and *Bodily Health*—can and will be undermined by the increasing physical harms and casualties brought on by the effects of a still rising trend of greenhouse gas emissions. As global emissions rise, so too does air pollution, affecting the respiratory health and shortening the lives of many people. As more heat from those same emissions is trapped in the atmosphere, surface temperatures, too, will rise. This trend affects people's health not only directly (e.g., via lack of shelter from the heat), but additionally in terms of threatening crops, water sources, and other sources of nourishment necessary for life, as above. One result of climate change predicted by the Intergovernmental Panel on Climate Change (IPCC) is gradually increasing desertification and a decreasing prevalence of water sources.¹⁴ Such changes in the climate will, given that substantial and consistent-over-time sources of water are necessary for crop growth, necessary food sources, too will enter a trend of decline. Via the loss of food and water sources alone, climate change will cause substantial damage in terms of the lives and bodily health of a large extent of the world's population.¹⁵ These trends can pose various indirect dangers to others via expanding the geographical range of invasive species and disease carrying organisms, limiting

opportunities for local resource exchanges, etc. Recent efforts to quantify mortality rates due to climate change-related causes have produced varied results, but consistently yield casualties in the hundreds of thousands.¹⁶ Casualties of this magnitude are, of course, of significant moral concern today, but their numbers will only increase as damages compound in the future. By the year 2100, some project that climate change will cause tens of millions of deaths if not more (Broome 2012).¹⁷ Climate change, as Peter Singer (2002) colorfully and rightfully puts it, “has revealed bizarre new ways of killing people.” Our best projections indicate that it will continue to do so into the foreseeable future, and likely beyond.

Other core human capabilities will be undermined for millions by climate change prompted material displacement and migration. Drastic changes in climate will require multitudes to leave their homes and possessions based on temperature rise and its aforementioned effects, shifting weather patterns and anomalies, etc. With the loss of one’s home, one may be forced into a somewhat rootless or nomadic existence (as tales of the plight of displaced refugees remind us), thus losing the “sense of place” required by the *Affiliation* capability, as well as the relatively unrestrained freedom of movement the *Bodily Integrity* capability requires. Climate-induced migrations are already forcing (and will continue to force) many to leave not only their own properties and belongings, but their home countries as well. This is perhaps particularly harmful with respect to the requirements of *Bodily Integrity*, as no current framework exists in international law to handle climate refugees¹⁸ Moreover, many facing this sort of adversity will have their opportunities for any sort of educational or creative pursuits as required by the *Senses, Imagination, and Thought* capability drastically abridged. They will also lose opportunities that are integral to the *Control over one’s Environment* capability, insofar as a displaced refugee can—for substantial and often unknown extents of time—no longer meaningfully participate in any sort of political choices, hold property reasonably, or seek employment and advancement opportunities.

In addition to many straightforward cases in which climate change can affect the enablement of materially basic capabilities for future generations, the changes brought on by climate change will affect other capacities in less obvious (and perhaps more damaging) ways. Consider, for instance, the *Practical Reason* capability from Nussbaum’s list, according to which we must be enabled to “form a conception of the good, and to *engage in critical reflection about the planning of [our lives]*”, or the *Emotion* capability, which requires “being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one’s emotional development blighted by fear and anxiety” (2006,

78). To understand the adverse effects victims of climate change could see with respect to this capability, we can follow Holland in looking to industrialized nations like the United States, which is expected to experience what we might regard as much less of the damaging effects of climate change than many places in the still-developing world. One consequence of climate change for even citizens of the affluent United States is a dramatic increase the frequency, severity, and range of storm events. Holland (2012) recalls Hurricane Katrina, which struck Louisiana's Gulf Coast in the Fall of 2005, as exactly the sort of weather event that a shifting global climate will make more frequent. Many have attributed the strength and severity of that storm, as well as more recent weather events (e.g., Maria and Irma, which struck Puerto Rico, Dominica, and states along the U.S.'s southern seaboard in the Fall of 2017) to rising water surface temperatures, which is yet another projected consequence of climate change that will continue and worsen over time (IPCC 2014).

While the damages of Maria and Irma are still being assessed, Hurricane Katrina had a devastating impact on residents of the United States' Gulf Coast region, particularly centralized in the densely populated city of New Orleans. In addition to destroying some victims' lives, health, and homes, the storm would have a much deeper and more prolonged effect on many over time. Those who fled their homes and who were affected in other ways experienced profound psychological trauma that long outlived the event itself. One representative study (Kessler et al. 2008) found that large percentages of those affected experienced (in addition to significant financial, income, or housing loss) extreme physical and psychological adversity, such as threats of physical violence, sleeping on floors with many other victims, lack of nourishment, etc.

In addition to the very clear psychological and emotional damages inflicted by these sorts of climate change-induced adversity, Holland reminds us that events of this ilk pose a real threat to the way victims conceive of their own lives as a comprehensive whole, damaging (sometimes irreparably) their ability to make decisions and plans in the interests of their various conceptions of the good. When our lives are so affected by an externally cataclysmic force such as a natural disaster, we may experience a profound shift in our basic understanding of what to expect from the world around us, as well as our own personal frameworks of assumption about how we relate to the world: "For instance, the shift can involve moving from a baseline assumption that one has personal control over one's own actions and one's relation to the world one inhabits, to an assumption that one lacks personal control in both of these areas" (Holland 2012, 154). With such results considered, we can see how climate change may dramatically

undermine one's sense of agency by eroding the self-regard and self-legislation necessary for planning one's own life in accordance with the *Practical Reason* capability.

As the adverse effects of climate change increase in frequency and severity throughout the temporal purview of future generations, it is clear that victims' core capabilities—indeed, some of the very things that make their lives “worthy of the dignity of a human being”—are in jeopardy.¹⁹ In these ways, employing the capabilities approach (with an environmental meta-capability in tow) as a metric for the harms caused by climate change, not only now, but generations into the future, seems undeniably fruitful. Holland proposes that we set conservation and environmental protection benchmarks with reference to the environmental meta-capability so that the current generation's range of capabilities are enabled. I propose that we generalize this sort of view in a forward-looking sense for future generations, provided, of course, that they are not morally different enough from us to warrant differential capability enablement and protection. I'll now discuss whether and how this seems to be the case.

4. Some Strengths of a Capability-Based Account

So, ought we be concerned with the development of these capabilities in future generations? While I cannot here give a full defense of the capabilities approach simpliciter, I will offer some salient reasons to think it plausible and advantageous as a way of thinking about the structure of intergenerational justice. As Nussbaum articulates them, the core human capabilities are specified in a way that is suitably universal, meaning that they apply for a variety of people (in fact, she thinks *all* people) across a variety of cultures and societies at a variety of times. They are derived from asking questions about a person's opportunities and options—what they are actually able to do and be. These questions are, according to Nussbaum, “ubiquitous in human life; they are probably part not just of every culture but of every individual life” (2011, 123). In fact, she goes as far as to argue that the connection between those opportunities and matters of basic justice that her account traces is also ubiquitous in human life. She views her capability list as the most plausible result of asking these sorts of questions, but maintains its flexibility: “The list is a proposal: it may be contested by arguing that one or more of the items is not so central and thus should be left to the ordinary political process rather than being given special protection” as a matter of justice (Nussbaum 2011, 36).

While some among Nussbaum's list of core capabilities may be more questionable in this regard than others, I do believe that most of the list's constituents identify basic human capabilities that are centrally crucial to our existing and flourishing as the kind of things we are. That is, they *do* seem to be the sorts of things the value of which we can garner near universal

agreement on. Few would dispute this assertion with respect to the capabilities of *Life, Health, Bodily Integrity, Affiliation, Practical Reason*, etc. Even the more seemingly expendable among Nussbaum's core entitlements seem eminently valuable to humans. *Play* and *Interaction with Other Species* would likely be among these, but compelling arguments can be made for their inclusion (Nussbaum 2011, 37-39). If we take this line of thought seriously, and endorse the notion that Nussbaum's list can be gleaned with universal or near-universal unanimity from self-regarding questions about the opportunities and relevant capacities of dignified human beings, then it doesn't seem to be a far stretch to extend this notion intergenerationally. In so extending, we can recognize that future people, for all their potential differences from us (including their current nonexistence), will still be essentially *the same sort* of beings as us with respect to their morally relevant capacities.²⁰

Other strengths of an intergenerational application of the capabilities approach become increasingly apparent when we consider alternative conceptions of justice and their potential for extension forward in time. A particular advantage comes when considering the context in which the approach arises in the first instance: as a well-motivated criticism of contractarian theories of justice (of which John Rawls is the most contemporary and stand-out representative). Most contractarian theories endorse a motivational assumption roughly corresponding to David Hume's "circumstances of justice," which assume the roughly equivalent rational and physical footing of respective parties to social contracts, as well as a notion of reciprocity that requires us to be able to enter into various relationships and agreements with parties to a contract.

This notion faces many problems in the intergenerational context, chiefly among which is the fact that we simply cannot stand in reciprocal relationships with prospective members of future generations. Stephen Gardiner (2009) has called this the "interaction problem." Future people are radically different from us in terms of the constraining circumstances required (at least on a contractarian view) for us to enter into cooperation with them in that they do not yet even exist.²¹ If such conditions are the basis for reciprocity and contractual agreements between parties, and it is the case that this reciprocity relation is to serve as the grounding for our obligations of justice to such parties, one can easily see the issue. Contract theory doesn't seem to be able to fit the intergenerational bill—it cannot give an account of obligations to future generations or their particular members in a way that is natural and straightforward.²² The capabilities approach assumes no such restrictions on initial circumstances, and identifies fundamental shared capacities among similar *kinds* of beings as the morally and politically salient variable, rather than any particular *relation* between various parties. For the capability theorist, reciprocity and intergenerational cooperation are not necessary theoretical components

for recognizing the fact that future humans are likely—in terms of their capabilities to do and be—to be, well, human.

The intergenerational strengths of the capabilities approach seem somewhat obvious when it is compared with contract theory, but how should we view it in comparison with other competing accounts of intergenerational obligations? As a first point of comparison, the capabilities approach does not fall vulnerable to some of the deeply perplexing puzzles that plague some traditional moral theories which take up the status and well-being of future people.

As perhaps the most oft cited example of such a puzzle, consider the Non-Identity Problem popularized by Derek Parfit (1984, ch. 16). The worry, in its most distilled form, is that in pursuing policies that we think will benefit future people in terms of welfare, we may actually cause them not to exist in the first place. Consider Parfit's example of the policy decision between depleting natural resources at an enhanced rate and conserving those same resources. Suppose we, as a society in the middle of a long trend of resource depletion, choose to abruptly change direction, endorsing a policy of conservation instead. Parfit suggests that this shift in social priority will cause the current generation to behave differently in a multitude of ways, thus potentially altering the composition of the future generation we aim to benefit with our policy shift. The people we aim to benefit with the conservation choice, according to Parfit, might no longer exist as a causal result of that very choice. Moreover, for theorists committed to a traditional conception of harm involving a counterfactual comparison of a person in two alternative states (e.g., whereby harm is inflicted when an agent is made worse off than she *otherwise would have been*), the Non-Identity Problem seems to threaten the very idea that we can cause harm to future people. The capabilities approach does not fall vulnerable to this sort of worry in that it doesn't require the existence of a *particular set* of members of a future generation to account for our obligations to them. Rather, it only requires that they be sufficiently like us in terms of core capacities for various uniquely human functions. Furthermore, because the approach implies a threshold notion of harm (see above), rather than a more traditional counterfactual conception, it seems to largely circumvent non-identity worries in this regard as well, as the harms involved in occupying a sub-threshold state (as defined by the capabilities list) do not require comparison between states of existence and non-existence.

Another important challenge of Parfit's is the so-called Repugnant Conclusion (1984, ch. 17). The general idea here, which especially affects some consequentialist views (i.e., those which hold that we ought to maximize total welfare), is that there are two ways to increase net utility across a population. The first and most traditionally obvious way is to increase the

relative welfare of the currently existing population—to make people happier. Another potential course of action, however, is to create more people among whom to distribute welfare. This strategy would increase net utility across the overall population, even if quality of life for existing people actually *decreases*, so long as the decrease is sufficiently less than the welfare of the additional people created. So, as Parfit’s continual search for “Theory X” (a moral theory which avoids this conclusion) attests, classical utilitarianism seems unacceptable as a basis for considering our intergenerational obligations.²³ The capability theorist here remains undeterred, as, on such a view, capabilities are not the subject of a maximization strategy, and thus would not imply any similar mandate to increase population at the expense of individual well-being.²⁴ The approach, paired with a kind of intergenerational sufficientarianism based on Meyer’s (2003, 2015) conception of harm, requires a threshold level of the capabilities to make lives compatible, as Nussbaum suggests, with respect for human dignity.

Given some of the problems which plague some attempts at determining the requirements of intergenerational justice, leading work in intergenerational justice has recently gravitated largely toward two influential classes of views: rights-based approaches like those of Henry Shue (2014) and Darrel Moellendorf (2014), and some forms of consequentialism that can remain invulnerable to the problems Parfit sets out in *Reasons and Persons*. The question remains how we might situate a capability-based approach with respect to these trends.

To situate such an approach in this context, it is important to consider that rights-based approaches, which typically stress something like the inviolability of basic entitlements, are not without some problems of their own in the intergenerational situation. Both Shue (2014) and Moellendorf (2014) have suggested that it will be difficult to ensure anything approximating the inviolability of persons’ various rights and interests in a world affected by climate change, as massive violations would likely occur in any case. Relatedly, given the scale of the damages projected, it is likely the case that enabling some capabilities among some populations will directly affect capability enablement among others. Moellendorf illustrates the problem succinctly:

Suppose that pessimistic predictions about climate change mitigation were correct; in that case, it would be unclear how a human rights approach gives a reason to prefer Mitigation over business as usual, *given that massive human rights violations would occur either way* (2014, 232).

Shue makes a similar point, noting the same problem with a rights-based motivation to reduce fossil fuel consumption in order to reduce harm to future people:

If to prevent future harm we reduce fossil fuel consumption deeply and quickly, then (since we can't build a renewable energy infrastructure overnight) we cause more harm now. But if we do not cut fossil fuel use deeply and quickly, then we are likely to harm even more people—once again, primarily the poor—over the coming centuries. *Either way the transgression of human rights is monumental* (2014, 316-317).

In solution to this problem, Moellendorf gestures to what John Nolt (2017b) refers to as a consequentialism of rights—a sort of hybridized theoretical mechanism for determining how and why some harms to our interests are more or less egregious than others. The capabilities approach, on my view, offers an important contribution to this conversation. Thinking of intergenerational justice in terms of capabilities, I submit, offers some of the key virtues of *both* a rights-based approach and a sort of objective list consequentialism.

The capabilities approach, like other theories, doesn't directly endorse a particular solution to conflicts among interests like those mentioned above. Nussbaum's version of approach, however, does enumerate capability values such that, at the very least, conflicts could be revealed in a clear and practical way, so as to prompt a well-informed public deliberation about which entitlements to sacrifice in favor of others, if (or perhaps when) this becomes necessary. David Schlosberg (2012a), Jonathan Wolff, and Avner De-Shalit (2007) have recommended using "clusters" of vulnerability or disadvantage (in terms of capability deprivation) to assess and prioritize various injustices for the purposes of policy intervention. Identifying such "cluster" cases where human dignity is particularly vulnerable (i.e., cases where multiple capabilities are not only threatened but substantively deprived) would allow us to prioritize some of the least advantaged (e.g., perhaps, citizens of the Small Island States who are likely to become homeless, stateless refugees) over the comparatively advantaged (e.g., the average citizen of an industrialized democracy like the U.S. whose capabilities are often threatened to a lesser extent by climate change) when conflicts do occur.

When it comes to thinking in terms of capability conflicts over the long(er) term, it makes sense to go beyond the notion of "clustered" disadvantages and try to prioritize the entitlements Nussbaum insists are central. In general, proponents of the capabilities approach maintain the principle that the interests identified by the relevant range of capabilities ought be satisfied as a primary matter of justice (Nussbaum 2000, 2006, 2011, Sen 1999, 2009). If, however, as Shue and Moellendorf fear, the most pessimistic or tragic of climate outcomes comes to pass, and we are thus unable to protect or enable all of the constituents of a capabilities

list, we ought to maintain, insofar as possible, a way to adjudicate among these values in emergent or triage-like circumstances. While, as above, Nussbaum does not herself explicitly endorse priority relations among the capabilities, the unique challenges of long-term intergenerational justice likely demand some further development to the view. To fully resolve these sorts of conflicts would require a massive and comprehensive effort which is impossible here—but I will here attempt to sketch a provisional account of priority relations which are compatible with Nussbaum’s capabilities list as she advances it.

It seems clear that the *Life* capability is a natural place to begin. Life itself is absolutely necessary as a physical prerequisite for anything else on Nussbaum’s list. To live a life worth living obviously requires *living a life at all*—more specifically, a life which is not brief and fleeting or threatened on a near-constant basis. Thus, in cases of conflict, *Life* ought be of central priority in terms of assessing or “ordering” the harms caused by climate change.²⁵ *Bodily Health* and *Bodily Integrity*, though not necessarily coextensive with *Life*, are of a similar priority, as they put material constraints on a life that is, in some basic sense, worth living—namely, Nussbaum requires a life not unduly burdened by threats of major illness, physical or sexual assault, etc. To put my point in dividing these upper “tiers” succinctly, if one’s life or physical health/integrity are routinely under threat, other abilities and opportunities for self-determination, choice, affiliation, etc. seem to be dramatically less attainable.

Another resource built into the approach that might be of some use here is Nussbaum’s conception (following Aristotle and Marx) of a life worthy of a specifically *human* kind of dignity—a dignity that is perhaps not similarly conferred on non-human animal species.²⁶ This commitment is expressed by Nussbaum in the *Affiliation* and *Practical Reason* capabilities, which play an “architectonic” role in her view, “[pervading and informing] all the others, *making their pursuit fully human*” (2006, 398). Thus, it seems, the capacities in these top “tiers” must be prioritized in a capabilities approach, at least in cases where morally tragic conflicts are present (Nussbaum 2011, 43-45). Thus, a long-term intergenerational capabilities approach might require a set of provisional but intuitive principles expressing a sense of the priority of each capability for human flourishing. It is my hope that it can begin to provide the resources necessary to adjudicate some of the conflicts between various interests (expressed in terms of Nussbaum’s central capabilities) that climate justice theorists like Moellendorf and Shue anticipate:

- (a) *Life*, because of its relation of physical necessity to the other capabilities, ought to receive first priority in decision-making;

- (b) *Bodily Health* and *Bodily Integrity*, because of its specification of the material securities associated with a good life, ought to receive first priority in decision-making;
- (c) *Affiliation* and *Practical Reason*, because of their specification of the forms of engagement which set out some of the bounds of a fully dignified human life, ought to receive a second-tier priority;
- (d) Other capabilities (*Senses, Imagination, and Thought, Emotions, Other Species, Play, and Control Over Environment*), while not generally less valuable than those covered by (a)-(c), may have to be abridged, sacrificed, or otherwise adjusted in circumstances which are truly morally tragic (such as those raised by Moellendorf and Shue).²⁷

Such a capability-based account, so prioritized for a potentially tragic long-term, combines the methodological and normative urgency that might accompany a rights-based account with some consequentialist considerations about priority. Indeed, it can perhaps be viewed—at least in the far-term intergenerational context—as a species of a “consequentialism of rights.” As Nolt argues, “ultimately the presumption that human rights are, in every individual, morally inviolable must in the long term give way to an imperative to keep aggregate harm as low as we reasonably can, consistent with present responsibilities” (2017b). The capabilities approach, I contend, contributes an interesting lens through which to view these harms, and the beginnings of a way to prioritize in cases of conflict.

Given some of the above, a capability-based metric for assessing our obligations to future generations seems somewhat more straightforward and detailed as an account of well-being than those accounts employed by some competing theories, and provides an interesting hybrid take on some of the considerations raised by others. Our consideration of future people, rather than being thwarted by the concerns above, is, from the perspective of the capabilities approach, based on core entitlements that we have no problem extending forward in time, provided that members of future generations are sufficiently like us in capacity.

As a pragmatic addendum to these strengths, a capabilities approach could begin to address what is needed in terms of policy initiatives to protect our abilities to develop and flourish in a rapidly changing climate. The approach, coupled with an understanding of what environmental conditions enable the core capabilities, tells us much about how climate change can harm and deprive, and would aid in designing substantive political responses to various threats future people will face more and more. Climate change, from the perspective of the capabilities approach, can be seen as a cause of what Wolff and De-Shalit (2007) have dubbed corrosive “clusters” of disadvantages. This affirms, in real terms of human development, what

climate activists have long insisted—that climate change will make those who are already the least advantaged even worse off. Using this sort of approach as a guide, policy makers can begin to understand harm and vulnerability (for both this generation and future generations) at a deeper level, as well as motivating and implementing policies on the ground which seek to ameliorate these disadvantages. The restoration or protection of capabilities lost or threatened can also serve as an operational benchmark to measure such policies' progress and effectiveness.²⁸

While I do not claim to have provided a comprehensive argument in favor of the capabilities approach as a theory of justice full stop, I do hope to have provided some reasons to explore it further for its advantages as a framing device for thinking about the requirements of intergenerational justice, specifically. Nussbaum's list of core human capabilities, coupled with Holland's notion of sustainable ecological capacity, provides us with a plausibly articulated and multidimensional threshold notion of harm and a closely related conception of what justice might require for future people (i.e., at the very least, non-harm). If we have sufficient reason in the *intragenerational* case to consider capabilities relevant to justice and seek their enablement and protection to this end, I hope to have provided some reasons to think them additionally relevant in an intergenerational context as well.²⁹ The application of this approach, as I have argued, fares rather well in this context, and can be adapted to answer some of the problems associated with long-term intergenerational justice. By seeking (insofar as possible) to enable core human capabilities as a matter of minimal social justice not only among our intragenerational contemporaries but our intergenerational successors as well, we can understand and begin to fulfill our obligations to them as such at a time where the well-being and dignity of future generations is perilously at stake.

Notes

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² Throughout this paper, I'll make use of Nussbaum's iteration of the capabilities approach based on the central feature which distinguishes it from Sen's: an objective and purportedly universal list of those capabilities which are relevant to human development, arrived at by asking questions about what human beings are able to do and to be. I believe that Nussbaum's explicit specification of these core entitlements aid its extension to an intergenerational context (specifically, as I argue below, via its contributions to our understanding of the harms caused by climate change)—particularly when compared to Sen's insistence that capability ranges be defined by a process of ongoing public deliberation.

³ Nussbaum purposefully does not restrict the relevance of the central capabilities to liberal democracies. In her view, they are generalizable from interrogating human experiences across societies and times, and are to this extent "universalizable." Sen (1999, 2009) criticizes this reasoning, suggesting instead that relevant capabilities and ranges should be indexed to ongoing democratic deliberation by the society they are to characterize. For more on explicit differences between the two approaches, see Nussbaum (2000, 11-16).

⁴ "Moral law requires us to act in such a way that we use humanity, whether in our own person or in the person of any other, always at the same time as an end, never merely as a means" (Kant 2011, 429). While Nussbaum's conception of dignity (and the idea of a life worthy of it) does somewhat rely on a Kantian notion of the inviolable nature of human moral status, she does distance herself in important ways. Nussbaum's conception, following Marx's (and, she argues, Aristotle's), departs from Kant's understanding insofar as it maintains that the major powers and prerogatives of human beings need various kinds of material support, and cannot be fully expressed without such support. For Nussbaum, this idea provides the basis for arguing that there is some definable threshold level at which "a person's capability becomes what Marx calls 'truly human,' that is, *worthy* of the human being." See Nussbaum (2000, 72-74, 2006, 70-78). The *Affiliation* and *Practical Reason* capabilities play a central or "architectonic" role in Nussbaum's notion of dignity, and she argues that lives without these capabilities do not meet her standard of human dignity. See Nussbaum (1995).

⁵ The *Other Species* capability requires that humans be able "to live with concern for and in relation to animals, plants, and the world of nature" (2006, 76). This suggests an anthropocentric approach to environmental values, whereby other species are valuable merely instrumentally. For the purposes of this paper, and given my goal of generalizing the capabilities approach to determine the distinctive human costs of climate change as it may affect future generations, I default to anthropocentric considerations and remain somewhat agnostic on the further question as to whether the approach provides a suitable account of the non-instrumental value of other species. On this point, however, Nussbaum does briefly sketch the possibility of a capability-based approach affording some non-instrumental value to non-human animal species based on their own sets and ranges of capabilities, which may generate indirect moral duties governing their treatment. It is not clear, however, that this provisional extension is as compelling as Nussbaum's central (human) case. For more on this strategy, see Nussbaum's discussions of species membership and animal entitlements (2004, 2006). For another interesting attempt to extend the capabilities approach to animals, as well as ecosystems and the natural world more generally, see Keulartz and Swart (2012) and Schlosberg (2012b).

⁶ See, for instance, WCED (1987).

⁷ For a detailed account of the *Affiliation* capability as it relates to these kinds of cultural practices, see Heyward (2011).

⁸ In view of the largely anthropocentric approach I take in this paper (and a relative agnosticism about whether the natural environment is valuable in and of itself), I am not in principle opposed to core capabilities being enabled to the prescribed extent against the backdrop of a *synthetic* environmental context—a sort of technological utopia in which the relevant relations can be preserved without the existence of a *natural* context. I am skeptical, however, that a true technological approximation of the relevant kinds of relations is possible on the scale and extent necessary to realize the kinds of human flourishing our current (natural) environmental context enables. The Inuit example I offer above (which I owe to Clare Heyward (2011)) concerns precisely the type of experience and capability enablement I fear would *not* be sufficiently compensated for by technologically-driven adaptation to climate change.

⁹ Sen (2000, 2004) argues for a similar conclusion—that we have an obligation not to denigrate the choices or the environmental contexts of those choices for future generations, in order to preserve their capabilities.

¹⁰ For compelling developments on threshold conceptions of harm more generally, as well as some of their comparative benefits in the intergenerational case, see Meyer (2003, 2015).

¹¹ Sen, too, while maintaining some conceptual disagreements with Nussbaum, endorses the notion of a capability threshold for harm in his (1995) discussion of poverty and deprivation in the developing world.

¹² One might take issue here by pointing out that not all harms are necessarily *wrongful harms*. Such a distinction might reasonably maintain that a harm is constituted by *any* setback to one's interests, while a *wrong* is constituted by some further injustice beyond the setback. The harms which are being caused and will continue to be caused by climate change, I submit, are indeed *wrongful*, as they consist in a minority (currently existing generations of people) causally inflicting harm on a much greater majority (some combination of future generations of people) which is causally inert with respect to the currently existent generation. Furthermore, the motivation for this harm lacks the mitigating excuse of necessity and is in fact often quite frivolous in nature (e.g., the US rate of carbon emissions being dramatically higher than other industrialized nations in the world based on practices of excess or entertainment). Cf., for instance, Nolt (2011).

¹³ Some opponents of climate change mitigation argue that the income and wealth generated by fossil-fuel driven economies does sufficient work in terms of ameliorating poverty and promoting development across the world that such present goods may outweigh any future harms caused by climate change. In view of my focus on particularly egregious *kinds* of harms here (defined in terms of deprivation of core capabilities), I suspect that no amount of compensatory benefits (least of all *economic* benefits) can *fully* make up for harms caused to the agency of future people by climate change. Put more generally, even *if* certain kinds of compensation can *begin* to make up for harms, such compensation does not change the state of affairs such that the harm was never caused, nor does compensation make it the case that the preceding harm is no longer morally relevant. Moreover, to follow the line of reasoning in such an objection, I fear, is to enable current generations to stand in harmful, domineering, or exploitative relationships with our posterity under the justificatory guise that we are providing them with sufficiently compensatory benefits in terms of economic development. For compelling accounts of intergenerational domination and exploitation, respectively, see Nolt (2011) and Bertram (2009). To put the general response here quite succinctly, formal opportunity for economic development may be of little consolation if one loses one's home and livelihood to extreme weather events, if one is displaced and thus loses one's ability to control one's life in various ways, or if one's life or health is reduced drastically by risk factors connected to climate change.

¹⁴ For a detailed (though not completely exhaustive) treatment of the current and projected damages caused by climate change, including the adverse effects of coastal flooding, reduced water supply, malnutrition and other health effects, etc., see the IPCC's most recent synthesis report (2014).

¹⁵ For more on the dangers of climate change in terms of food and water security see FAO et al. (2017) and Georgakakos et al. (2014)

¹⁶ Development Research Associates (DARA) (2012) reports a current figure of 400,000 with an increase to 700,000 by the year 2030. The World Health Organization's (2015) report on a limited number of causes of death yields a figure of 250,000 casualties during the time period between 2030 and 2050.

¹⁷ For a detailed treatment of assessing and measuring casualties caused by climate change, see Nolt (2011, 2014).

¹⁸ Under the United Nations' operational definition of a refugee (UNHCR 1967), people fleeing the effects of natural disasters or other environmental problems qualify for neither refugee status nor any of the protections that stem from such status. While some commentators on migration suggest that the logic, spirit, and protections of the UNHCR protocol can and ought to be extended to those fleeing climate change-induced disasters of various kinds, such a framework has not, as of yet, been the subject of any substantive international agreement or endorsement. See, for example, Risse (2009) and Lister (2013, 2014).

¹⁹ According to the IPCC's most recent (2014) synthesis report, continued emissions "will cause further warming and long-lasting changes in all components of the climate system," which are projected to accumulate and even worsen over the course of the 21st century and substantially beyond—by some estimates, over the course of millennia.

²⁰ It is, admittedly, a bit unclear how far into the succession of future generations the kind of approach I advocate can reach. It makes sense to think that there will not be any significant difference in capacities between humans born today and those born, say, 100 years from now. For instance, it is likely the case that human beings will *always* value materially basic capabilities like *Life*, *Bodily Health*, and *Bodily Integrity*. We will almost certainly continue to value our capacity for Practical Reason. I do, however, imagine there is a point at which this becomes a stretch, though it is certainly temporally distant. I'm thinking, for instance, of a bleak long-distant future where (based on environmental degradation, only *extremely* limited forms of *Control Over One's Environment* are

possible, or where significantly changing economic realities make our current commitments and relationships to labor, and thus, to related capabilities like *Play*, unrecognizable. So, this theory is likely limited in its scope, though it is not clear that other normative theories of intergenerational justice fare much better in this regard over the long haul.

²¹ Moreover, there is the issue of unidirectional causation to contend with: the notion that, while we can and frequently do causally affect future generations in a multitude of ways, the inverse is not the case—members of future generations cannot causally interact with us in any salient way. It certainly seems straightforward to suggest that this fact violates the conditions of reciprocity and rough equality assumed as the initial starting point for contractarian theories of justice.

²² This is not to say that such extension attempts have not been made. Many plausible suggestions to this effect exist in the literature, though most require a substantial amount of modification to the core tenets and aims of contract theories. In fact, some attempts at explaining the bases of intergenerational contracts are perhaps scarcely recognizable as contractarian in this regard. For some such accounts, see Heyd (2009) and Attas (2009). For a more general account of the intergenerational difficulties faced by contract theorists, particularly in terms of the characteristic reciprocity constraint I have taken up here, see Gardiner (2009), and O’Neill (1993).

²³ There has, to date, been no wide convergence on a prime candidate for Parfit’s somewhat elusive “Theory X,” though some have questioned the extent of his conclusion’s “repugnance” for intergenerational forms of consequentialism. See Huemer (2008) and Nolt (2015) for some such discussion.

²⁴ In fact, a view like the capabilities approach would seem to preclude such reasoning, based on the fact that engaging in such a population increase would violate core capabilities among those who would engage in the reproductive labor to do so. For more discussion on this point, see Overall (2012, 73-75).

²⁵ The capabilities list presents us with several often competing and perhaps incommensurable values, making direct trade-offs quite difficult to assess. So, any ordering of the capabilities in terms of priorities will thus be partial. Here, rather than arguing for priority relations among individual capabilities, I sketch a “tiered” priority system which somewhat isolates classes of capabilities based on their relationship to Nussbaum’s conception of a life worthy of human dignity.

²⁶ See endnote 3, above.

²⁷ It is important to note that in cases of such sacrifice, a harm has obviously still occurred: “... any failure to secure a capability at a minimum level is a failure of justice, and we should work for a world in which those conflicts will not occur” (Nussbaum 2006, 381). But this is, of course, compatible with maintaining that some harms are worse than others.

²⁸ The World Bank and some private entities are beginning to follow a similar strategy in attempting to “map” climate vulnerability. See Heltberg and Bonch-Osmolovskiy (2011). For a bit more information on what capability-driven policy benchmarking may look like for initiatives like this, see Schlosberg (2012a).

²⁹ As remains a general problem with other approaches to intergenerational justice, this motivational assumption is something that will likely need further development specifically with respect to the intergenerational case. Nussbaum (2006) argues that we should be concerned with people’s capabilities insofar as we are concerned with respect for their dignity and status as persons, though her remarks are admittedly somewhat vague with respect to how far into the future this mandate extends. Sen (2009) draws upon our shared identity as members of the human race to argue that we are in a position to help future generations in terms of their capabilities, and thus, that we ought to do so. For an interesting account of motivational moral psychology for long term intergenerational justice, see Nolt’s (2017b) development of John Stuart Mill’s “sentiment of justice.”

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