

## Book Review

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*Life on the Brink: Environmentalists Confront Overpopulation.* Philip Cafaro and Eileen Crist. University of Georgia Press, 2012.

*Life on the Brink* is an unusual volume in that it allows non-academic, activist voices as well as politicians, environmental studies scholars, and social scientists to participate in the argument that concerns us all, the argument about the future of our planet and of humanity. The common thread running through the essays of two dozen nature writers and activists hailing from a range of disciplines and offering varied perspectives is their shared concern about population growth. All contributors see population growth as a major force behind our most serious ecological problems, including global climate change, habitat loss and species extinctions, air and water pollution, and food and water scarcity. Despite the differences in perspectives, all contributors argue that ending population growth worldwide is a moral imperative that deserves renewed commitment.

Of course population debates are not new, and recent publications address the environmental costs of human population growth, for example, the new report addressed to the Club of Rome, *Bankrupting Nature: Denying Our Planetary Boundaries*, by Wijkman and Rockström. The authors state: “The biggest gains from significantly lower birth rates would be the combination of a better quality of life for both women and children and a greater potential for stabilizing the climate” (Wijkman and Rockström, 2012: 84). However, different from other publications, this volume engages with bolder or even more radical ideas, criticizing much conventional wisdom.

One of them is the myth of “demographic transition” paradigm, based on the belief that the “population problem will solve itself” (e.g. Campbell, p. 48-49). According to this paradigm, “modern developments like urbanization, rising incomes, and women’s empowerment are reliably accompanied by falling fertility rates” (Crist and Cafaro, p. 11). Many contributors to the volume agree that this view is flawed as it assumes that current downward fertility trends will continue without continuous great efforts, such as providing wide-spread contraception and convincing individuals in societies where large families are desired that smaller families are preferable (Ryerson, p. 256). Also, the “demographic transition” position ignores the immensity of population in absolute terms and assumes that population is generally not a problem, as long as we can find ways to “feed the world” – thus ignoring the needs of other species (e.g. Crist, p.141).

Another conventional wisdom is the possibility of combining the concept of “sustainability” with that of “growth,” which becomes impossible when growth in population and consumption continues at present rate (Bartlett, p. 35) and which “has been used to mask the destruction of resources” (Watson, p. 135). Contributors to *Life on the Brink* criticize the

very idea of “natural resources” or “ecosystem services” for reinforcing an anthropocentric vision of biodiversity and the instrumental use of plant and animal species by humanity (Kolankiewicz, p. 75; McKee, p. 91; Crist, p. 141). In the case of agriculture, for example, the instrumental use of resources leads to “stripping the land of its native species of animals, plants, fungi, and other organisms and replacing them with large scale monocultures” (Wuerthner, p. 124).

All contributors agree that there are limits to growth given the finite resources of this planet, that “sustainable growth” is an oxymoron (Barlett, p. 38), and that the grand “narration of expansion and progress based on growth” (Butler, p. 168) and living off “resource-consumptive growth” (Lamm, p. 281) will soon come to an end. One of the contributors to this volume and co-founder of the sub-discipline of environmental sociology, William R. Catton, argues that “modern people have become not only hypernumerous but also hypervoracious” (p. 22) and that they now inhabit the planet with no “clear-minded regard for carrying capacity limits, let alone non-human species” (p. 24). With current human reliance on non-renewable cheap resources such as oil, and what some call “addiction to oil,” “not only do we have a problem of a growing population, but we also have a growing population of a dangerous substance-addicted species” (Watson, p. 133).

From the time of publication of *An Essay on the Principles of Population* by Thomas Malthus in 1798, a forced return to subsistence-level conditions once population growth had outpaced food production was predicted. Malthus (1978: 61) wrote: “The power of population is so superior to the power of the earth to produce subsistence for man, that premature death must in some shape or other visit the human race.” Malthus, who believed that population was restricted to available resources, could not predict the technological developments propelled by the Industrial Revolution and in the twentieth century the Green Revolution that allowed humans to keep pace with population growth. Before the twentieth century, populations of most developed countries grew slowly enough to be outpaced by gains in productivity, but with the introduction of medical technologies that wiped out many human scourges, together with advanced food technologies, population has dramatically increased. Despite unprecedented losses of lives during two world wars, human numbers have continued rising and reached seven billion in 2012 (<http://www.census.gov/main/www/popclock.html>).

The dire predictions of Malthus that included “the great army of destruction,” the “war of extermination, sickly seasons, epidemics, pestilence, and plague advance in terrific array” as well as “gigantic inevitable famine” (Ibid), has not yet occurred, with specific exceptions in some parts of the world. Since the publication of *The Population Bomb* by Paul and Ann Ehrlich in 1968, a lot of heated debates have issued arguing for and against the Ehrlichs’ Neo-Malthusian predictions. Critics blame the Ehrlichs for being alarmist and inaccurate in their estimates, having predicted possible human starvation in the 1970s and 1980s as a

result of overpopulation, as well as other major societal upheavals. Proponents praised the book for alerting the general public to the importance of environmental issues that brought human numbers into the debate on the human future – precisely the subject that is brought most forcefully forward in *Life on the Brink*. In response to criticism that many of his predictions had not come to pass, Ehrlich (2009) retorted:

...the biggest tactical error in *The Bomb* was the use of scenarios, stories designed to help one think about the future... their failure to occur is often cited as a failure of prediction. In honesty, the scenarios were way off, especially in their timing (we underestimated the resilience of the world system). But they did deal with future issues that people in 1968 should have been thinking about – famines, plagues, water shortages, armed international interventions by the United States, and nuclear winter ... all events that have occurred or now still threaten us (p. 9).

Martha Campbell in this volume asserts “Malthusian” and even “demographic” became derogatory terms describing “anybody still concerned about population growth” (p. 46). The cheerful chorus of sustainable development proponents, ecological modernization theorists, and generally all optimists of human progress begged to disagree with the Ehrlichs’ thesis. Recent publications by the United Nations, the World Bank and many development agencies praised human ingenuity in overthrowing Malthusian doom and gloom scenarios. Not so Paul and Ann Ehrlich, who open *Life on the Brink* with a powerful Foreword.

The volume is divided into four parts, including Part One, which introduces the topic; Part Two, “Impacts,” which focuses on ecological impacts of population growth; Part Three, “Necessary Conversations,” which includes the bold and sometimes controversial arguments for limiting or stabilizing population growth; and Part Four, which seeks to specify the “Solutions” to the problem of continuous population growth.

Perhaps one of the most significant commonly shared points of view expressed by all contributors is their belief that the future awaiting seven billion-plus human beings and thousands of other species is endangered. It is that latter concern – with the fate of non-human beings – that makes this book on the threats of population so particularly poignant and its message so urgent.

Reflecting on the subject in the Introduction of the volume, these contributors state that consumption, poverty and population growth are closely interlinked. While conventional environmental wisdom would have it that overconsumption is the failing of the affluent, as if their numbers were negligible, “overpopulation has been regarded as the plight of the poor, as if they did not consume in ecologically unsustainable ways” (Crist and Cafaro, p. 5). Poverty has rarely been linked to population growth; instead, mainstream opinion assumes that ending poverty will solve both population and environmental problems.

Dave Foreman (p. 57) and other contributors question the false dichotomy between the “innocent” poor and the “guilty” rich, asserting that it is both population growth *and* consumption everywhere that contribute to environmental degradation. The skepticism is well summed up by Crist:

Part of the difficulty lies in the fact that *one* constituency – for example, men, Western culture, or corporations – cannot be held solely accountable for the dire plight of the greater-than-human world. The domination of Nature cannot be pinned on a particular constituency that derives power and profit from it. Rather, culpability lies in broad human participation, exceeding any particular group or (at this historical juncture) culture, and crossing class, race, religious, national, ethnic, and gender boundaries (p. 142).

As George Wuerthner states, “The convergence of population growth, expanding agriculture, and climate change is likely to create immense challenges for humanity, and it is certain to deepen the biodiversity crisis” (p. 128). The solution is to address “both overconsumption and overpopulation if we hope to create a sustainable society and contribute to a sustainable world” (Cafaro and Staples, p. 181).

What also makes *Life on the Brink* different from many other volumes on (over)population is that the eco- or biocentric perspective as well as concern with animal rights takes precedence over debates about whether or not and by which year human population is going to face resource constraints. Many contributors of this volume prioritize environmental ethics and particularly deep ecology perspectives in their framing of population questions and quite simply state that, aside from social and economic interests of human beings, the greatest sacrifice made on the altar of population growth is that of billions of non-human lives. Contributors reflect that in mainstream political discourse the values accorded to nature are instrumental in character, in the sense that the natural environment is only useful insofar as it provides resources that can be used to satisfy human wants.

In linking animal rights and ecocentric environmentalism, Foreman and Watson reflect that while ethical assumptions underlying sustainable development condemn practices like child labour, gender, class, ethnic and racial discrimination, the daily mechanized slaughter of farm animals for human consumption or medical experimentation is rarely disputed. While combating social problems is acknowledged in all sustainable development objectives, discrimination against other species tends to be under-valued. What all contributing essays hold in common is a commitment to sharing resources with other species and a willingness to consider what will be necessary to do so. The overall hope expressed by historian Roderick Nash is shared by many contributors: “Maybe biocentric ethics and respect for self-willed nature – along with the healthy dose of fear for our future – could turn us from cancerous to caring” (p. 312).

Related to biocentric ethics is the issue of ecological justice, or justice between species. While environmental justice issues are widely recognized in our society, ecological justice seems often forgotten. Proponents of environmental justice seek to redress inequitable distribution of environmental burdens to vulnerable groups and economically disadvantaged populations and are concerned about developed and developing countries' unequal exposure to environmental risks and benefits. In both cases, environmental justice entails equitable distribution of burdens and benefits to different nations or social groups, concerned with both present and future generations of humans. By contrast, proponents of ecological justice identify anthropocentrism as one of the mechanisms which marginalizes the question of justice in relation to other species.

Including animal and plant rights and the concept of biospheric egalitarianism under the umbrella of core moral principles would have a number of fundamental implications, discussed by contributors to the volume. Some contributors reflect upon the debate within environmental ethics about the complex relationship between animal rights and ecocentric ethics, exemplified by the discussion generated by Baird J. Callicott's essay 'Animal Liberation: A Triangular Affair.' In contrasting the ethical foundations of the "animal liberation" movement with those of Aldo Leopold's "land ethic," Callicott reflects that while only sentient animals are morally considerable according to the humane ethic, the land ethic includes within its purview plants as well as animals and even soils and waters. Nor does the land ethic prohibit the hunting, killing, and eating of certain animal species, in sharp contrast to the animal rights ethic. The animal liberation movement rests on the assumption that pain is taken to be the ultimate evil and it is reductive or atomistic in its moral focus. The land ethic, on the other hand, is holistic in the sense that the integrity, stability, and beauty of the biotic community are taken as a starting point (Callicott, 1980:131).

Despite such differences in perspectives, what characterizes all contributors' concerns is the gravity of the implications of population growth for the biosphere, the species, and individuals within the species (including humans). Individual species and their homelands are closely interlinked, as are the people and their homes. As Eileen Crist states, if animal life had been placed on an existential par with human life – or had animals been recognized as subjects of their lives – then their exploitation and that of their homelands would have been rendered morally unfeasible.

All contributors share their passion for the defense of nature and of a vibrant human future confronting hard issues regarding contraception, abortion, immigration, and limits to growth that many environmentalists have become reluctant to address in recent years. Ronnie Hawkins speaks of the crisis of perception in which humanity seems so "ill-informed of its actual situation, so mesmerized by the imperative of infinite expansion, so deeply in denial of its suicidal trajectory, that it celebrates hitting seven billion... and looks forward to

adding another two or three billion by the end of the century” (p. 202). As Cafaro states in the case of environmentalists, it seems that today many have become much more sensitive, well behaved, well spoken, and as a result, “failing utterly to protect wild nature or future human generations from over-population” (p. 313).

Some contributors openly refuse to be part of the mainstream, established, politically correct and generally ‘safe’ discourse of sustainability, and acknowledge the fact that ending population growth will not happen easily and will require drastic moral and practical choices. For example, social altruism may lead the well-meaning members of liberal elites to raise the standard of living of the world’s poor, as conventional environmental justice rhetoric would dictate. However,

While ‘raising the standard of living’ may be nebulous shorthand for the worthy aim of ending severe deprivation, translated into shared understanding and policy the expression is a euphemism for the global dissemination of consumer culture – the unrivaled model of what a ‘high standard of living’ looks like. But to feed a growing population *and* enter increasing numbers of people into the consumer class is a formula for completing Earth’s overhaul into a planet of resources: for ever more intensified uses of land and waterways for habitation, agriculture and farming; for the continued extraction, exploitation, and harnessing of the natural world; and for the magnification of global trade and travel (Crist, p. 141-142).

All contributors propose the array of voluntary, benign and humane approaches to lowering fertility rates. William Ryerson reflects on the other hand that coercion in childbearing practice has no role to play (p. 251) and agrees with Campbell (pp. 41-56), Weeden and Palomba (pp.255-274), and Engelman (pp. 223-240) that the overall framework for population stabilization lies in women’s rights and increasing access to education; provision of reproductive health care (family planning); provision of social-cultural climate that motivates people to have small families; and new ecological and political worldview that recognizes and works within ecological limits.

The solution is then clear: “to make resources for the control of fertility a political, economic, social, and cultural top priority, while also acting to remove or preempt financial, informational, cultural, and normative barriers to access” (Crist, p. 146). However, in practice, such barriers cannot be easily removed without addressing some sensitive or controversial questions.

The potential controversy of the population question is reflected in the disagreements of contributors on certain issues, based on personal beliefs and circumstances. For example, the issue of having children is discussed differently by Dave Foreman, Stephanie Mills and Paul Watson. While the first two state that it was their conscious decision not to have children, Watson reflects:

Intelligent and ecologically concerned people cut right to the chase and declare that they will have no children... Ecologically intelligent men and women refraining from reproduction leave the world in the hands of the ecologically ignorant and the anthropocentrically arrogant. If the biocentrically oriented refrain from having children, while the ecologically ignorant reproduce, the self-sacrificing people will act like cuckoo birds, paying taxes to raise children of people who will do little to solve our problems (Watson, p. 134).

This concern reflects another issue raised – the fact that women with higher levels of education tend to have less children (e.g. Ryerson, p. 249), which implies that most children born in the world are of less educated parents.

Many contributors to the volume would agree that limiting births might be morally difficult and yet absolutely necessary if the welfare of future generations, and most saliently the very survival of non-human species, is to be taken into account. Watson (p. 135) reflects: “Rather than endure genocide, war, famine, or pestilence, societies may choose to implement a more humane answer, although one that is in opposition to what is often falsely seen as a fundamental human right: the right to unlimited procreation.” Acknowledging the fact that restricting childbirth is a difficult moral dilemma, Watson further proposes to regard having children as a limited right with commensurate responsibilities.

The essays on immigration also demonstrate just how controversial population questions can be, as contributions by Winthrop Staples III and Philip Cafaro as well as Joseph Bish, Lester Brown, and Tim Palmer demonstrate. In Palmer’s words:

Immigrants who come to America don’t come to be poor; they reasonably aspire to the American “standard of living.” That means becoming American consumers, which increases energy use, carbon emissions, and other problems for the Earth. Americans, eventually including the new ones, consume resources at forty times the rate of people in India, so the global ecological effects of U.S. population increases are far greater than increases in India or in most other countries (p. 105-106).

Obviously, a position that restricts free movement of people and keeps some populations from profiting from what the wealthy elites consider to be a superior life-style is going to be controversial. The authors could also be criticized for implying that the consumer societies of which they themselves are a part should refuse to recognize any moral obligations to share its riches. But Watson actually argues that all environmentalists in such consumer societies should acknowledge their hypocrisy, exemplifying this by personal reflection on his use of oil (which he opposes): “My ships burn oil, and I trade that off for the lives of whales, sharks, dolphins, turtles, birds, and marine invertebrates. You cannot fight a

whaling ship with the kayak” (p. 134). The fact that such questions are raised by the contributors, however, shows the degree of ethical entanglement if problems of overpopulation are to be taken seriously.

Last but not least, contributors to this volume share the hope that “while we are part of the problem, we can also be part of the solution” (Gulick, p. 220). Contributors are aware that creating genuinely sustainable societies requires major changes to economic systems and ethical values coupled with clear thinking and hard work. *Life on the Brink* is an invitation to join the discussion about the great work of building a better future and a reminder to humanity to continue to grow morally, intellectually, spiritually and creatively, as well as in “understanding and appreciation of nature and in our willingness to share the world with other species” (Cafaro, p. 317).

The only limitation of the volume is that, just like with other such important publications, the authors risk “preaching to the converted” as the book is likely to be read by environmentally minded readers and is not likely to reach the audience of those in power, such as political leaders, international policy-makers and heads of corporate elites. While the volume does provide an index of useful websites and “organizations that are working to reduce population growth and preserve wild nature” (p. 323), these resources do not necessarily constitute suggestions for solutions that environmentally concerned readers might find extremely useful. While the last and perhaps most important part of the volume on “Solutions” does contain important suggestions, such as supporting increased funding for the provision of family planning (Ryerson, p. 244), few contributors provide suggestions that could be realistically followed by individual readers, given current political, economic, social and ethical constraints.

*Life on the Brink* is an extremely good volume that could have been even stronger if contributors had made more practical suggestions as to how individual environmentalists or groups could engage in strategically significant environmental behavior. For example, this could be done by following the distinctions between the public and private sphere of environmental action or direct and indirect environmental impact assessment based on the work of conservation psychologists Stern and Dietz (1997) or environmental anthropologists Chalwa and Cushing (2007).

Another area that might have been productively explored is that of the potential for environmental education, citizenship education, and education for sustainable development in raising public awareness of the salience of population issues with the aim of achieving true environmental sustainability as witnessed in publications like *The Journal of Environmental Education* and *Environmental Education Research*. Emerging from this literature, discussing recommendations for stopping, reducing, or stabilizing population growth could be linked to practical advice to interested individuals on how to influence certain policy decisions, actively participate in raising public awareness, and usefully



engage with those agencies, organizations, or groups that are opposing, condoning or indirectly stimulating 'business as usual' and population growth. Without such concrete recommendations, this bold, morally engaging, and generally robust discussion risks having its contributors' recommendations land into history's ever-expanding cruel dustbin of failed aspirations. Even so, *Life on the Brink* stands as a unique and truly inspiring volume that helps the readers to think through the possible options and, in the words of the editors, "working to achieve a future in which we share the planet generously with all its inhabitants, human and nonhuman" (Crist and Cafaro, p. 14).

#### CONTRIBUTORS

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