Two Shades of Green: Food and Environmental Sustainability

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The politics of food illustrates an enduring tension within environmental ethics and green political theory: this oft-assumed division between those thinkers for whom humanitarian goals remain prominent but who situate them within a normative framework stressing environmental sustainability and those thinkers who reject any distinctively humanitarian interests as untenably anthropocentric. In posing the problem as a moral dilemma between feeding people and saving nature, light and dark green value theories are made to appear in stark contrast, with the former prescribing the delivery of food aid to relieve hunger-related suffering, and the latter rejecting that call. This supposed dilemma between feeding people and saving nature is a false one. The real problem is a moral elitism on the part of developed countries where an insidious form of selfishness overemphasizes the role of population and obscures the roles of highly variable rates of consumption upon current environmental ills. An examination of the exemplary case of food politics shows that the exaggerated differences in policy implications of these two value theories can be diminished and that there is potential for common cause.

INTRODUCTION

In contemporary political discourse, calling oneself a "green" implies not so much an affinity with an organized political party as a commitment to environmental sustainability. Not long ago, the color instead represented agriculture (e.g., the Green Revolution, a "green thumb"), and a different kind of social agenda was implied. Rather than protecting nature against the ravaging impulses of human consumption (as contemporary "greens" regard themselves as attempting), these historical "greens" aimed to harness the power of nature in order to meet human appetites for consumption, improving agricultural efficiency through the study of (and occasional "improvement" upon) natural processes. No conflict over the rightful ownership of the color ensued, however, because these two projects were not (until quite recently) viewed by their adherents as inconsistent with each other. In fact, the agrarian lifestyle of the citizen-farmer was for many years viewed as the epitome of a right-thinking concern for the land, and insofar as environmental protection was a social

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concern at all (as it was in the early conservationist movement), its desideratum was the maintenance of the productive capacity of the land itself.

Things have changed since then. Now, the social project of feeding people is sometimes viewed as being incompatible with the goal of saving nature, as is perhaps most dramatically illustrated in an essay (entitled "Feeding People versus Saving Nature?") in which Holmes Rolston, III counterposes the two objectives into a kind of moral dilemma, where we must choose whether we will continue to increase agricultural productivity in order to meet the human world's increasing caloric demands or else protect the last remaining wild places against what often seems to be their inevitable destruction.[1] Rolston is hardly the only the only contemporary "green" to treat these two imperatives as existing in basic conflict with one another, as many contemporary "greens" assume famine relief to unavoidably lead to exacerbated ecological costs of population growth. Some point to the origin of agriculture as the turning point in humanity's long descent from a sustainable life style to one parasitic upon its terrestrial host.[2] Others object to large-scale agriculture on more practical grounds, including ecological stress from overpopulation and deforestation as well as the damaging effects upon the land's biological productivity and the health of its residents (both human and nonhuman) of the application of chemical fertilizers, herbicides, and pesticides, as well as the systematic eradication of humanity's competitors for the land's agricultural bounty. More recently, concerns about the long-term effects of the dissemination of genetically modified organisms into the biosphere for the purpose of increasing agricultural efficiency merely add onto what was already a sizable list of grievances that contemporary "greens" make against historical ones.

Not all contemporary "greens" would endorse the view that environmental protection necessarily requires an indifference to the human suffering inherent in famine or that obligations to save nature necessarily trump those to feed people. Others take the contrary view, suggesting that ecological health is largely (if not entirely) instrumental to human welfare, and thus that the sacrifice of the latter cannot be justified purely by the former.[3] At the center of this conundrum

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[1] Holmes Rolston, III, "Feeding People versus Saving Nature?" in Holmes Rolston, III and Andrew Light, eds., *Environmental Ethics: An Anthology* (Malden, Mass.: Blackwell, 2003), pp. 451–62. In fairness to Rolston, he admits that the world's poor "may not have so much a right to develop in any way they please, as a right to a more equitable share of the goods of the Earth that we, the wealthy, think we absolutely own." His qualified claim to save nature over feeding people is conditional upon (among other qualifications) that there be "unequal and unjust distribution of wealth" and that "just redistribution to alleviate poverty is refused" (pp. 460–61). Thus, Rolston's essay does not oppose my core thesis.

[2] That the agrarian revolution served as the origin of our ecologically insensitive "Taker" civilization, in contrast to the sustainable life styles of older "Leaver" cultures, is the central thesis of Daniel Quinn's *Ishmael* (New York: Bantam Books, 1995).

[3] For an exposition of "weak anthropocentrism" (an example of the kind of view described here), see Bryan G. Norton, "Environmental Ethics and Weak Anthropocentrism," *Environmental Ethics* 6 (1984): 131–48.

lies an issue that continues to carve cleavages across environmental ethics and green political theory: the oft-assumed division between those thinkers for whom humanitarian goals remain prominent but who situate themselves in a normative framework stressing environmental sustainability and those thinkers who reject any distinctively humanitarian interests as untenably anthropocentric (hereafter referred to by the contrasting hues of light and dark green with which the two positions have conventionally been identified). Briefly and crudely, light greens would side with human welfare in the standard moral dilemma between *Homo sapiens* and other species (maintaining that nonhuman welfare interests, if they are to count at all, cannot trump human ones), while dark greens, to paraphrase Rolston, may at least sometimes side with the nonhumans in the dilemma (denying human welfare interests any privileged status). Much of the contrast between historical and contemporary "greens" is reproduced in these two shades of green, but light green and dark green positions need not remain as far apart philosophically and politically as some of their rhetoric suggests, as the popularly referenced dilemma between feeding people and saving nature is largely a false one. Indeed, the supposed dilemma between feeding people and saving nature is a false one, and that the real problem is a moral elitism on the part of developed countries where an insidious form of selfishness overemphasizes the role of population and obscures the role of highly variable rates of consumption in contributing to environmental degradation. Despite the disparate value theories upon which they are based, a consideration of the politics of food suggests that it may be more appropriate to view them as reflecting slightly different hues of the same basic color—a contrast exaggerated where all is green but appearing more alike than different when viewed against the full color spectrum.

THE POLITICS OF FOOD

Should we feed the world's hungry people, even if it means doing so through agricultural practices that cannot be sustained? Conversely, should we strictly adhere to the constraints of environmental sustainability, even if it means denying food aid to starving people? Although posed as a kind of moral dilemma, the apparently conflicting imperatives to feed people and save nature present no genuine moral dilemma from within either light or dark green value theories, as both recognize the moral value of human life (though the latter denies it the priority over other life interests) and both recognize moral value in nonhuman nature (though the former denies it intrinsic value), but each attaches different relative weights to these two sources of value in cases where they conflict. A genuine moral dilemma presents two morally required actions; both of which are possible individually, but which cannot be accomplished in combination (i.e., we can do one or the other, but not both). Internally, each of these two value theories promises to provide the requisite theoretical framework for conceptualizing and resolving the apparent dilemma, but their

respective policy prescriptions diverge: if forced to choose between these two *prima facie* moral claims, light greens would feed people and dark greens would save nature.

The supposed dilemma between feeding people and saving nature is often merely used as a staging area upon which to carry on an entirely different dispute, where these two objectives are merely assumed to be negatively related (with little or no empirical support for that contention), transforming a debate over the proper policy response for relieving world hunger into one over whether light or dark green value theories ought to be hegemonic in green theory. When this happens, some of the facts and assumptions about the original policy choices start to fade from view, and several potentially useful insights are lost. Insofar as the imperative to feed people is indeed negatively related to that of saving nature, the practical divergence between light and dark green value theories appears especially pronounced, as the two issue opposite prescriptions on the merits of efforts to relieve hunger-related human suffering, contributing to the popular perception that such theoretical choices entail stark contrasts and stoking incendiary debates between light and dark greens. However, as I show below, insofar as these two objectives are largely (if not entirely) positively related, the oft-declared opposing policy implications of these two value theories—in this exemplary case as in Twain's prematurely announced death—appears to be greatly exaggerated, and their differences less intractable than is often claimed.

A closer examination of the politics of food sheds needed light upon several assumptions that contribute to the erroneous claim that feeding people necessarily competes with efforts to save nature. The need for food is an unavoidable biological fact of life, and while humans can survive on a diet based in remarkable array of nutritional sources, the existence of over six billion human mouths to feed necessitates agriculture on an enormous scale if hunger-related human suffering is to be avoided. According to the United Nations Food and Agriculture Organization (FAO), the average person requires 2,350 calories per day in order to survive, and fifty-four of the world's nations (most of them in sub-Saharan Africa) produced less than this amount during the most recently measured period of 2000 to 2002. Of the ninety-seven developing nations tracked by the FAO, seventeen saw thirty-five percent or more of their population go undernourished (i.e., receive fewer than the required 2,350 calories per day) during this period, while another seventeen saw between twenty and thirty-four percent of their populations suffer from food deprivation. Among these most hunger-prone nations, however, the average per capita daily food production of the former group was 1,941 calories in 2002 (down from 1,986 per capita calories in 1992), and the latter group produced 2,264 calories in 2002 (up from 2,158 in 1992). Among developing nations as a whole, daily food production averaged 2,486 calories per capita in 2002 (well

above the required minimum), up from 2,394 in 1992.[4] These numbers suggest that the primary problem is not one of food production or agricultural capacity (globally, 2,720 per capita calories are produced daily), but one of distribution. When 852 million people went hungry in 2004 (over thirteen percent of the planet's human population), enough food was produced to feed them all.

Even if hunger is not a necessary problem, it remains a remarkably persistent one. The reasons for the disturbing recurrence of hunger are familiar enough: distribution of food to the world's poor remains difficult due to corrupt governments and inadequate transportation infrastructure, increasing instances of drought or other climate-related crop failures primarily plague the poorest nations (resulting in demands for food that are geographically distant from supply), and large percentages of available grain-based calories are exported or fed to livestock in order to supply the heavily meat-based diets of persons residing in the industrialized nations. In addition, and as Americans are increasingly reminded (though to little avail), some of us simply eat much more than we need to, with the necessary consequence that less remains for others—the average American, for example, consumes 3,700 calories per day, more than fifty percent above the required minimum. World hunger, therefore, is fundamentally a distributive problem rather than a capacity problem, and it is one that *could* be solved (given current population levels, at least) without converting any additional rain forest or other ecologically valuable land into agricultural use. The obstacles to such a solution have more to do with political will than the implementation of emerging biotechnologies or increasing proportions of the biota being devoted to producing food for human consumption.

Campaigns to reduce or even end world hunger are nothing new, nor are the public debates over whether and how to relieve both the high-profile humanitarian crises (famines) and the less dramatic (but no less deadly) recurring episodes of chronic food deprivation. Famine relief organizations like Oxfam and UNICEF (along with a host of others, both public and private) abound, and many have been instrumental as both first responders to crises "hot spots" when famine occurs as well as engaging in less dramatic but crucial agricultural development assistance programs designed to reduce the frequency and intensity of crises. The notion of a moral obligation to feed the hungry has a far longer history than these multinational relief organizations which act upon its imperative, though one was formally instantiated as among those basic universal human rights in Article 25 of the 1948 Universal Declaration of Human Rights:

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[4] Hartwig de Hean et al, *The State of Food Insecurity in the World*, 5th ed. (Rome: United Nations Food and Agriculture Organization, 2003), pp. 33–36.

> Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.[5]

The declaration of a positive right to subsistence implies a correlative duty to assist those in need, and transforms what might otherwise be an optional act of charity into a moral (and quasi-legal) imperative. Although the recurrence of avoidable hunger-related suffering suggests an insidious indifference to this obligation on the part of affluent nations, the significant levels of aid for agricultural development as well as direct food aid given by the world's wealthy in order to assist the world's hungry have surely had a substantial mitigating impact upon that suffering.

Nonetheless, levels of aid have fallen short of those required to fully meet the moral objective of ensuring that all humans have access to adequate supplies of food. Half a century after declaring a human right to subsistence, one of the eight UN Millennium Goals was to cut in half by 2015 the percentage of the world's population that goes hungry (a goal first declared at the 1996 World Food Summit in Rome, which marked a significant retreat from a 1974 goal of eradicating hunger entirely within a decade), though current trends suggest that this relatively modest goal may be elusive. To meet it, the FAO estimates that an addition $12 billion per year in international aid for agriculture and nutrition would be necessary,[6] and despite the lofty rhetoric surrounding the Millennium Challenge Account (proposed by the United States in 2000 for the purpose of increasing development aid for the campaign against hunger) those funds have not been forthcoming, as is evidenced by recent global hunger trends. Responses to this imperative in international aid budgets have varied widely, with the UN's target of 0.7 percent of gross national product being met by only five nations (Denmark, Luxembourg, the Netherlands, Norway, and Sweden), and with the United States ranking last among industrialized nations at 0.14 percent in combined state and private aid (with recipients of state aid obligated to use eighty percent of that aid to purchase U.S. goods and services).[7] Despite a 37 million person reduction in world hunger during the first half of the 1990s, numbers of hungry are again rising by some 4.5 million persons per year, nullifying earlier gains and leading the FAO to push back to 2050 the target year for halving world hunger.

While food deficits and distribution problems continue to plague the developing world, food surpluses remain the norm in the United States and Europe,

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[5] UN General Assembly Resolution 217 A(III), Article 25, 10 December 1948.

[6] Ibid., p. 30.

[7] Office of Economic Cooperation and Development, "Net Official Development Assistance in 2003," http://www.oecd.org/dataoecd/42/61/31504039.pdf.

due in large part to a costly system of agricultural subsidies that generates domestic supplies that far outstrip demands. These surpluses are then exported as in kind food aid, which can have beneficial short-term effects in relieving hunger-related crises but which have more insidious effects upon international commodity markets, jeopardizing long-term food security efforts elsewhere. As the World Commission on Environment and Development (WCED) notes about these effects: "Non-emergency food aid and low-priced imports also keep down prices received by Third World farmers and reduce the incentive to improve domestic food production."[8] The consequences, according to a report in 2005 from Iowa State University's Leopold Center for Sustainable Agriculture, are manifold:

> Generous subsidies replaced part of the lost income for U.S. producers but in food producing countries where the government is unwilling or unable to provide such subsidies, land values decline and returns to farm workers drop to the point where farm families cannot subsist. Workers then leave the land and exacerbate social problems in the large cities, often stunting the economic development which frequently begins with improved agricultural productivity. The U.S. market share increases, but partly at the expense of Third World development.[9]

Depressed commodity prices caused by a combination of biotechnology advances and subsidized overproduction in North America and Europe have devastated the domestic agriculture sector in many developing nations, forcing many small farmers (who must compete with heavily subsidized produce from the U.S. and Europe) off their farmland and often into more ecologically sensitive areas (to be replaced, in many cases, by large, chemical-intensive, export-oriented agribusiness operations). The intransigence of the U.S. and Europe on maintaining domestic subsidies over the strong objections expressed by developing nations opposed to them has become such a contentious issue that it was the primary reason for the breakdown in discussions at the 2004 World Trade Organization meetings in Cancun, and now stands as perhaps the biggest obstacle to global efforts at sustainable development.[10]

Not all agricultural pricing issues can be attributed to these state subsidy programs, however. The Leopold Center report further identifies the greatest economic threat to small American farmers as the "deadly combination of concentration and vertical integration" where both the input suppliers and output processors are controlled by a few agribusiness giants (e.g., Cargill,

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[8] World Commission on Environment and Development, *Our Common Future* (New York: Oxford University Press, 1987), p. 123; it is also known as the "Brundtland Report."

[9] Traci Bruckner et al. "Toward a Global Food and Agriculture Policy," draft report, Leopold Center for Sustainable Agriculture, Iowa State University, January 2005, http://www.leopold.iastate.edu/pubs/staff/policy/globalag.pdf, p. 8.

[10] See, for example, Claire Melamed, "Why Poor People Would Prefer to be Protected from Free Trade," *The Guardian* , online ed., 8 September 2003.

ADM, Monsanto) able to exert monopoly pressure on prices. One might expect the low prices paid to producers to benefit consumers (the "price transmission theory"), but the report instead finds that "powerful buyers sell their products in a market with its own competitive features, unrelated to input costs."[11] Similar anti-competitive pressures afflict small farmers elsewhere, as these same multinationals aim to control world seed production (and therefore also the fertilizers and pesticides genetically matched to them) as well as distribution, thereby displacing small subsistence farmers with a model of industrial agriculture fit only for large, relatively prosperous organizations (with access to credit, economies of scale, and so on). When poor farmers are forced off land to make way for foreign-controlled industrial monoculture or "resettled" as a matter of state policy, they frequently convert forests into farm or grazing land, exacerbating deforestation in ecologically sensitive areas such as upland watersheds, speeding soil erosion and affecting precipitation (a phenomenon now recognized as among the leading causes of ecological degradation as well as rural impoverishment in developing nations).

Thus, there exists a considerable gap between actual and optimal roles of states in promoting economically and ecologically sound agriculture practices. Where states do interfere in markets (as with subsidy programs), they tend to promote production at the expense of conservation, with negative consequences for both small farmers and the environment. If at least some of these economic resources were instead used to promote sustainable practices (rather than the maximum yields now being promoted), comparable levels of overall food production would be possible at a much lower environmental cost. Where states do not interfere (as they might with antitrust actions against agribusiness giants or land tenure policies promoting sustainable agriculture abroad), they likewise facilitate the process by which the goals of sustainable food production are undermined, protecting agribusiness interests and promoting free trade at the expense of small farmers and the environment. Agricultural policies, that is, have successfully promoted maximal production at the expense of both conservation efforts and small farmers (at home and abroad), in effect choosing to produce enough food to feed most of the world's hungry people (though often without actually delivering that food to where it is needed) at the expense of nature. As before, this trade-off is not a necessary one, and it bodes ill for future humans who stand to inherit (as a direct consequence of current policies) a less biologically productive planet. As Aldo Leopold writes, "When land does well for its owner and the owner does well by his land—when both end up better by reason of their partnership—then we have conservation. When one or the other grows poorer either in substance or in character, or in responsiveness to sun, wind, and rain—then we have something else, and it's something we do not like."[12]

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[11] Bruckner et al, "Toward a Global Food and Agriculture Policy," pp. 22–24.

[12] Aldo Leopold, "The Farmer as a Conservationist," *American Forests* 45 (1939): 206–12.

SUSTAINABILITY AS A DISTRIBUTIVE PROBLEM

In framing the problem as a moral dilemma between feeding people and saving nature, "greens" have subordinated more basic questions concerning the causes and consequences of population growth, misleadingly elevating the role of population (relative to other variables) in environmental sustainability. Given world food supplies and demands, and given the potential for maintaining such supplies while employing more sustainable agricultural practices, it should be possible both to feed people *and* save nature (threats to which are multifarious and should not be crudely reduced to sheer numbers of existing persons), though of course there must eventually come a point (extrapolating from present rates of population growth) at which it will cease to be the case. Malthusian predictions about the inevitable outpacing of arithmetic growth in agricultural production by exponential population growth may have to be recalculated in light of the past two centuries worth of advancements in agricultural technology, but not even the most optimistic cornucopian would claim that the biological capacity of the planet can support an *infinite* number of people. The real moral dilemma (though it hardly counts as a dilemma once one examines the reasons offered in support of each alternative) instead involves the choice between maintaining a status quo of widening global inequality combined with overconsumption by the affluent and a commitment to global justice that stands a far better chance of minimizing the aggregate human impact upon the environment than does the indifference to suffering that is sometimes prescribed by dark greens as a remedy to environmental problems like famine.

Population size is obviously a significant variable in the net human impact upon the environment (which, along with ecological capacity, determines sustainability), but it remains one of only several such significant variables, and is one whose relative significance has often been overstated within the dark green population literature (where it is described as a "bomb," a "plague," and a "cancer"). In determining humanity's aggregate environmental impact, global population is multiplied by the average per capita impact of humans, but thinking in terms of averages can betray the wide variation around the median and therefore the relative effects of population growth in various parts of the world. A single North American is likely (given regional average rates of resource consumption and waste production) to leave an ecological imprint (or footprint—a conception of sustainability described below) that is many times the size of that left by a comparable African, and so a small rate of population growth in the U.S. or Canada is likely to have the equivalent effect upon humanity's aggregate impact as a significantly higher population growth rate in Africa. Perhaps this difference explains why, at the 1992 Earth Summit in Rio de Janeiro, representatives of developing nations (which had higher rates of population growth than their counterparts among industrialized nations, but which also caused significantly less environmental stress than did their more affluent counterparts) objected to the characterization of the objective of

environmental sustainability as primarily concerning population, and then an issue that primarily affected the developing world. Population growth matters, but it is hardly the only thing that matters.

In order to more clearly see the relative effects of population, consumption, and waste production upon environmental sustainability (and thus to overcome this fixation upon population size), one needs a conceptual model in which these variables can be quantitatively integrated and sustainability itself defined in terms of these variables. Superseding the first generation conception of sustainability as carrying capacity (which examines the total natural resource outputs and pollution inputs that a given parcel of land could carry without any diminution of that capacity to sustain that stable load over time, but which has difficulty accounting for the transfer of ecological costs into or out of those parcels), the second generation conception of the ecological footprint better illustrates the relative effects of population size and patterns of per capita resource consumption and waste production (whether or not extracted from or dumped into one's local environment). Wackernagel and Rees, who developed the index and subsequently set out to measure the footprints of various regions, explain its basic form:

> The Ecological Footprint starts from the assumption that every category of energy and material consumption and waste discharge requires the productive or absorptive capacity of a finite area of land or water. If we sum the land requirements for all categories of consumption and waste discharge by a defined population, the total area represents the Ecological Footprint of that population on the Earth *whether or not this area coincides with the population's home region*. In short, the Ecological Footprint measures land area required per person (or population), rather than population per unit area.[13]

By this measure, interpersonal and interregional comparisons in consumption and pollution patterns can be made, since the footprint conception does not (unlike carrying capacity, which compares aggregate ecological impacts within a given areas against that area's ecological capacity, thereby implicitly permitting widely disparate "sustainable" impacts among areas with varying capacities) privilege those living in resource-rich bioregions. In a closed system like the Earth, what matters for sustainability is not where one's resources originate or where one's waste winds up (although these are surely relevant for other questions), but how much one consumes and how much waste one produces. Conceptually separating the *how much* questions from the *where* ones allows for a meaningful assessment of the relative ecological consequences of various individual consumption patterns without these insidious implications.

If as we conceive of and measure sustainability in terms of ecological

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[13] Mathis Wackernagel and William Rees, *Our Ecological Footprint: Reducing Human Impact on Earth* (Gabriola Island, B.C.: New Society Publishers, 1996), p. 51.

footprints (whether of cities, nations, or all of humanity), we are forced to acknowledge the range of variables that affect both net ecological capacity and the human demand for ecological resources. Population size is, of course, one of these variables. So also are the conversion of land from forest to agricultural use (as biological productivity is affected by land use) and the value of the land in question as a carbon sink for absorbing greenhouse gasses. Aggregate rates of resource consumption—which in turn depend upon absolute and relative wealth, consumer norms and the expectations they generate, effectiveness of recycling programs, social preferences for leisure, and a host of other factors—likewise play a prominent role. The effectiveness of state institutions in promoting environmental sustainability, whether through promotion of efficiency programs or through their effects upon markets and preferences, significantly determine the extent to which a population is likely to expand or shrink its aggregate footprint, as well as affecting the biological capacity of land through conservationist policies, and government efficacy depends upon the responsiveness of democratic institutions, the political culture and preferences of a population, levels of social capital, the existence of requisite regulatory and educational institutions, and the like. In short, a great many social and political institutions affect the prospects of successfully promoting environmental sustainability, and to focus exclusively upon population size is to ignore far more than half of the relevant variables.

As a further consequence of our better understanding the various causal variables driving ecological degradation, what was once simply referred to as the "population problem" is now more accurately described in terms of an interconnected web of "human development" issues, of which family size is but one of several related variables that also includes political rights, infant mortality rates, educational and economic opportunities for women, and a variety of other social, political, and economic factors that are now recognized as significant causal variables in any society's population growth. As described by the Worldwatch Institute (an organization that has developed a more enlightened view of population as a result of better understanding its causes), "it is increasingly clear that the long-term future of environmental and human health—and, critically, population—is bound up in the rights and capacities of the young, especially young women, to control their own lives and destines."[14] Family size, we now know, is a far more rational response to external incentives than the oversimplified "if you feed them, they will reproduce" theory espoused by some dark greens in defense of the willful withholding of famine aid by those in industrialized nations. Many of the most effective means of promoting population stabilization involve the empowerment of the planet's most disadvantaged persons rather than their treatment as a kind of manage-

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[14] Robert Engelman, Brian Halweil, and Danielle Nierenberg, "Rethinking Population, Improving Lives," *State of the World 2002* (New York: W. W. Norton and Co., 2002), p. 128.

ment species suffering from "overshoot" and therefore in need of some resource manager to come in and cull the herd. Many, that is, seek to elevate the status of those peoples most prone to both overpopulation and famine (two causally related phenomena) such that high fertility rates are not the only rational response to their external circumstances.

Such has been the motive of the various efforts that have (since the 1987 publication of the WCED's Brundtland Report) been lumped together within the goal of "sustainable development"—an encompassing set of projects which aim to ensure that humanity "meets the need of the present without compromising the ability of future generations to meet their own needs."[15] Sustainable development, to be sure, is a concept that has attracted some deserved criticism, especially in terms of some of the projects or means proposed in pursuit of this end. As John B. Cobb, Jr. notes, the Brundtland Report recommends a five to tenfold increase in consumption for the world's poor without prescribing any fundamental changes in the world's economic order (a recommendation too threatening to the world's affluent to include in the report). Were these consumption increases for the poor not accompanied by equal or greater decreases in by the world's affluent, the ecological consequences would be devastating. One problem with the conventional understanding of sustainable development, then (and the reason why more radical proposals have not appeared under the auspices of political organizations like the WCED), is that "any program designed to help the poor while leaving the affluent where they are would require a massive shift of power that is now unthinkable."[16] Although poverty is properly regarded as the leading cause of both unsustainable population growth and ecological degradation, some proposed solutions issuing from the sustainable development camp plainly overemphasize the noun at the expense of its adjective, especially insofar as they treat poverty as a problem that can be addressed by economic growth alone and not by global redistribution.

Nonetheless, there remain a variety of goals that aim to advance "human development" (including, but limited to, the causal variables in unsustainable population growth) in ways that advance the quintessentially anthropocentric aims of relieving human suffering (whether caused by hunger, disease, war, poverty, economic exploitation or political subjugation) and promoting human welfare while simultaneously promoting goals of environmental sustainability. One must remain careful to view the supposed compatibility of environmental sustainability and human development with some justified skepticism, as there plainly remain some conflicts between these two aims in practice. Most obviously, improved sanitation and access to medicine reduce disease and therefore

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[15] World Commission on Environment and Development, *Our Common Future*, p. 8.

[16] John B. Cobb, Jr., "Toward a Just and Sustainable Economic Order," *Journal of Social Issues* 51 (1995): 364.

increase population in the short run, with a generational time lag between reduced mortality and consequent reductions in family size, and (as Cobb cautions) reduction of poverty may lead to significantly increased consumption of energy and natural resources. Yet equally important to keep in view are the affinities between promoting human development (including, but not limited to, "feeding people") and promoting environmental sustainability, and these must disabuse greens (of whatever hue) of the oversimplified notion that the causes of ecological degradation necessarily compete with those causing hunger-related suffering, as we now know (or should know) that both of these problems share several common causes.

As noted above, the goal of feeding people is a problem of food distribution rather than agricultural capacity, but both hunger relief and environmental sustainability present distributive problems of a different kind, as well. We might conceive of problems of ecological degradation as being issues for global distributive justice (that is, as concerned with the highly inequitable global distribution of wealth and power) in two senses: in their causes (that is, as a product of existing relationships of unjustified inequity) and in their effects (exacerbating those unjustified inequities). Take, for example, the problem of anthropogenic climate change, which has primarily been caused by the combustion of fossil fuels within the relatively affluent parts of the world, and which is expected to have its most damaging effects upon the poorest parts of the world. Quite literally, it presents an example of environmental externality on a global scale, with the wealthy nations receiving most of the benefits of consuming most of the world's supply of fossil fuels, and the poor ones bearing most of the (uncompensated) costs. One might convincingly claim that the highly disproportionate share of the world's nonrenewable energy reserves being consumed by the relatively small proportion of planet's residents residing in North America itself constitutes an instance of distributive injustice, leaving aside the costs entailed by the political interference or military force used to extract these resources from developing nations and the ecological effects of the air and water pollution, greenhouse gas accumulation, and habitat destruction caused by the extraction and transport of these resources. Add in these latter effects, and the initially persuasive case becomes compelling. By no defensible account of global distributive justice can such an arrangement (essentially, an exchange of energy for pollution that benefits the affluent at the expense of the poor) be justified.

The politics of food presents a more difficult case to analyze in terms of its distributive effects, since the affluent don't so obviously profit at the expense of the poor in cases involving famine or other hunger-related suffering. To be sure, the costs of famine and hunger are borne almost entirely by poor nations and the poor within all nations, with the only spillover costs to the affluent being the conflict and instability that such humanitarian crises occasionally affect across borders. But, one may object, there's still no sense in which these

costs amount to a distributive injustice: famine is merely the tragic consequence of inadequate population policies combined with abject poverty in regions prone to both of these as well as climate-related crop failures (the latter suggesting a casual relationship with the subject of the previous paragraph, but we'll set that aside). The world's resources (natural and economic) may currently be inequitably distributed across peoples (as is, not coincidently, human welfare), but this situation is merely unfortunate (for many) rather than unjust. Hunger-related human suffering is a rather a technical distributive problem (that is, a coordination problem of delivering ample global stocks of food to those people who need it), and though it may be tangentially related to the global distribution of income and wealth, it is not a necessary feature of that distribution. In contrast to the case of climate change (where harm is visited upon those in poor nations as a direct consequence of the unsustainable energy consumption patterns of wealthy nations), no set of acts taken within or by the industrialized nations directly *causes* the hunger-related suffering that occurs elsewhere. That the affluent nations might help *prevent* this suffering is rather beside the point, since aid organizations founded within and financed by the affluent nations currently do aim to prevent (or at least minimize) such suffering, and since this prevention (hypothetically) could be accomplished without the global redistribution of wealth that is implied by the framing of food politics as a matter of distributive justice, rather than as a claim for charitable relief.

Such a reply would be inadequate on two counts. It would be mistaken on empirical grounds for failing to recognize the common causal sequences driving world poverty and hunger as well as environmental degradation, and therefore also the role of global redistributions of wealth and power as remedies to both problems. The Brundtland Report, for example, declares that poverty (already understood to be the root cause of hunger) "is a major cause and effect of global environmental problems" and urges that "it is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and economic inequality."[17] Poverty places higher demands on the natural environment, driving the poor to degrade stocks of natural resources as they struggle to meet basic needs for food, housing, and fuel, and inequalities in wealth and political power among persons in society enables further exploitation of these resources. Treating objectives of global distributive justice and environmental protection as distinct or conflicting concerns is, the report argues, to misunderstand that the two objectives are inexorably intertwined. Identifying and correcting the root causes of environmental degradation, it suggests, requires attention not merely to poverty but also to political inequality, since "the distribution of power and influence within society lies at the heart of most

[17] World Commission on Environment and Development, *Our Common Future*, p. 3.

environment and development challenges."[18] Indeed, the report suggests, the political means to alleviating both socioeconomic inequality and environmental degradation must involve the redistribution of political power within and among societies, for "a world in which poverty is endemic will always be prone to ecological and other catastrophes."[19]

The reply would also be mistaken on normative grounds for failing to adequately account for the origin and nature of the value of human welfare within either light or dark green value theories. One major driver of both resource depletion and waste production is the high rate of consumption among industrialized nations, particularly in the United States (where less than five percent of the world's population consumes over a quarter of the world's resources and produces nearly a third of its greenhouse gas emissions). If more of this material prosperity was to be shared with the world's poor rather than continuing to be used—as it currently is—to pollute the planet and deplete its resources, major inroads toward reducing global poverty and hunger could be accomplished, along with significant foregone resource consumption and waste production. Why, then, do we continue to resist sharing the wealth, even while knowing that, in doing so, we could help feed people and save nature? The answer cannot be found in either light or dark green value theories, for both would condemn this insidious form of selfishness. Insofar as both problems can be attributed to a set of values that privileges our already-high consumption patterns over both the welfare of the poor and environmental sustainability (and therefore the interests of nonhuman nature as well as the welfare of future generations), the resistance can only be explained by reference to a value theory that is indefensibly insular and elitist; one that is centrally concerned with *our* welfare but is entirely indifferent to *their* suffering, and not concerned with saving nature *per se*, but only saving *our* nature.

Only such a value system could complain of the "population problem" while refusing to adequately fund human development efforts and remaining blithely uninterested in reducing in first world consumption patterns. Only this kind of moral elitism could blame famine victims of "unsustainable" population growth rates (implying that they deserve to suffer and do not deserve assistance) while simultaneously exploiting their regions for natural resources and relying upon their forests for carbon sinks. Only a radically ethnocentric (and not merely anthropocentric) value theory could justify maintaining lifes tyle patterns and coercively imposing economic theories upon other governments whose consequences are either directly or indirectly the degradation of the environment and immiseration of many of its human and nonhuman residents, all while jealously protecting our own ecological amenities against outsiders and closing our borders to environmental refugees displaced by these policies

[18] Ibid., p. 38.
[19] Ibid., p. 8.

and practices. To respond to the moral imperatives to feed people and save nature with a claim that global inequality is not the problem (and therefore that these problems don't require greater global equity as a solution) is not only factually mistaken, but is also to rely upon a value theory that cannot be any shade of green. Failing to take the necessary action to reduce hunger-related suffering and to promote environmental sustainability may merely be regrettable when we don't understand their causes, but is morally reprehensible when we do and simply prefer to maintain our advantages instead.

CONCLUSION

In a recent essay entitled "Why We Should Preserve the Spotted Owl" (but which never mentions that particular environmental issue), Amartya Sen is sharply critical of those conventional accounts of sustainability that derive obligations to feed the hungry entirely from *their* needs and *our* ability to meet them. Such accounts, Sen argues, "give us a rather meager view of humanity" in that they ignore agency within those affected populations, and so give us an inadequate account of what it is about those lives that might make them worth living. Insofar as sustainability is understood as the goal of maintaining in perpetuity those things understood as valuable, a need-based account of the value of human life fails us. Sen asks, ". . . should we not be concerned with preserving—and when possible expanding—the substantive freedoms of people today 'without compromising the ability of future generations' to have similar, or more, freedoms?"[20] Poverty and hunger are evils because pain and suffering are evils, but relief from pain cannot be an end in itself (else death would make for a happy solution to hunger) and human flourishing has to involve more than the absence of unpleasant sensory experiences.

Poverty and hunger are both causes and consequences of political powerlessness and denials to persons of the requisite means for their liberation—not only in freedom from deprivation, but also in the freedom to develop their innate human capacities, take control of their own lives, and so on. Sen therefore suggests conceiving of sustainability as obliging us not only to maintain existing lives (human and nonhuman) or the requisite ecological capacities to produce the goods necessary for doing so, but as maintaining "sustainable freedoms" in perpetuity, for the same reasons that we should also want to maintain our environmental amenities: because they, and not merely their human vessels, are taken to be what is important about human lives within our value theories. Mere life cannot be the goal behind poverty and hunger relief efforts, else Derek Parfit's population-maximizing "repugnant conclusion" would entreat us to bring far more persons into existence than we currently

[20] Amartya Sen, "Why We Should Preserve the Spotted Owl," *London Review of Books*, 5 February 2004, pp. 10–11.

have the capacity to feed, with devastating costs to human welfare and the environment.[21] Whether based in light or dark green value theories, the goal must be the flourishing of life and not merely its existence, whether human or nonhuman.

In reconsidering the dilemma between feeding people and saving nature, we can identify causes of both hunger-caused human suffering and ecological degradation that are competitive with one another (for example, the short-run effect upon populations of promoting agricultural and health goals in famine-prone regions), but we find many more which are synergistic (for example, reducing global inequality, promoting food security, promoting human development goals). The latter have in common not only a concern for the inequitable distribution of wealth and power in today's world, but also a vision of humanity that sees all persons as enjoying a basic right to subsistence not for its own sake, but for the sake of promoting those capacities which make human life worth living. One need not espouse a light green value theory in order to treat human lives as valuable in this way—dark green value theories likewise value human life, and acknowledge that flourishing takes different forms in different species—but one does need a commitment to the equal value of the various individual members of the species. In confronting contemporary problems of global hunger and ecological degradation, then, we are not presented with a dilemma at the level of justification between light and dark green value theories, but are required instead to choose between either of them and an indefensible value theory that claims an exemption for the affluent from the demands of environmental sustainability that is not extended to the world's poor. Conflicts between human and nonhuman interests surely exist and will continue (with population growth exacerbating some of these conflicts), but we must not mistake them with conflicts that are fundamentally between humans and other humans, where nonhuman nature is misleadingly made a scapegoat for our failures to act as we ought.

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[21] Derek Parfit, *Reasons and Persons* (New York: Oxford University Press, 1984), pp. 384–90.