

# Justice and the Environment in Nussbaum's "Capabilities Approach"

## Why Sustainable Ecological Capacity Is a Meta-Capability

Breana Holland

*Lehigh University, Bethlehem, Pennsylvania*

What principles should guide how society distributes environmental benefits and burdens? Like many liberal theories of justice, Martha Nussbaum's "capabilities approach" does not adequately address this question. The author argues that the capabilities approach should be extended to account for the environment's instrumental value to human capabilities. Given this instrumental value, protecting capabilities requires establishing certain environmental conditions as an independent "meta-capability." When combined with Nussbaum's nonprocedural method of political justification, this extension provides the basis for adjudicating environmental justice claims. The author applies this extended capabilities approach to assess the distribution of benefits and burdens associated with climate change.

**Keywords:** *capabilities; climate change; environment; instrumental value; justice; political liberalism*

What principles should we appeal to when we make decisions about how public policies distribute environmental benefits and burdens? For political theorists, this is a question about justice. Specifically, it is about what justice is and why it requires that citizens interact with the natural environment in one way rather than other ways. The most prominent theorists of justice have often neglected important dimensions of the natural environment's instrumental value in their accounts of how society should allocate social advantages and disadvantages (see Miller 1999). John Rawls (1971, 266-68), for example, treats environmental problems as a matter of correcting externalities not accounted for in market prices. By simply applying the appropriate taxes and subsidies, government can make polluters pay the (true) cost of public goods they use, such as the sinks of air and water that absorb pollution they produce. From this perspective, environmental resources are understood as "indivisible," and therefore they are not subject to unequal distribution. "If the ozone layer is preserved and the tiger saved from extinction, these goods are made available to everyone" (Miller 1999, 154). The natural environment, in other words, does not confer fundamental advantages of wealth and power to some and not to others. It follows that there is no need to address it as a matter of basic justice, alongside goods such as income and opportunity.

Studies analyzing the distribution of environmental hazards and other environmental "burdens," however, suggest that the environment should be included in any basic account of what justice requires. In the United States, for example, neighborhoods with high concentrations of poor and minority residents face more severe air pollution (American Lung Association 2001). Similarly, residents of poor and minority communities face disproportionate exposure to risks posed by abandoned hazardous waste sites (Hamilton and Viscusi 1999). These data indicate that relationships to the environment shape and are shaped by a maldistribution of wealth and power. Exposure to high levels of polluted air can have devastating impacts on human health, closing off the normal channels through which one might pursue important career and personal goals. Similarly, ingestion of

---

**Author's Note:** For their help thinking through the ideas on which this article is based, I wish to thank my dissertation advisors, Iris Marion Young, Cass Sunstein, Martha Nussbaum, and Leigh Raymond. I am also grateful to the Eisenhower Institute and the Charlotte W. Newcombe Foundation for providing financial support for my doctoral research. For helpful comments on this article, I also wish to thank John Martin Gillroy, Jeremy Bendik-Keymer, Rick Matthews, Jennifer Rubenstein, Murat Arsel, and three anonymous reviewers at *Political Research Quarterly*.

contaminated groundwater might increase one's likelihood of contracting a deadly disease that brings one's normal span of life to an abrupt halt. These outcomes are only two of many ways in which the environment does indeed confer basic advantages to some and not to others. They reveal that just as Rawls fails to consider how gender inequities within the family pose barriers to social justice (e.g., see Okin 1989), he also fails to consider how inequities in the distribution of environmental benefits and burdens pose barriers to social justice.

Martha Nussbaum has made a significant effort to address the former problem concerning gender inequities by developing a liberal political theory—the “capabilities approach”—that can address the special circumstances faced by women. Central to Nussbaum's capabilities approach is the idea that justice should be defined in terms of people's *capabilities* to do and be different things. By “capabilities,” Nussbaum means the conditions or states of enablement that make it possible for people to achieve things; capabilities are people's real opportunities to achieve outcomes they value. For example, on Nussbaum's (2000, 78-80) account, part of what justice requires is that people have the capability to “hold property” and the capability to “move freely from place to place.” Nussbaum argues that without these capabilities, women are especially subject to common forms of oppression and deprivation, and they will therefore often remain unable to live a life that is “worthy of the dignity of a human being.”<sup>1</sup> Thus, from the perspective of the capabilities approach, if we begin our evaluation of social policy and social arrangements by looking at how internal and external conditions shape the capabilities of people facing different life circumstances, then we are in a good position to assess and reason about what justice is and what it requires.

By treating property holdings and freedom of movement (among other capabilities) as a basic requirement of justice, Nussbaum establishes the instrumental value of certain material goods to human capabilities. For example, being able to hold property and move freely may require specific types of land and transportation. Given that Nussbaum (2006, 78-79) intends for her “somewhat abstract and general” capabilities to be specified in the context of national and local deliberation by citizens and their legal and political institutions, she does not indicate the exact components of these material dimensions of human capability. This poses serious limitations for the theory of justice she advances. Specifically, I will argue that without an account of the natural environment's instrumental value to human capabilities,

Nussbaum's capabilities approach cannot accurately reason about the conditions of social justice.

Before making this argument, it is important to emphasize that in the present article I do not address the environment's intrinsic value. Equally important, I do not seek to treat components of the environment, such as ecosystems, as if they are the same kind of ontological entity as humans; for example, I do not conceptualize ecosystems as having opportunity sets from which they can make choices. Rather, my basic claim is that because of the extent to which human capabilities are dependent on the natural environment, we should treat certain environmental entitlements as a matter of basic justice. This view of the environment's value is distinctly different from the view Nussbaum (2006, 325-407) presents in her recent effort to address how her capabilities approach might be extended to promote the capabilities of animals. In that project, Nussbaum argues that the capabilities of nonhuman species deserve certain political protections independent of their value to humans.<sup>2</sup> In contrast, I am interested in the environment's instrumental value to human capabilities. I treat certain environmental conditions as instrumental to human capabilities in the same way that Nussbaum treats material things such as shelter, nourishment, and property as instrumental to human capabilities. However, because certain environmental conditions are necessary for producing and sustaining these material things, and indeed for making all human capabilities possible, I seek to establish these environmental conditions as an independent “meta-capability.”

I make this argument by engaging Nussbaum's theory of justice because the absence of an account of the environment's instrumental value is particularly unfortunate for Nussbaum. On my reading, the capabilities approach, as a theory of justice, offers a level of breadth and specificity that is useful for identifying the environmental dimension of social justice and what justice therefore requires with respect to the distribution of environmental benefits and burdens.<sup>3</sup> So that Nussbaum's theory might better serve this purpose, my primary aim in the following discussion is to engage critically and expand on the “partial theory of justice” that Nussbaum (2000, 75-76) advances by proposing how it might account for the environment's instrumental value to human capabilities.<sup>4</sup>

I argue, first, that failing to account for the natural environment's instrumental value to human capabilities poses a problem for the capabilities approach: without an account of the natural environment's role in enabling human capabilities, the capabilities approach will not establish protections for conditions

of enablement that are necessary for achieving justice in society. I argue, second, that Nussbaum can respond to this problem by expanding her list of capabilities in a way that establishes the importance of the environment's instrumental value as a condition of justice. Specifically, Nussbaum's capabilities approach should treat certain ecological conditions as a meta-capability necessary for all the capabilities on her list of "central human functional capabilities." Not only would this improve Nussbaum's partial theory of justice, it would also make Nussbaum's capabilities approach attractive for addressing inequities in the distribution of environmental benefits and burdens. I argue, third, that for the latter purpose, the capabilities approach is especially instructive, largely because it relies on a nonprocedural method of political justification for its principles of justice. Thus, to summarize, my overall aim is to argue why and how Nussbaum's capabilities approach should be extended to account for the natural environment's instrumental value to human capabilities, especially for addressing matters of environmental justice.

The argument will proceed in the following way. First, I introduce Nussbaum's capabilities approach and explain why it requires a stronger account of the environment's instrumental value. Second, and toward this end, I argue why the capabilities approach should (a) treat certain ecological conditions as a meta-capability and, consequently, (b) establish that justice requires ecological protections that ensure people can attain threshold levels of the "central human functional capabilities" that Nussbaum seeks to protect as constitutional entitlements. Third, I explain why this extension of the capabilities approach, when combined with the approach's existing nonprocedural method of political justification, makes it particularly useful for addressing inequities in the distribution of environmental benefits and burdens. Finally, I clarify this final point by using the version of the capabilities approach that I propose to assess what justice requires in the context of climate change policy.

### Nussbaum's Capabilities Approach

In *Women and Human Development: The Capabilities Approach*, Martha Nussbaum (2000) offers her first book-length treatment of the capabilities approach as a form of "political liberalism" that can address the special issues faced by women. Nussbaum is particularly interested in responding to feminist critics of John Rawls's liberal political theory, but she does this by advancing her own "partial theory of justice" that evolves in critical yet constructive

dialogue with Rawls. While agreeing with many feminists that Rawls's theory is insufficient for addressing injustices that manifest society's treatment of women, Nussbaum also agrees with many of the intuitive ideas that underlie Rawls's general approach to justice. She therefore treats her project as an effort to extend or complement Rawls.<sup>5</sup>

Following Rawls, Nussbaum starts from the basic premise that each person has "an inviolability founded on justice that even the welfare of society as a whole cannot override" (Nussbaum 2006, 63). Additionally, like Rawls, Nussbaum defends her account of the substantive protections that this inviolability demands as a freestanding "partial moral conception" of justice: the substantive protections "are introduced for political purposes only, and without any grounding in metaphysical ideas of the sort that divide people along lines of culture and religion" (Nussbaum 2006, 79). Consequently, for Nussbaum, again like Rawls, the protections "can become the object of an 'overlapping consensus' among people who otherwise have very different comprehensive conceptions of the good" (Nussbaum 2006, 70).

However, whereas Rawls defined the protections that justice requires in terms of the protection of basic liberties and distribution of "social primary goods," Nussbaum focuses on *human capabilities*, that is, on what people are actually able to do and to be. The capabilities that Nussbaum seeks to protect are conditions or states of human enablement; they are valuable opportunities, such as "being able to have good health" and being able "to move freely from place to place" (see Nussbaum 2000, 78-80). Capabilities, in other words, are not necessarily protected by providing people with certain liberties or with certain Rawlsian primary goods, such as income or wealth. What matters is what people are actually able to do, given the protections or goods available to them. The capabilities approach is concerned with whether people are able to translate those protections and goods into actual achievements that characterize a life that is worthy of the dignity of human beings.

For the purpose of ensuring that people are able to live such a life, Nussbaum proposes a core list of "central human functional capabilities" and defends them as bare minimum of what respect for human dignity requires.<sup>6</sup> In its most recent form, this list of capabilities is drafted as follows (Nussbaum 2000, 78-80; Nussbaum 2006, 76-78):

1. *Life*. Being able to live to the end of a human life of normal length, not dying prematurely,

- or before one's life is so reduced as to be not worth living.
2. *Bodily health.* Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
  3. *Bodily integrity.* Being able to move freely from place to place; having one's bodily boundaries treated as sovereign, that is, being able to be secure against assault, including sexual assault, child sexual abuse, and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
  4. *Senses, imagination, and thought.* Being able to use the senses, to imagine, think, and reason—and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing self-expressive works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech and freedom of religious exercise. Being able to search for the ultimate meaning of life in one's own way. Being able to have pleasurable experiences, and to avoid nonnecessary pain.
  5. *Emotions.* 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 overwhelming fear and anxiety or by traumatic events of abuse or neglect. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)
  6. *Practical reason.* Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience.)
  7. *Affiliation.* (A) Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another and to have compassion for that situation; to have the capability for

- both justice and friendship. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) (B) Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails, at a minimum, protections against discrimination on the basis of race, sex, sexual orientation, religion, caste, ethnicity, or national origin. In work, being able to work as a human being, exercising practical reason, and entering into meaningful relationships of mutual recognition with other workers.
8. *Other species.* Being able to live with concern for and in relation to animals, plants, and the world of nature.
  9. *Play.* Being able to laugh, to play, to enjoy recreational activities.
  10. *Control over one's environment.* (A) *Political.* Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (B) *Material.* Being able to hold property (both land and moveable goods), not just formally but in terms of real opportunity; having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure.

I will soon discuss how Nussbaum arrives at this list of capabilities and how she defends it, but for present purposes, it is important to emphasize Nussbaum's basic motivating logic: to ensure that each person is able to live a life that is worthy of the dignity of a human being, a just society must ensure that each person attains a minimum threshold of each of these capabilities.

### **The Natural Environment in Nussbaum's Capabilities Approach**

Within this general context, the natural environment's instrumental value only explicitly figures into the eighth capability on Nussbaum's list of central capabilities. The eighth capability is “Other Species.” In holding that animals, plants, and particular natural places enable people to have relationships that are

central to living a good human life, Nussbaum treats these components of the natural environment as instrumentally valuable to one of the human capabilities that she designates as centrally important to living a dignified human life.

While this does establish the natural environment's instrumental value as a basis for protecting components of the natural environment with which people have particularly meaningful relationships, Nussbaum does not theorize the multiple ways in which these and other environmental resources, as well as broader ecological systems, cycles, 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.<sup>7</sup> Put differently, the natural environment's instrumental value figures into Nussbaum's capabilities approach in a quite recognizable, but limited, way. As I argue in the following section, establishing the environmental conditions that are necessary for achieving threshold levels of the capabilities that Nussbaum seeks to protect will require expanding the capabilities approach.

### **Sustainable Ecological Capacity as a Central Human Functional Capability**

As currently conceived, a primary problem with Nussbaum's capabilities approach is that it does not account for the ways in which many (and to some extent, all) of the central human functional capabilities are dependent on the natural environment. For example, consider "Bodily Health," which is the second capability on Nussbaum's list. The natural environment enables the components of the bodily health capability. Being able to have good health and nourishment 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 (pollution). Similarly, the adequacy of human shelter is partly contingent upon the extent to which whole ecological systems can maintain the chemical composition of the atmosphere in a way that stabilizes temperatures and ensures environmental change occurs on time scales to which humans can adapt.

Like one's bodily health, "Life"—the first capability on Nussbaum's list of central human capabilities—is enabled by the natural environment for similar reasons. Ecological systems provide the basic materials needed to "live to the end of a human life of normal length," such as food, freshwater, the ingredients of medicines that prevent disease, and the forms of

energy necessary for regulating one's body temperature. These systems also control the range and transition of threatening human diseases, as well as pests and diseases that threaten livestock and agricultural products on which humans depend. More generally, ecological systems form soil; cycle nutrients, such as oxygen, water, and nitrogen; and carry out primary production (e.g., photosynthesis), which are basic conditions of life on this planet (see Millennium Assessment Panel 2003, 56-60).

Likewise, consider "Senses, Imagination, and Thought," which is the fourth capability on Nussbaum's list. The natural environment enables this capability in important ways. For many people, having certain interactions or relationships with the environment is a matter of spiritual or religious expression. The Mescalero Apache Indians of south-central New Mexico (United States), for example, associate spiritual power with "sacred mountains" that are intimately bound up with their ceremonial traditions, prayer, and cultural identity (Ball 2000). Similarly, in Garhwal Himalaya (India), certain patches of forests are believed to be "sacred groves" in which deities reside; like the Mescalero Apache's sacred mountains, sacred groves are central to a people's sociocultural and religious practices (Anthwal, Sharma, and Sharma 2006). In these instances, components of ecological systems influence the religious, spiritual, and cultural aspects of human experience, making it possible for people to use their senses, imagination, and thought in ways that make their lives meaningful (see Millennium Assessment Panel 2003, 58-59).

Similar connections can illustrate that having each central human capability requires having a natural environment that enables the components of that capability. Being able to "have attachments to things and people outside ourselves" can involve the protection of particular ecosystems in which one recognizes features of it that create a "sense of place." Being able to "laugh, to play, to enjoy recreational activities" might require the protection of particular natural places in which people can find the components of ecosystems that enable them to pursue the kinds of recreation and play that they enjoy. At the very least, to have the capabilities of life and bodily health—which are necessary for maintaining one's bodily integrity, for engaging in practical reasoning, for affiliating with others, and for controlling one's environment—one must have nourishment, shelter, and other basic materials that ecological systems provide.

However, because these systems do not deliver these materials regardless of our impact on them, a

just society must protect their functional capacity to carry out activities such as food production, waste absorption, disease control, and maintaining the chemical composition of the atmosphere. Similarly, for people to be able to use the senses to imagine, think, and reason in ways that allow for freedom of conscience, ecological systems must have the functional capacity to maintain the particular natural features and contexts in which religious and cultural experiences are made meaningful. Thus, without accounting for the importance of functioning ecological systems, Nussbaum's capabilities approach cannot promise to identify what is necessary for achieving justice in society.<sup>8</sup> To address this limitation in her partial theory of justice, I propose adding "Sustainable Ecological Capacity" as a meta-capability that enables all the capabilities on Nussbaum's list of central human capabilities. Having this meta-capability involves being able *to live one's life in the context of ecological conditions that can provide environmental resources and services that enable the current generation's range of capabilities; to have these conditions now and in the future.*

As discussed above, functioning ecological systems create the physical conditions that are necessary for human life, conditions that enable the very *possibility* of human life. In this respect, ecological systems are unique in being a meta-capability. First, unlike social, political, and economic systems, the functioning of ecological systems is always necessary for the exercise of human capabilities. The institutions that make up social, political, and economic systems can shape one's ability to convert resources or goods into valuable achievements in the same way that the components of ecological systems can influence this conversion. However, the fact that the capabilities approach recognizes and can account for how these social, political, and economic contexts determine people's capabilities does not imply that these human-created environments necessarily operate at the same meta-level as ecological systems. For it is possible to exercise at least some of the central human functional capabilities outside or independent of social, political, and economic systems, while it is not possible to exercise the central human capabilities outside or independent of functioning ecological systems. Second, because of the role ecological systems play in making human life possible, the ecological meta-capability should be understood as more fundamental than any capability on Nussbaum's list of central capabilities. Indeed, without functioning ecological systems, all organisms (including humans)

would lack the biogeochemical conditions that make them capable of having a life.

The importance of these systems is also why Sustainable Ecological Capacity should be understood as part of an individual's opportunity set, not merely as a property of a nonhuman system. Two primary opportunities are at stake in protecting Sustainable Ecological Capacity as an individual capability: (1) the opportunity for an individual to exercise any of the other human capabilities, which requires that ecological systems maintain the conditions of life; and (2) the opportunity for an individual to exercise these capabilities in relation to the environmental resources and services that the current generation enjoys. Thus, the environmental meta-capability I am defending in the present argument should not be taken to imply a limitation imposed by the individualistic character of Nussbaum's capabilities approach.<sup>9</sup> The capability is a meta-capability in the sense that it is necessary for the exercise of other capabilities, but the ecological conditions that constitute the capability are a component of individual opportunity in the same way that landed property and shelter are, respectively, a component of one's capability to have "Control over One's Environment" and to have "Bodily Health." As with property and shelter, certain ecological conditions are often inseparable from the exercise of capabilities.

In addition to creating the possibility of human life, ecological conditions also create the components of environmental experiences that make human life *meaningful*, or worthy of the dignity of a human being. With respect to this role, the ecological meta-capability should be understood as having "special importance" in the same way that Nussbaum (2000, 83) treats the capabilities of "practical reason" and "affiliation" as having special importance. Practical reason and affiliation have this status because they organize and suffuse all of the other capabilities, making the pursuit of the capabilities truly human. Thus, to say that the ecological meta-capability should have a role similar to practical reason and affiliation is to say that all of the capabilities on the list of central human functional 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.

In practice, this requires that governments ensure the functioning of ecological conditions is not diminished to a point at which they can no longer supply the particular resources and experiences that enable people to achieve a threshold level of the capabilities

on Nussbaum's list of capabilities. Protection of the ecological meta-capability therefore requires (1) the protection of ecological systems at a level that promises to sustain the conditions of life on earth and (2) the protection of ecological systems at a level that promises to sustain the particular resources and maintain the physical context for environmental experiences that enable threshold levels of other central human functional capabilities.

What it means to ensure that ecological systems function at a level that fulfills this second condition will depend on the environmental resources, services, and experiences that are relevant in different geographical, political, and cultural locations. This is in part why I have followed Nussbaum in defining the ecological meta-capability in general and abstract terms. Like her other capabilities, the ecological meta-capability should be specified in a way that reflects the circumstances and values that are relevant in particular places. For example, being able to have shelter will require environmental resources and services in the Midwestern United States that are different from those required in coastal Bangladesh. This is because the adequacy of shelter in coastal Bangladesh partly depends on the extent to which global ecological systems are able to maintain the chemical composition of the atmosphere so that the incidence of climate change does not produce flooding that rapidly submerges the coastline's heavily populated areas.<sup>10</sup> However, in the Midwestern United States, the adequacy of shelter depends on sustaining the supply of building materials necessary for protecting people from freezing temperatures during the winter months. In other words, while justice for people in Bangladesh means preventing pollution that heats the atmosphere, for people in the Midwestern United States it means overcoming the limitations in the local supply of environmental resources so that the construction of adequate shelter can continue.

This comparison of what shelter requires in different physical contexts illuminates how expanding Nussbaum's list of capabilities to include Sustainable Ecological Capacity as an ecological meta-capability can help bring the ecological dimension of human capability to bear on questions concerning the distribution of environmental benefits and burdens.<sup>11</sup> Furthermore, when this extension of the capabilities approach is combined with the capabilities approach's nonprocedural method of political justification, it becomes particularly instructive as a framework for thinking and reasoning about environmental justice. In what follows, I will first explain the nonprocedural

method of political justification that Nussbaum advances and why it is relevant to questions of environmental justice. I will then elaborate how a capabilities approach that includes an environmental meta-capability can provide a framework for reasoning about the relationship between Sustainable Ecological Capacity and the capabilities that make up Nussbaum's current list of central human functional capabilities. Finally, I will use this extended capabilities approach to consider what justice requires in the context of climate change policy.

### **Nussbaum's Nonprocedural Method of Political Justification**

Although Nussbaum follows Rawls in holding that justice requires recognizing the inviolable dignity held by each person, and in holding that people from diverse cultural backgrounds can agree to the basic protections that justice requires, her theory of justice is distinct from Rawls's. First, as I have discussed above, Nussbaum's account of justice focuses on the protection and provisioning of "central human functional capabilities" rather than "primary goods."<sup>12</sup> Some of Nussbaum's capabilities do establish protections for the same rights, opportunities, and material resources that Rawls's two principles of justice distribute; however, Nussbaum does not follow Rawls in allowing income and wealth to play such a central role in evaluation of relative social position. Specifically, in the capabilities approach, the resources that contribute to people's capabilities are understood to span to goods beyond income and wealth and to goods that are not commensurable with income and wealth (see Nussbaum 2006, 283-84). Likewise, the capabilities approach accounts for how the different circumstances people face shape their ability to convert the resources they have into actual achievements. In this sense, the capabilities approach evaluates relative social position by looking at a broad range of resources or goods as well as a person's abilities.

Second, Nussbaum (2000, 74; 2006, 71) insists that a threshold level of each of these capabilities must be protected for each person, treated as an end in its own right (Nussbaum 2000, 5-6; 2006, 71, 78, 166-67). Unlike Rawls, she does not separate political and civil liberties from basic social and economic protections and then give lexical priority to the principle protecting the former (see Nussbaum 2006, 288-89). Rather, the capabilities approach recognizes that political and civil liberties may have material

prerequisites such that social and economic protections are necessary preconditions for realizing these liberties.<sup>13</sup> For this reason, the full list of capabilities are to be protected for each person, regardless of whether a person fits into Rawls's "least advantaged" group, the members of which, on Rawls's account, are merely supposed to get the "greatest benefit" from an unequal distribution of certain classes of primary goods (see Rawls 1971, 83).

Taken together, these two components of Nussbaum's capabilities approach distinguish her from Rawls in important ways. In comparison to Rawls's theory of justice, Nussbaum's capabilities approach establishes protections for social advantages that are more responsive to variation in individual need and circumstance, yet in requiring threshold levels of capability protection, Nussbaum's theory is less fungible when it comes to making trade-offs among them (see Rawls 1971, 60-65, 76-83; Nussbaum 2006, 164-68).

More important to the present discussion, Nussbaum's method for justifying the list of central capabilities (and the requirement that each person should have them) makes her partial theory of justice particularly relevant to addressing questions about the distribution of environmental benefits and burdens. As a starting point, it is important to distinguish Nussbaum's support for Rawls's general method of political justification as a search for "reflective equilibrium." Specifically, she states,

The account of political justification I favor lies close to the Rawlsian account of argument proceeding toward reflective equilibrium: we lay out the arguments for a given theoretical position, holding it up against the "fixed points" in our moral intuitions; we see how those intuitions both test and are tested by the conceptions we examine. . . . We hope, over time, to achieve consistency and fit in our judgments when this seems required by a theoretical conception, but modifying or rejecting the theoretical conception when that has failed to fit the most secure of our moral intuitions. (Nussbaum 2000, 101-2)

As this quote indicates, Nussbaum does endorse the Rawlsian method for testing the adequacy of a proposed account of justice. However, she arrives at the initial content of her principles through moral argumentation that is consequentialist in nature. And it is here that her departure from Rawls becomes clear.

Rawls's widely discussed procedure for initially determining principles of justice and the goods they

allocate involves imagining ourselves in a hypothetical social contract situation in which we are under a "veil of ignorance" that prevents us from knowing facts about our personal life circumstances, such as our abilities, skills, social status, and so on. Rawls proposes that decision making under these constraints is fair to all participants and will therefore produce principles that are fair and rational. Nussbaum, in contrast, seeks a less procedural and more consequentialist approach to arriving at the content of her principles.<sup>14</sup> Her method involves making "intuitive arguments about what a good outcome is, in the form of an account of a minimally decent and just society" (Nussbaum 2004, 197). In this respect, Nussbaum's principles do not evolve from a hypothetical choice situation subject to a set of procedural constraints (see Nussbaum 2006, 81).<sup>15</sup> Instead, she engages in a form of Socratic reasoning about the basic preconditions—or capabilities—required for living a life worthy of the dignity of a human being, and she identifies general and abstract conditions that she believes resonate with people the world over.<sup>16</sup> Furthermore, each of the capabilities she advances has two characteristics: first, they are "particularly central in human life, in the sense that their presence or absence is typically understood to be the mark of the presence or absence of human life"; and second, they can be realized in a "truly human way, not a merely animal way" (Nussbaum 2000, 71-72; 1992, 215-16). Thus, where Rawls relies on procedural constraints to determine the content of justice, Nussbaum relies on independent moral argument about the capabilities widely recognized as necessary for life that is truly human.<sup>17</sup>

This is why, in the capabilities approach, that citizens ought to have certain capabilities as a matter of justice is not something that can be overridden by claims that people in a hypothetical choice situation under a veil of ignorance would choose otherwise.<sup>18</sup> Similarly, when the priorities implied by the list of capabilities come into conflict with the desires and preferences that emerge from people meeting and deliberating in the real world of political choice, Nussbaum is clear that we should not in the short run conclude that those priorities are negotiable. As she explains,

Suppose a majority of people in India, meeting and deliberating in ways that meet the moral constraints of the best informed-desire conceptions, desire to replace their pluralistic constitution by one declaring India a Hindu state. . . . This should not lead us to conclude that equal

freedom of conscience is a negotiable item for a decent pluralistic democracy. We ought to say, "What the majority desires here is wrong." (Nussbaum 2004, 201)

In this situation, declaring India a Hindu state would violate the fourth capability on Nussbaum's list of central human functional capabilities, which involves "being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise" (Nussbaum 2000, 79).

Endeavoring to walk a nuanced line between "informed-desire" conceptions of the good and intuitive arguments emerging from empirically informed reasoning about what it means to lead a good human life, Nussbaum specifies a modest ancillary role for people's desires and preferences (see Nussbaum 2000, 148-61). They should help bring attention to salient issues, provide a basis for checking the political feasibility of conclusions arrived at through independent moral argument, and push political discussion toward finding a convergence between informed desires and independent moral argument that respects the expression of preferences as a reflection of people's ability to reach out for the good (see Nussbaum 2004, 200; 2000, 146-67). But even so, Nussbaum still stops a good distance from permitting democratic outcomes to take priority over capabilities deemed central through sustained and reflective moral argument about what a good human life requires. In her account, the conclusions of moral argument take priority, at least in the short run.

These basic features of the capabilities approach, when combined with the ecological meta-capability I have previously defined, are instructive as a framework for judging the political legitimacy of public policies affecting the natural environment. Nussbaum offers a nonprocedural justification for designating certain outcomes as substantively just even if they conflict with collective norms. For example, referring to her list of central human functional capabilities, we can say that if a policy outcome emerging from collective norms produces a capability failure, then it is violating basic conditions of justice.<sup>19</sup> Given the inclusion of an ecological meta-capability into Nussbaum's account of justice, it also follows that if collective norms produce outcomes threatening the ecological conditions that are the basis of human capabilities, then those norms are violating capabilities necessary for achieving basic conditions of justice. In short, collective outcomes that undermine

what I have defined as Sustainable Ecological Capacity—the ecological meta-capability—will undermine basic conditions of justice.

Thus, in comparison to Rawls's theory of justice, the capabilities approach not only provides the basis for substantive environmental protections that are responsive to variations in individual need, it also provides a nonprocedural justification for designating certain environmental outcomes as unjust. In the capabilities approach, the justification for the environmental meta-capability, and for claiming protection of it is inadequate, comes from an independent moral argument about the ecological conditions that are necessary for living a life that is worthy of the dignity of a human being. Moral argument of this kind requires inquiry and reasoning about the consequences of environmental degradation for human dignity. In grounding claims of environmental injustice in the empirical consequences policies produce, Nussbaum's capabilities approach promises to make policies accountable to their substantive impacts on the lives of real people.

To clarify the implications of treating Sustainable Ecological Capacity as a meta-capability, I will now consider the relationship between this ecological meta-capability and Nussbaum's conditions of justice in the context of climate change policy. Although climate change is only one environmental problem to which we might apply the capabilities approach, I focus on it here to demonstrate the concrete, policy relevance of the capabilities approach as a tool for improving our normative thinking and reasoning about the natural environment and social justice. Thus, although the following discussion will simplify many nuanced and complicated relationships, I do so to lay the basis for further discussion about how the capabilities approach can provide a basic theoretical or conceptual structure for thinking through these relationships.

## **Human Capabilities and Environmental Justice**

As Nussbaum has already noted, the capabilities on her list are related to one another in many complex ways; promoting some inherently involves promoting others, and some organize and suffuse all others (see Nussbaum 2000, 81-82). These relationships are further complicated when we compare what it would mean to have an ecological meta-capability in Bangladesh and in the Midwestern United States. Despite the extent to which the specific requirements

of Sustainable Ecological Capacity are locally and nationally determined, the requirements of each locality can impact the capabilities of people who live in distant places.<sup>20</sup> For example, controlling the chemical composition of the atmosphere in an effort to prevent the impact of climate change on people in Bangladesh may require industrialized societies to reduce or offset their carbon dioxide emissions.<sup>21</sup> Likewise, providing resources for adequate shelter in a Midwestern city like Chicago may require access to natural resources in distant locations, such as Bangladesh. For these reasons, achieving the ecological conditions of justice in one area will require that people in other areas make significant sacrifices, potentially undermining their own capabilities.

To conceptualize the relationship between the ecological meta-capability proposed above and the other capabilities that must be protected (at a threshold level) to achieve Nussbaum's conditions of justice, let us assume that there exists some level at which the minimum threshold of each capability on Nussbaum's current list of capabilities is met for each person. I will refer to this level as NJT for "Nussbaum's Justice Threshold" since it represents a level of capability protection at which a necessary condition of justice is met for each person. So at level NJT, each person has a threshold level of each capability, and therefore, Nussbaum's necessary conditions of justice are met.

If, as I argue above, an ecological meta-capability is necessary for achieving all the capabilities on Nussbaum's list, then there is also some threshold level of this capability that is necessary for achieving conditions of justice, defined as the achievement of a threshold level of each of Nussbaum's capabilities. I will refer to this level as EJT for "Environmental Justice Threshold" since it represents a level at which ecological systems have the sustainable ecological capacity to enable achieving a threshold level of the capabilities on Nussbaum's list, for each person. Assuming (as I have argued) that Nussbaum's capabilities are dependent on ecological systems, then up to a certain point, there will be a roughly positive relationship between Sustainable Ecological Capacity and Nussbaum's central human functional capabilities. In other words, up to a certain point, as the ecological meta-capability is enabled, the capabilities on Nussbaum's list will also be enabled.

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, the *ecological* conditions of justice are met. I will refer to this circumstance as ECJ for

"Ecological Condition of Justice." When the ECJ is met, each person has a threshold level of all of Nussbaum's capabilities and ecological systems are functioning at a capacity that enables them to provide the resources and services that enable these capabilities. In a just world, all people in both the United States and Bangladesh experience the ECJ. However, in the real world, when the United States moves its level of capability protection beyond the Nussbaum's threshold of justice (NJT), the likelihood of achieving the ECJ for people in Bangladesh diminishes.

Specifically, first consider the level of capability protection widely available in an industrialized society such as the United States. Many people in the United States experience a quality of life that exceeds the threshold level of protection required to protect Nussbaum's capabilities.<sup>22</sup> For example, not only are many of us in the United States able to have good health, to be adequately nourished, and to have adequate shelter (as Nussbaum's Bodily Health Capability requires), we are able to go far beyond this capability to satisfy extravagant tastes. We pay for strawberries flown in from tropical locations in the middle of the winter; we purchase wood shipped in from other countries so we can build aesthetically attractive homes. While the experience of these luxuries (combined with many others) push some people in the United States above a minimum capability threshold needed for bodily health (i.e., above NJT), the experience also has environmental impacts that threaten to push other people's ecological meta-capability below what is needed to meet the threshold level of this capability required for justice. For as we fly strawberries and ship exotic wood around the world, we release carbon dioxide that alters the chemical composition of the atmosphere, and this in turn threatens to make the shelter of people living in low-lying coastal areas inadequate, in both the United States (e.g., Louisiana) and in other countries (e.g., Bangladesh).

In this respect, although the United States fails to provide the threshold level of Sustainable Ecological Capacity that is required to meet the ECJ, it comes closer to providing, and in some cases surpasses provision of, the threshold level of Nussbaum's capabilities that is required to meet conditions of justice (at NJT). Specifically, in the United States, for much of the population, at least some of the capabilities on Nussbaum's list are enabled above the minimum threshold required at NJT. But the activities involved in protecting these capabilities produce a decrease in Sustainable Ecological Capacity for people in low-lying coastal areas. For as carbon dioxide emissions

overwhelm the capacity of ecological systems, cycles, and processes to stabilize climate, some people in low-lying coastal areas will be unable to attain shelter that can withstand the consequent floods, storm surges, erosion, and so on. More generally, the United States's protection of some of Nussbaum's capabilities above the threshold required for justice effectively reduces the ecological meta-capability as well as the central human functional capabilities for some people in both the United States (e.g., on the Louisiana coastline) and for many people living in Bangladesh (e.g., in low-lying coastal areas subject to flooding).<sup>23</sup>

However, the vulnerability that climate change creates will be more devastating for the coastal populations of poor people living in underdeveloped countries. This is because a majority of those vulnerable to the impact of climate change in Bangladesh already lack threshold levels of these capabilities necessary for meeting conditions of justice. For example, 47.8 percent of the people in Bangladesh (as a whole) live below a "basic needs poverty line." The case is even worse for people in Bangladesh's coastal areas, where 52.8 percent of the people live below this poverty line. Furthermore, although extremely poor people in coastal areas have a slightly higher caloric intake than extremely poor people in noncoastal areas, the coastal poor also face greater risk and vulnerability to climate change impacts, such as storm surges and tidal flooding (see Huq and Kahn 2006, 187-88).

This is why we should identify Bangladesh as a country whose level of capability protection falls below the threshold level of Sustainable Ecological Capacity and below the threshold level of Nussbaum's capabilities that are required for justice. Not only do an enormous number of people in Bangladesh lack the capabilities that Nussbaum's account of justice seeks to protect, climate change will also render many of them unable to live their lives in the context of ecological conditions that provide the environmental resources and services enabling their current range of capabilities.

In such a situation, to regain conditions of justice for people in Bangladesh and Louisiana, Sustainable Ecological Capacity must be pushed up to the level required for achieving a threshold level of Nussbaum's other capabilities. Specifically, because the United States's production of carbon dioxide threatens to produce climate changes that will undermine people's capabilities to achieve adequate shelter (which is a component of one's bodily health capability), justice requires that the United States reduce or offset its

release of carbon dioxide. This prescription to recover Sustainable Ecological Capacity, rather than to provide alternative means of adequate shelter to people living in coastal Bangladesh and Louisiana, follows from the central role that Sustainable Ecological Capacity plays in enabling all of the other central human functional capabilities.

Consider, for example, that a response to the threat of storm surges and tidal flooding that involves forcing the coastal poor to immediately migrate away from the coast could potentially undermine their capabilities for what Nussbaum defines as "Emotions." This (fifth) capability involves "being able to have attachments to things and people outside ourselves" and "not having one's emotional development blighted by fear and anxiety or by traumatic events of abuse or neglect." Far from protecting this capability, to forcibly move a population of people away from its home is, for many, to sever attachments to things and people outside themselves, such as the physical geography that makes a place meaningful and the familiar relationships to others that routinely make a place or a home familiar and safe.

Likewise, forcibly relocating a population either before or after the destruction of their homes by a human-created natural disaster (e.g., flooding resulting from rapid changes in climate caused by humans) is itself a traumatic event. Consider, for example, the sense of neglect voiced by low-income residents of New Orleans, Louisiana, who were moved from the city prior to Hurricane Katrina's destruction of their homes. These "evacuees" may have faced better circumstances than those stuck in the New Orleans's Superdome, but that is little consolation amidst the traumatic effects of losing one's home and material possessions, as well as being unable to return to the familiar people and places that make a community one's own.

Such events illustrate why it is important to achieve ECJ by recovering Sustainable Ecological Capacity, rather than by providing alternative means of adequate shelter to people living in coastal Bangladesh and Louisiana. In particular, recovering Sustainable Ecological Capacity is necessary to prevent violation of additional capabilities, such as "Emotions."

More generally, this rough simplification of how Sustainable Ecological Capacity as an ecological meta-capability relates to Nussbaum's list of central human functional capabilities illustrates how Nussbaum's capabilities approach can provide a general framework and logic for thinking about the relationship between the distribution of environmental benefits and burdens.

When used to analyze climate change policy, the expanded capabilities approach I have proposed prescribes reducing or offsetting carbon dioxide emissions in the United States. The relationship between Nussbaum's capabilities and the ecological meta-capability also suggests that in a world connected by large-scale ecological interactions, Nussbaum's capabilities approach not only needs to account for the ecological conditions that enable a minimum threshold (or floor) of capability protection required for justice, as Nussbaum already argues, but also needs to account for the maximum (i.e., ceiling) level of capability protection that a society can justify without impacting ecological conditions in ways that undermine the capabilities of vulnerable populations in sometimes distant locations.

As a final point, it is worth emphasizing that not all activities increasing the central human functional capabilities above what is required to meet minimum conditions of justice threaten Sustainable Ecological Capacity. Consider, for example, Nussbaum's ninth capability: "Play." Having this capability involves "being able to laugh, to play, [and] to enjoy recreational activities" (Nussbaum 2000, 80). For some people, being able to enjoy recreational activities means being able to recreate outside, in wilderness areas filled with trees, plants, and other wildlife that may actually absorb carbon dioxide. If these wilderness areas absorb more carbon dioxide than the amount produced in traveling to them, then having increasing levels of this "Play" capability will obviously not have negative implications for people threatened by climate change in other areas of the world. In fact, in this case, increases in one of the central human functional capabilities will lead to overall improvements in the ecological meta-capability, for the absorption of carbon dioxide will actually help stabilize climate such that the current shelter used by people in low-lying coastal areas is less subject to damage.

On the other hand, this relationship between recreation and Sustainable Ecological Capacity does not apply if being able to enjoy recreational activities involves policing the borders of parks in underdeveloped countries so tourists can experience wild nature untouched by the people who also live in those forests. In this case, although protection of the park may increase levels of the ecological meta-capability, it will do so at the cost of some people's central human functional capabilities; for example, those who forage in the forest will no longer be able to access the park to attain the food and materials they need to meet threshold levels of bodily health that are required for justice.

## Conclusion

These examples suggest only a few of the complex ways in which the relationship between ecological systems and human capabilities bear on questions of justice. My primary aim has been to expand Nussbaum's capabilities approach so that it can account for the instrumental relationship between the environment and human capabilities and to argue why the nonprocedural justification of Nussbaum's capabilities approach is particularly useful in the environmental area. With respect to the latter issue, Nussbaum's justification for basic capability protection, when expanded to account for the central role ecological conditions play in enabling capabilities, makes it possible to designate certain environmental policies as unjust because they violate the ecological conditions of human capabilities.<sup>24</sup> Toward this end, I have proposed expanding Nussbaum's capabilities approach to account for the necessary role of ecological conditions in enabling human capabilities. By accounting for the multiple ways in which ecological conditions are instrumental to human capabilities, it is possible to conceptualize ecological conditions of justice within the broader framework of Nussbaum's capabilities approach. To protect these conditions for each person, treated as an end, would require considering how ecological systems, cycles, and processes connect the environmental impacts and experiences of people in distant geographical locations. As these connections increasingly bring benefits to the rich while making the poor (in the global North and the global South) yet more vulnerable, the capabilities approach has much to offer.

## Notes

1. The idea of human dignity, and a life that is worthy of it, appears throughout Nussbaum's work on the capabilities approach. Her reference to the idea of human dignity, or human worth, provides the basis for arguing that there is a threshold level at which "a person's capability becomes what Marx calls 'truly human,' that is, *worthy* of the human being." Marx's thought is particularly important to Nussbaum because he followed Aristotle (and on Nussbaum's account, departed from Kant) in emphasizing that the major human powers require material support. See Nussbaum (2000, 72-73; 2006, 70-78). For a detailed discussion of why a life without the capabilities for "affiliation" and "practical reason" do not meet this standard of human dignity, see Nussbaum (1995).

2. Nussbaum's discussion of animals might be best understood as taking up Rawls's (1993, 244-45) suggestion to treat "our relations to animals" as "problems of extension."

3. The capabilities approach has breadth and specificity largely due to the step it takes away from approaches to justice that evaluate relative social position in terms of resources, such as income and wealth. These resources do not account for the variety of variables

that influence social position, and often income and wealth are not good proxies for these other variables. Additionally, the vast diversity of life circumstances produces widely varying needs and widely varying abilities to convert needed resources into valuable outcomes. Evaluating people's capabilities involves accounting for the variety of advantages (besides income and wealth) that are available to people; and it also involves evaluating people's ability to convert the advantages they have into valuable outcomes, or functionings. Thus, a capabilities-based evaluation broadens the range of indicators that are taken as relevant to evaluating social position and is more sensitive to the conditions of an individual's circumstance that determine one's ability to translate available resources into achievements. I discuss these points more fully in the section of this article titled "Nussbaum's Nonprocedural Method of Political Justification."

4. Nussbaum refers to her capabilities approach as providing a "partial" theory of justice because she does not advance it as an "exhaustive account of political justice" but rather maintains that there may be other important political values she does not include that are closely connected with justice.

5. Although Nussbaum begins this dialogue with Rawls's political theory in *Women and Human Development: The Capabilities Approach* (2000), she develops the discussion of Rawls (and contractarian political theory more generally) in her second book (Nussbaum 2006) on the capabilities approach. In this second book, she also addresses injustices experienced by the disabled, nonhuman species, and people of other nations.

6. In this article, I use the terms "central human functional capabilities," "central human capabilities," and "Nussbaum's list of capabilities" interchangeably. In each case, I refer to the list of capabilities Nussbaum (2000, 78-80) presents in *Women and Human Development: The Capabilities Approach*.

7. I say that Nussbaum's list does not yet account for the ecological dimension of human capabilities because Nussbaum follows Rawls in seeing the search for reflective equilibrium as open-ended and subject to ongoing revision and rethinking. In this sense, my effort to ground her list in the reality of our ecological circumstance as human beings should be seen as effort to engage in precisely the kind of reasoning her approach recommends and for which we should recommend it. Aside from revising her own list several times, Nussbaum has consistently emphasized this revisionary aspect of her theory. For example, see Nussbaum (2004, 197).

8. Nussbaum comes closest to recognizing the importance of ecological systems in discussing the eighth capability on her list of central human functional capabilities. The eighth capability is "Other Species" and involves "being able to live with concern for and in relation to animals, plants, and the world of nature." In a footnote, for example, she states that government can do a lot to protect this capability "through its choices of policy regarding endangered species, the health and life of animals, and the ecology" (Nussbaum 2000, 80). Also see Nussbaum (2000, 157-58).

9. See Robyns (1995, 107-10) for a discussion and critique of the claim that the capabilities approach is too individualistic.

10. For example, Bangladesh is already experiencing massive migration due to population growth and land scarcity coupled with floods and droughts. The Intergovernmental Panel on Climate Change (IPCC; 2001, 572) warned that further "loss in coastal areas resulting from inundation from sea-level rise as a result of climate change is likely to lead to increased displacement of resident populations." Additionally, the IPCC (2001, 579) noted that a 0.5°C

to 2°C increase in atmospheric temperature would inundate about 15 percent of the Bangladesh Sundarbans, exacerbating existing human insecurity and producing further loss of employment. Similarly, a 2°C increase in temperature would produce about a 23 to 29 percent increase in the extent of inundation in Bangladesh lowlands, leading to changes in flood depth and monsoon rice cropping patterns and, thus, to increased risks to human life and property, increased health problems, and a reduction in rice yields.

11. In using Nussbaum's capabilities approach to address matters of environmental justice, the following discussion will refer to "Sustainable Ecological Capacity" and "ecological meta-capability" interchangeably.

12. In contrast to the list of capabilities that Nussbaum proposes, Rawlsian (1971, 62) primary goods refer to basic rights and liberties (e.g., the right to vote and free speech), powers and opportunities (e.g., the right of legislators to vote on a particular piece of legislation), and income and wealth.

13. Rawls (1993) briefly addresses this point, granting that certain basic needs might need to be met in order for citizens to understand and exercise their basic civil and political liberties. But as Nussbaum notes, Rawls grants this point with "tantalizing brevity" and does not explain what it might mean to satisfy basic needs (see Nussbaum 2006, 289).

14. By procedural approach, I mean approaches to deriving principles of justice, such as John Rawls's, that propose a procedure for modeling key features of fairness and impartiality into the choice situation (such as the "Veil of Ignorance") and then accept whatever principles emerge from those procedures as just.

15. Unlike Rawls, Nussbaum goes "directly to outcomes and examine[s] these for hallmarks of moral adequacy" (Nussbaum 2006, 81).

16. Nussbaum believes her list would gather broad cross-cultural support; in fact, the list has emerged from years of cross-cultural discussion, which has shaped its content. In this sense, it already represents an "overlapping consensus," which refers to the Rawlsian idea that people with diverse conceptions of the good may support the list, without accepting any particular metaphysical view of the world (see Nussbaum 2000, 76). Nussbaum also follows Rawls in introducing it as a basis for political judgments only. In this respect, she defends it as free from any metaphysical grounding that might divide people along lines of culture and religion (see Nussbaum 2006, 79).

17. More abstractly, it might be said that Nussbaum differs from Rawls in her approach to arriving at the content of *what* is to be justified through the method of reasoning toward reflective equilibrium. She relies on a "freestanding moral idea" that "certain human capabilities exert a moral claim that they should be developed" (Nussbaum 2000, 83).

18. Because having these capabilities may not be the only requirement of justice, Nussbaum maintains that her theory is partial (see note 4).

19. In asserting her own list as the basis for constitutional guarantees, Nussbaum makes similar claims in the context of current law and policy concerning both religion and "the family" (see Nussbaum 2000, 167-297).

20. Gillroy (2000, 276-77) makes a related point in arguing that excessive wealth for some inhibits the freedom of others by depriving them of the baseline material conditions that empower a citizen's moral agency. On Gillroy's account, these material conditions must therefore include a baseline of ecosystem integrity.

21. I consider the implications of climate change for Bangladesh because it is recognized as one of the countries most vulnerable to the impact of climate change (see Huq 2001, 1617).

22. My claim that people in the United States experience a quality of life that exceeds the level of protection that Nussbaum's capabilities approach requires applies to the materialist capabilities on Nussbaum's list of capabilities (e.g., "Bodily Health" and "Life") more than to the abstract capabilities (e.g., "Senses, Imagination, and Thought" and "Affiliation").

23. For example, the IPCC (2001) reported that a 45 cm rise in sea level will inundate 10.9 percent of Bangladesh's land area and expose 5.5 million people in coastal areas to dangerous risks and harm.

24. Although this topic cannot be taken up in the present article, Nussbaum's capabilities approach also has important implications for more democratic methods of resolving environmental concerns. Specifically, Nussbaum's capabilities approach could provide a framework for questioning deliberative and majoritarian approaches that rely on well-crafted procedures to arrive at principles or policies that will produce a fair distribution of environmental benefits and burdens.

## References

- American Lung Association. 2001. Urban air pollution and health inequities: A workshop report. *Environmental Health Perspectives* 109 (June): 357-74.
- Anthwal, Ashish, Ramesh C. Sharma, and Archana Sharma. 2006. Sacred groves: Traditional way of conserving plant diversity in Garhwal Himalaya, Uttaranchal. *Journal of American Science* 2 (2): 35-38.
- Ball, Martin. 2000. Sacred mountains, religious paradigms, and identity among the Mescalero Apache. *Worldviews: Environment, Culture, Religion* 4 (3): 264-82.
- Gillroy, John Martin. 2000. *Justice and nature: Kantian philosophy, environmental policy, and the law*. Washington, DC: Georgetown University Press.
- Hamilton, James, and W. Kip Viscusi. 1999. *Calculating risks: The spatial and political dimensions of hazardous waste policy*. Cambridge, MA: MIT Press.
- Huq, Saleemul. 2001. Climate change and Bangladesh. *Science* 294 (5547): 1617.
- Huq, Saleemul, and Mizan R. Kahn. 2006. Equity in national adaptation programs of action (NAPAs): The case of Bangladesh. In *Fairness in adaptation to climate change*, eds. W. Neil Adger, Jouni Paavola, and Saleemul Huq. Cambridge, MA: MIT Press.
- Intergovernmental Panel on Climate Change (IPCC). 2001. *Climate change 2001: Impacts, adaptation, and vulnerability*. Geneva, Switzerland: IPCC.
- Millennium Assessment Panel. 2003. *Ecosystems and human well-being: A framework for assessment*. Washington, DC: Island Press.
- Miller, David. 1999. Social justice and environmental goods. In *Fairness and futurity: Essays on environmental sustainability and social justice*, ed. Andrew Dobson. Oxford: Oxford University Press.
- Nussbaum, Martha. 1992. Human functioning and social justice: In defense of Aristotelian essentialism. *Political Theory* 20 (2): 202-46.
- . 1995. Aristotle on human nature and the foundations of ethics. In *World, mind, and ethics: Essays on the philosophy of Bernard Williams*, eds. J. E. G. Altham and Ross Harrison. Cambridge: Cambridge University Press.
- . 2000. *Women and human development: The capabilities approach*. New York: Cambridge University Press.
- . 2004. On hearing Women's voices: A reply to Susan Okin. *Philosophy and Public Affairs* 32 (2): 193-205.
- . 2006. *Frontiers of justice: Disability, nationality, species membership*. Cambridge, MA: Belknap Press of Harvard University Press.
- Okin, Susan. 1989. *Justice, gender, and the family*. New York: Basic Books.
- Rawls, John. 1971. *A theory of justice*. Cambridge, MA: Belknap Press of Harvard University Press.
- . 1993. *Political liberalism*. New York: Columbia University Press.
- Robyns, Ingrid. 1995. The capability approach: A theoretical survey. *Journal of Human Development* 6 (1): 93-114.