



DIGITAL ACCESS TO
SCHOLARSHIP AT HARVARD
DASH.HARVARD.EDU



HARVARD LIBRARY
Office for Scholarly Communication

Anthropocene Panic: Contemporary Ecocriticism and the Issue of Human Numbers

The Harvard community has made this article openly available. [Please share](#) how this access benefits you. Your story matters

Citation	Buell, Lawrence. 2016. Anthropocene Panic: Contemporary Ecocriticism and the Issue of Human Numbers. Frame 29 (2).
Published Version	http://www.tijdschriftframe.nl/29-2-perspectives-on-the-anthropocene/1449/
Citable link	http://nrs.harvard.edu/urn-3:HUL.InstRepos:32192699
Terms of Use	This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Open Access Policy Articles, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#OAP

Anthropocene Panic
Contemporary Ecocriticism and the Issue of Human Numbers

@ 2016 LAWRENCE BUELL

Environmental humanists rightly believe they have valuable contributions to make to rethinking and redressing Anthropocene Age excess. Ecocriticism's recent maturation as an interdiscipline has put it in a stronger position to do so than ever before. Its "material" turn in the 2000s bears this out up to a point, but its interventions also seem somewhat self-limiting. This essay argues that ecocritics and environmental humanists more generally have foregone a promising opportunity by avoiding the controversial issue of unsustainable human population growth as a sociohistorical phenomenon and an impetus to creative imagination.

Few should be surprised by the environmental humanities' keen interest in the "Anthropocene" hypothesis, however often specialists remind us that it remains to be canonized by the International Union of Geological Sciences (Autin and Holbrook). Not long after entering circulation in 2000, the term went viral across the human as well as natural sciences into the public sphere, as a ready-to-hand signifier and conduit of already widespread convictions that planetary change had become increasingly and perhaps irreversibly anthropogenic since industrial modernity. The marine scientist and atmospheric chemist who co-coined the term backdated the idea to the first major conservationist manifesto, George Perkins Marsh's 1864 *Man and Nature; or The Earth as Modified by Human Action*, long since reckoned a classic by environmental humanists (Crutzen and Stoermer 17). So ecocritics were well prepared for Anthropocene proclamations. The term itself simply added momentum, urgency, gravity, to what they knew in their bones. After all, in literary history, the vulnerability of the physical world to anthropogenic degradation is attested as early as the first surviving major literary work, the Sumerian *Epic of Gilgamesh*.

Nor is it surprising that environmental humanists should believe, however hesitantly they express it, that they have a rightful place at the table today in parsing the arc of human dominance and what might be done about restraining it from destructive extremes. The present

symposium is at least the sixth such special issue for an academic journal.¹ Although the natural and quantitative social sciences predictably see themselves and tend to be seen by the public as the anointed monitors of the indices of environmental change, when it comes to defining pathways toward a more environmentally sustainable future, the challenges are too large and multifarious to be left to “science” alone. Indeed, “scientifically-informed” proposals are now framed in increasing awareness that they will fail without taking due account of such qualitative factors as cultural idiosyncrasy, ethico-spiritual values, and aesthetic preferences that ensure actual persons and peoples don’t behave like textbook rational actors. As one recent, well-received attempt to define the ingredients of a “sustainability science” for the twenty-first century affirms, the understanding of what deserves to count as sustainable development has matured “from simple relationships that see human prosperity primarily in terms of economic growth” to “the ever more encompassing and nuanced views centered on social well-being advanced today” (Matson, Clark, and Andersson 3). Although the authors’ five-pillar “framework for sustainability analysis”—natural capital, human capital, manufactured capital, social capital, knowledge capital—is too stolid to assimilate such messy factors as local knowledge, cultural norms, and social custom beyond a limited degree, at least they have made the effort (14-51). Indeed my own experience in cross-disciplinary dialogue suggests that natural and social scientists are often at least as interested—however insouciantly—in insights environmental humanists might have to offer them as “we” are in “theirs.”

Ecocriticism Confronts the Anthropocene

What then *might* “we” have to offer?—meaning especially for present purposes we whose bases of operation fall within the various discursive camps that have gathered during the 1990s and 2000s around the disciplinary home base of literature-and-environment studies. Since its crystallization in the early 1990s as a small insurgency within (mostly Anglo-American) literature studies, ecocriticism has cross-pollinated across the disciplines, in a series of waves or stages. It has become markedly larger, more critically sophisticated, and—within academia, anyhow—more competitive as a field in which graduate students are educated and faculty

¹ Predecessors include “Writing in the Anthropocene,” ed. Deborah Rose, *Australian Humanities Review* 47 (2009); Tobias Boes and Kate Marshall, ed., *Minnesota Review* 83, n.s. (2014); Greg Garrard, Gary Handwerk, and Sabine Wilke, ed., *Environmental Humanities* 5.1 (2014): 149-53; Barbara Eckstein, ed., “Genres of Climate Change,” *Philological Quarterly*, 93.3 (Summer 2014); and (in part) *New Literary History*, 46.1 (2016): Climate, Species, the Anthropocene.”

recruited. Its impact so far has been chiefly “tribal,” however. Apart from achieving recognition as an academic-discursive enterprise, its influence has been scant. Even within the cloister it remains a dependent relation. Beyond the realm of arts and letters, its dialogues with other disciplines have been markedly one-sided. Ecocritics have been much more anxious about engaging environmental history, anthropology, geography, phenomenology, post-structuralist epistemologies, science studies, and so forth than practitioners in those fields have been about engaging theirs. Now and again, Donna Haraway, Bruno Latour, Slavoj Žižek, Richard White, and David Harvey may have paid a kind of glancing attention to the ecocritical scene, but clearly it hasn’t influenced their own projects nearly so much as vice-versa.

What, then, are the actual prospects for ecocriticism’s longstanding aspirations to make a wider impact both within academia and within the public sphere? Timothy Clark, a trenchant chastiser of his tribesmen’s limits, asserts that “a specific work of environmental criticism can only ever have a *derivative* impact, as a function, that is, of the social status and force already granted literature, criticism and the realm of cultural representations more generally” (190). Elsewhere he qualifies this downbeat assessment with some inventive proposals for the disruption of mainstream critical and creative spatiohistorical thinking that a robust confrontation with the stakes of the Anthropocene would demand. Meanwhile, it’s hard to disagree with that critique of business-as-usual ecocriticism, i.e. the kinds of close readings of cultural artifacts that literature studies specialists are trained to do—of artifacts that mostly turn on timebound human-scale crises and dilemmas, which almost by definition seem a mismatch for the vastly larger geologic-temporal scale of Anthropocene thinking.

Beyond that, it must be granted that the conceptual underpinnings of ecocriticism’s first several waves were themselves derivative: nature-protectionist “ecocentric” environmentalism for the 1990s, post-Marxist and critical race critiques of socioenvironmental inequalities for environmental justice ecocriticism of the turn of the century, and postcolonial and global network theory for the third-wave worlding of ecocriticism’s horizons in the later 2000s. In this respect, the movement’s first notable harbinger was predictive: Joseph Meeker’s *The Comedy of Survival* (1973), an unabashedly derivative Darwinian allegory of Shakespearean comedy as encoding practices of adaptation. For most of its short history as a self-conscious movement, ecocriticism has relied more on recycling received models than generating new ones. It has been more a lagging indicator, in other words, than a leading one.

It may be that the latest ecocritical wave, its “material” turn in the 2000s (cf. Iovino and Oppermann), will not only further consolidate its emergence intra-tribally as a robust subfield, but also percolate more influentially beyond its own ranks, through its auspicious combination of powerful analytical subtlety and resonance with the exigencies of the Anthropocene moment. One thinks for example of Stacy Alaimo’s theory of transcorporeal personhood—the porousness of human being itself to its environmental surround at the material-chemical level; of Timothy Morton’s theory of “hyperobjects”—global warming his example par excellence—within which we are irretrievably meshed but (therefore) cannot conceptualize; of Stephanie LeMenager’s and others’ critical-historical unpacking of the cocooning/addictive effects of fossil fuel culture (Alaimo 85-140; Morton; LeMenager, Barrett and Worden).

These and kindred interventions, disparate though they are, might lumpingly be characterized as rotating around a “posthumanist” understanding of humanity’s place on earth excellently fitted, at least up to a point, to speak to the crucial paradox of Anthropocene being: that humanity as a species is the primary driver of planetary environmental change, yet inextricably entangled somatically, attitudinally, ethically, politically within the technosocial apparatuses of human making on the one hand, and with non-human life forms from the gigantic to the microbial on the other.²

That said by way of hopeful praise, the posthumanism—or posthumanisms—of ecocriticism’s material turn have yet to confront at least two semi-related kinds of endemic hazards. The first, of which Morton’s *Hyperobjects* is a good case in point, is the risk of taking principled critique of autonomous human agency to the point of disabling gridlock: the Anthropocene “is too much to take in at once. Not only are we waking up inside of a gigantic object like finding ourselves in the womb again, but a toxic womb—but we are responsible for it” (183). Such pushbacks against anthropocentric hubris might be justified at a meta-level as salutary correctives to the doggedly hopeful, fingers-crossed instrumental reform advocacy of, say, developmental economist Jeffrey Sachs’s *The Age of Sustainable Development* (2015) (this century *could* be the age of sustainable development if everything falls into line), and economists Gernot Wagner and Martin Weitzman’s *Climate Shock* (2015) (maybe a carbon tax will do the

² Two of the many primers on posthumanism I have found especially instructive are Cary Wolfe, *What Is Posthumanism?* (Minneapolis: U of Minnesota P, 2010); and Pramod K. Nayar, *Posthumanism* (London: Polity, 2014).

trick). But the ontological counter-model of Lord Man crippled by extrasomatic material agency is not likely to gain much public traction ethically, let alone politically.

Relatedly problematic is Anthropocene-era ecocriticism's tendency to look to speculative fiction and film as the preferred aesthetic carrier of the critique of anthropogenic disarrangement, as in a number of the contributions to the Anthropocene-focused ecocritical symposia cited earlier. Again Clark seems on target: "Extreme environmental scenarios unfold with a kind of remorseless logic whose effect of protest is undone" by an aesthetic "of increasing suspense, in which horror merges with a kind of gripping excitement" or "phantasmagoria, an unacknowledged indulgence in a pleasurable destructiveness" (182). From highbrow to middlebrow to low—Margaret Atwood's *MaddAddam* trilogy, Nathaniel Rich's *The Odds Against Tomorrow*, the American films *Beasts of the Southern Wild* and *The Day After Tomorrow*—with scattered exceptions, such performances stand guilty as charged. The problem with cli-fi apocalypticism's is not, then, its potential box-office appeal—even to nonhumanist academics. Indeed, scientists have also been enlisting it (cf. Firor and Jacobsen, 1-22; Oreskes and Conway, 2013, 2014). The problem is rather that the longstanding prehistory of end-of-the-world-as-we-know-it apocalypticism as narrative trope, whether religious or secular (the *Book of Revelation*, Lucretius's *De Rerum Naturae*: take your pick), made such vicarious futurism so comfortably predictable long before 2000. Since then, the uptick of as yet unfulfilled prophecies of anthropogenic destruction of the world from the Cold War era onward has conditioned most consumers of the genre into the doublethink of notional agreement that we may well be living in the end times, but that THE REAL END probably isn't going to happen anytime soon. And why not? Because apocalypticism is a mismatch for the "slow violence" of how environmental deterioration actually works, not only in regions of the exploited global south to which rich world perpetrators turn a blind eye, as ecocritic Rob Nixon contends, but within the environments of the denizens of the rich world too (Nixon; cf. Buell 177-208).³

What, then, might be an alternative path for ecohumanistic critique that would avoid the kinds of problems just described? The rest of this essay will explore one such—not intending to offer it as the only option and without retracting anything said above in admiration of the cogency and subtlety of the best eco-posthumanist work. The path chosen here is to single out a major but neglected major aggravator of Anthropocene-era disarrangement; one that falls

³ Adam Trexler's *Anthropocene Fictions* pertinently suggests that the dearth of "realist climate change novel[s] could be a symptom of a deeper cultural resistance to the Anthropocene itself" (224).

squarely if not exclusively in the domain of the humanities insofar as it boils down to matters of ethical and cultural bias/preference; one less effectively addressed by techno-scientific “solutions” than by sociocultural politics and personal choice; and one that also showcases the limitations of sci-fi apocalypticism as a countervailing force, even when brilliantly deployed.⁴

Discourses of Human Population Growth Revisited

The dramatic shrinkage during the past several decades from progressive environmentalist discourse of the overpopulation imaginary is a mystery hidden in plain sight. If a space alien learned on arrival on this planet that “between 1945 and 2015, some two-thirds of the population growth in the history of our species took place within one human lifetime” (McNeill and Engelke 41), she or he might be forgiven for expecting that earthlings would be at least as concerned about that explosion in human numbers as about climate aberration, biodiversity and habitat loss, pollution, and fresh water supply. Half a century ago that was so, but no longer. Even though most who spend serious time worrying about earth’s environmental future might well concur that “if the world does not solve the population problem, it will have a much harder time accomplishing virtually every other desired [environmental] goal” (Firor and Jacobsen 84), the growth of human numbers as an exacerbator of environmental degradation has been largely relegated to the fiefdoms of a handful of international agencies or NGOs and voices from the discursive margins. In the 1960s, it was *au courant* to speak of “the modern plague of overpopulation,” as Martin Luther King did in accepting the Margaret Sanger Award (King). Stanford entomologist Paul Erlich catapulted to instant celebrity on the basis of his best-selling *The Population Bomb* (1968). In the 2010s he continues to press a revised version of his case, but to much smaller audiences.

No one factor accounts for this attitudinal shift, although several seem incontestable. First and most obviously, Erlich’s prophecy of imminent worldwide famine and starvation within the next decade proved dead wrong—a classic case of demographer Joel Cohen’s “Law of Prediction”: “the more confidence someone places in an unconditional prediction of what will happen in human affairs, the less confidence you should place in that prediction” (134). Erlich’s and other “limits to growth” jeremiads grossly underestimated the impact of the Green Revolution just then underway. Most pointedly for present purposes, they failed to anticipate the

⁴ Greg Garrard’s brilliant but quite differently configured “Worlds Without Us” (2012) helped set these thoughts in motion.

dramatic drop in worldwide fertility that had also begun, from an all-time modern high of 5.0 children per woman in the 1950s and early 1960s to 2.5 in 2015, including sub-replacement birthrates in many nations of the developed world as low as 1.2 that have provoked fears, particularly in Europe and Japan, of *infertility crisis*, disproportionately aging populations, and shrinking workforce.⁵

Attempts to limit human population increase during the past half century have been further tainted by highly-publicized cases of coercion—most notoriously forced abortion and sterilization in India and China of the 1970s and after, refracted through world literature in such works as Salman Rushdie’s Booker Prize-winning *Midnight’s Children* (1981) and Nobel laureate Mo Yan’s *Frog* (2009, tr. 2016). And tainted further by their association, partly justified, with racist eugenic campaigns dating back to the early 1900s to weed out “defective” or otherwise undesirable populations; by spasms of white/nativist anti-immigration pushback; and by narrowly-targeted efforts to dispense technologies of contraception ideologically offensive to influential religious conservatives and often also chastised by progressive social activists as insufficient in their education and social outreach efforts.

For such reasons as these, not to mention the mounting fixation since the 1990s on global warming as the key driver of Anthropocene derangement in most urgent need of address now, the specter of overpopulation has been treated by most environmental researchers as a side-issue, broached gingerly for the most part, if not dismissed as a canard or shunned as taboo. When I asked an economist colleague who had participated in the 2015 Paris summit on climate change whether population had been discussed, his arch reply was “Ah, that which is not to be named.” Indeed, in the 2000s the issue of geoengineering is a far livelier topic among environmental economists and scientists than the growth of world population by another billion within the next fifteen years, above and beyond the last billion added since the early 2000s. “In ecocriticism,” as Greg Garrard observes, we find much the same: “just as in mainstream environmentalism, population is virtually unspeakable” (55). Donna Haraway’s emphatic “make kin, not babies” is an outlier that confirms standard practice, as a one-sentence parting shot in her main text with explanation furnished only below the line, as it were, in a long end note (Haraway 162 and n).

⁵ “The Empty Crib,” *The Economist* 420.9004 (27 August 2016): 14-16, is broadly typical both of that magazine and of the discourse in question generally in lamenting what it takes to be the “neglected global scourge” of population shrinkage.

The prevailing assumption that underwrites the contemporary tendency to minimize the environmental significance of the unprecedented twentieth-century quintupling of human numbers appears to be that the world population problem seems likely to peak within the next century (at 11 billion or so, from its present 7.5), maybe sooner (UN 1), because the “second demographic transition,” as some social psychologists have termed it (cf. Lesaghe), promises to spread worldwide: a shift toward later and fewer children following from the rising status, education, and aspirations of women; from urbanization; from the dissemination of social prosperity, however uneven and slow; and from postponement and/or decline in the long-term monogamous marriage.⁶ So conservation biologist-polymath Edward O. Wilson, who maintained in the 1990s that “the time has come to speak more openly of a population policy” based on “the judgment of [each country’s] informed citizenry” of its “*optimal* population,” now affirms that the population “will be solved as an unintended consequence of human nature” (Wilson 1993: 329; Wilson, *Half-Earth* 191). This is by no means a unique instance of side-switching among prominent environmental researchers.⁷

In short, though the awakening-in-progress to the sense of living in the Anthropocene has generally seemed vertiginous and alarming, world population trend lines have provoked more hope than alarm. If the late-century “burst in human population growth” is really “coming to an end,” at least eventually (McNeill and Engelke 209), just how much should one worry even if “the number of people *added* to the world population during the lifetime of today’s young people is likely to exceed the world’s *total* population in the middle of the twentieth century”? (Matson, Clark, and Andersson 42-3). Surely they can be squeezed in somehow. And might not some degree of planetary degradation be tolerated for the sake of sustaining economic growth?

It’s hard not to feel a certain relief at such hopefulness, if only because of the uptick of Anthropocene doom-crying (“My God, a continent-sized ice shelf has broken off from

⁶ This hasty summation homogenizes nuanced differences within what seems a broad concurrence, also omitting some interesting alternate lines of explanation, such as the importance attached by Winter and Teitlebaum to contemporary “risk society” anxieties in declining birthrates worldwide.

⁷ The most telling instance of how prevailing winds of doctrine have changed since the 1970s, which also shows the folly of rushing to judgment when a thinking person changes position on this or any other issue, is that of John Holdren, Assistant for Science and Technology under President Obama, one of Paul Erlich’s closest colleagues and an overpopulation hawk through the 1970s (cf. Holdren). In the 1980s, Holdren switched his primary research and advocacy commitments to nuclear disarmament and energy technology; yet he continues to be hounded by right-wing bloggers who mine his early work for extreme statements (cf. “John Holdren in His Own (Radical) Words,” 31 May 2014, www.cfact.org). For an even-handed assessment of the larger issues at stake in the underlying dispute between pro-growth and limits-to-growth persuasions, including an important caveat that Erlich’s Malthusianism may be more relevant to our time than his, see Sabin 224-7.

Antarctica!” “Scores of low-lying island nations face imminent doom!”). But to subside into complacency is misguided.

To begin with, “no developing country has successfully modernized without slowing population growth” (Brown 185); and there’s no guarantee that the countries with the highest fertility rates today—most of them, like Somalia and Burundi, gravely under-resourced, conflict-ridden lands with birthrates above 5.5 per woman—*will* make the transition any time soon. The UN projection that Niger, with the world’s highest fertility rate today at 7.63 will decline by 2050 to 4.87 seems wishful at best (UN 43). Relatedly, the next billion infants projected to increase the world’s human population by another 13% within the next fifteen years will be born in Sub-Saharan Africa and parts of South Asia rather than the ecologically “best places,” such as the better water-sourced, relatively less populated areas of north central North America, South America, and the lower Russian steppes, according to one thoughtful recent study (Forman and Wu). Yet most people prefer to stay put; historically, international migration rates “have averaged only 10% or so of global birth rates” (Matson, Clark, and Andersson 44). The reluctance of modernized European, North American, and East Asian countries to accept anything like a fair proportional share of refugees from the Middle East and North Africa suggests that that figure will not rise much anytime soon.

Were the modernization barrier surmounted worldwide—let’s assume so for the sake of argument—it would hugely aggravate Anthropocene-era environmental derangement through the dramatic increase in the average human’s ecological footprint, as is now happening in China and elsewhere. Planet earth “could possibly hold ten billion modest vegetarians, but could not sustain ten or even our current [7.5] billion people [if an appreciable number of others become] as wealthy as we” (Rieder 3). For all its rhetorical fluorescence, Jared Diamond’s insistence “that no one at the U.N. or in First World governments is willing to acknowledge ... the unsustainability of a world in which the Third World’s large population were to reach and maintain First World living standards” makes a telling point (496). Why that should be so is understandable enough: few today, even among the Euro-world’s entrenched elites, deny the legitimacy of the global south’s aspirations to social prosperity, even as prosperous folk everywhere dislike making major retrenchments in their own lifestyles. That in turn redoubles the cogency of an argument that voices from the developing world have made for decades, such as Mahdavi Gadgil and Ramachandra Guha in their 1995 assessment of ecological politics in India: Yes, the Subcontinent should control population growth, but “if there is a [world]

population problem at all, it exists in affluent consumer societies such as the United States” (181), where the birth of a single child has “an environmental impact equal to that of (say) the birth of several dozen Bangladeshi” (178). Indeed, that estimate may have been far too modest; a more recent calculation sets the differential at 160 (Ryerson 158). Although the U.S. population is less than 5% of the world total, its outsized ecological footprint makes it “in a real sense the most populous nation on earth” (McKibben 108)—all the more so to the extent that American materialism remains the envy of the rest of the world. Much the same might be said of most rich world countries as seen from the perspective of the global south.

Hence in part Pope Francis’ refusal in his encyclical *Laudato Si* “to blame population growth instead of extreme and selective consumerism” for global resource depletion (22). Here and elsewhere, the Pope sounds like left-progressive-secular climate activist Naomi Klein in *This Changes Everything: Capitalism vs. the Climate*: “positing of population control as a solution to climate change is a distraction and moral dead end,” because “the most significant cause of rising emissions is not the reproductive behavior of the poor but the consumer behaviors of the rich” (114). Klein would indict the capitalist system root and branch as the cause of all environmental woes, Francis would drive home his eco-justice critique of blatant inequality between peasant and grandee without unsettling official Catholic doctrine, which opposes most methods of birth control.

Their lopsided overgeneralizations revive, albeit not quite to the same end, the straw man long since rejected by persons of conscience in principle if not in practice, that the lives of the poor and the dark count for less than that of affluent Euros.

In so doing, both dismiss a readier-to-hand, inexpensive, and *potentially* even less controversial means of countering Anthropocene environmental derangement than either the paths of economic redistributionism or conversion to renewable energy sources on a scale that would end fossil fuel dependence, namely, fewer unwanted pregnancies and births through truly comprehensive non-coercive propagation of both the knowledge and means to those who lack them, and more persuasive cultural reinforcement of smaller-family ethics. As environmental journalist Alan Weisman points out, concerted efforts of this kind have achieved dramatic results, perhaps nowhere more so than Iran after 1989 (a UN-award winning initiative ironically reversed in the 2000s) (273-93).

What’s more—and here is where the ecocritical part potentially plays the largest part—creative media directed at popular audiences seem to have been a significant influence to this

end. The best-known case, developed by Mexican media executive Miguel Sabido in the late 1970s and adapted in other developing countries since, was a series of prime-time Mexican “serial dramas” or *telenovelas* that ran for nearly a decade, stories that literary brought home to ordinary people the benefits of the correlation between family planning, family harmony, and national health and well-being. Though no “scientific” correlation can be proven, this same decade saw the steepest decline (34%) in the Mexican birthrate, which dropped from 5.40 to 2.29 between 1975 and 2015 (Ryerson 170-1; Population Media Center; U. N. 40).

The feel-good, down-home, melodramatic genre(s) of narrative soap opera are a far cry from apocalyptic sci fi and its neo-naturist sibling, “dysanthropic” films that highlight the expanse and power of physical nature as devoid of human presence as the camera can make it (Garrard 45-9). However riveting at best, though, the latter are also more easily dismissible for their combination of recycling overly familiar “empty landscape” tropes and remoteness from the quotidian.

When 1970s population-bomb scare stories ceased to be front-page news, overpopulation stories “waned dramatically” (Stableford and Langford). The few that continue to pop up—like L. R. Currell’s *Curve Day* (2013)—whose imagined antidote to overpopulation is an annual killing spree where almost anyone but police is fair game—are a sad comedown from the brainy prescience and psychosocial complexity of the techno-genetic futurism of John Brunner’s *Stand on Zanzibar* (1968) and Harry Harrison’s images of twenty-first century New York City as third-world megacity, *Make Room, Make Room!* (1966), bastardized in the 1973 film *Soylent Green*. Meanwhile, the seeming quaintness of even top-cut 1960s overpopulation lit by contrast to today’s cli-fi only goes to show the ephemerally labile character of the apocalypse trope itself.

The chance of lasting impact might be greater were a latter-day U.S.-based Sabido to deploy—and sustain—the resources of a media empire to tackling the country’s two most recalcitrant social norms in respect to population concerns. The better known is the zeal of so-called pro-life advocates since the 1970s to hobble family planning programs domestically and worldwide by damning all such efforts categorically with the stigmas of abortion and/or coercion (Barot and Cohen). Even more fundamental, however, are the lingering biases against single- or no-child unions and in favor of large families that flourish widely enough in today’s U.S. to put the country at the high end among G-8 nations plus China in fertility trend-line as well as in religiosity, and to make it the only one of the nine projected among the top fifteen contributors to

world population increase between 2015 and 2050.⁸ Right now, as Bill McKibben pithily observes, “it’s fine to have single parents on TV, but single children are scarce” (33). That he even feels the need to write as if few even notice the imbalance testifies to the pervasiveness of the problem.

This essay should not be misunderstood as insinuating that my country is already filled to carrying capacity. There’s still room for many more of those next billion than the anti-immigrationist lobby contends. Nor should it be mistaken as a plea to keep as much of the U.S. as wild or rustic as possible. My core arguments are rather that environmental sustainability goals should assign a higher priority to curtailing world population increase; that responsibility for so doing should be proportional to the size of the ecological footprint, with the primary onus on rich world nations and privileged socioeconomic groups everywhere; that preferences for smaller families *can* be quickly “woven into the cultural fabric of the nation” (qtd. Weisman 278); and that creative intervention in attention-getting media of whatever sort *can* significantly matter to that end.⁹

⁸ The U.N. figures for 2010-2015 put the U.S. fertility rate at 1.89, slightly below France (2.0) and the U.K. (1.92), but well above Canada, Germany, Russia, China, Italy, and Japan (1.61 to 1.4, in descending order) (38-42).

⁹ [Sincere thanks to Richard T. T. Forman for his careful scrutiny of a penultimate version of this essay,](#)

Works Cited

- Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana UP, 2010.
- Autin, Whitney J. and John M. Holbrook. "Is the Anthropocene an Issue of Stratigraphy or Pop Culture?" *GSA Today* 22.7 (2012): 60-1.
- Barrett, Ross and Daniel Worden, ed. *Oil Culture*. Minneapolis: U of Minnesota P, 2014.
- Barot, Sneha and Susan A. Cohen. "The Global Gag Rule and Fights over Funding UNFPA: The Issues That Won't Go Away." *Guttmacher Policy Review* 18.2 (2015): 27-33.
- Brown, Lester R. *Plan B 4.0: Mobilizing to Save Civilization*. Rev. ed. New York: Norton, 2009.
- Buell, Frederick. *From Apocalypse to Way of Life*. New York: Routledge, 2003.
- Clark, Timothy. *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept*. London: Bloomsbury, 2015.
- Cohen, Joel E. *How Many People Can Earth Support?* New York: Norton, 1995.
- Crutzen, Paul J. and Eugene F. Stoermer. "The 'Anthropocene'." *Global Change Newsletter* 41 (2000): 17-8.
- Diamond, Jared. *Collapse*. New York: Viking, 2005.
- "The Empty Crib." *The Economist*. 420.9004 (27 August 2016): 14-16.
- Firor, John and Judith E. Jacobsen. *The Crowded Greenhouse: Population, Climate Change, and Creating a Sustainable World*. New Haven: Yale UP, 2002.
- Francis I. *Laudato Si'*. Vatican: Libreria Editrice Vaticana, 2015.
- Forman, Richard T.T. and Jianguo (Jingle) Wu. "Where are the best places for the next billion people? Think globally, plan regionally." *Handbook on Biodiversity and Ecosystem Services*. Ed. Davide Geneletti. Chichester: Edward Elgar, 2016. 453-73.
- Gadgil, Madhav and Ramachandra Guha. *Ecology and Equity: The Use and Abuse of Nature in Contemporary India*. London: Routledge, 1995.
- Garrard, Greg. "Worlds Without Us: Some Types of Disanthropy." *SubStance* #127, 41.2 (2012): 40-60.
- Garrard, Greg, Gary Handwerk, and Sabine Wilke. "Introduction: 'Imagining Anew: Challenges of Representing the Anthropocene'." *Environmental Humanities* 5.1 (2014): 149-53.
- Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," *Environmental Humanities* 6. 1 (2015): 159-165.
- Holdren, John T. "Population and the American Predicament: The Case against Complacency." *Daedalus* 102.4 (1973): 31-43.
- Iovino, Serenella and Serpil Oppermann, ed. *Material Ecocriticism*. Bloomington: Indiana UP, 2014.

- King, Martin Luther. "Family Planning – A Special and Urgent Concern." *plannedparenthood.org*.
- Klein, Naomi. *This Changes Everything: Capitalism vs. the Climate*. New York: Simon & Schuster, 2014.
- LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century*. New York: Oxford UP, 2014.
- Lesthaeghe, Ron. "The Unfolding Story of the Second Demographic Transition." *Population and Development Review* 36.2 (2010): 211-51.
- Matson, Pamela, William C. Clark, and Krister Andersson. *Pursuing Sustainability: A Guide to the Science and Practice*. Princeton: Princeton UP, 2016.[A book pitched to "sustainability leaders" (131)—i.e. researchers and policy administrators.
- McKibben, Bill. *Maybe One: A Case for Smaller Families*. New York: Plume, 1999.
- McNeill, J.R., and Peter Engelke. *The Great Acceleration: An Environmental History of the Anthropocene Since 1945*. Cambridge, MA: Harvard UP, 2014.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: U of Minnesota P, 2013.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge: Harvard UP, 2011.
- Oreskes, Naomi, and Erik M. Conway. "The Collapse of Western Civilization: A View from the Future." *Daedalus* 142.1 (2013): 40-58.
- . *The Collapse of Western Civilization: A View from the Future*. New York: Columbia UP, 2014.
- Population Media Center. "History of the Sabido Methodology." *populationmedia.org*
- Rieder, Travis. *Toward a Small Family Ethic: How Overpopulation and Climate Change Are Affecting the Morality of Procreation*. Basel: Springer International, 2016.
- Ryerson, William N. "Population: The Multiplier of Everything Else." *The Post-Carbon Reader: Managing the 21st Century's Sustainability Crises*. Ed. Richard Heinberg and Daniel Lerch. Healsburg: Watershed, 2010. 155-74.
- Sabin, Paul. *Paul Erlich, Julian Simon, and Our Gamble over Earth's Future*. New Haven: Yale UP, 2013.
- Sachs, Jeffrey D. *The Age of Sustainable Development*. New York: Columbia UP, 2015.
- Stableford, Brian and David Langford. "Overpopulation." *Science Fiction Encyclopedia*. 12 May 2016. *sf-encyclopedia.com*. Web. 4 June 2016.
- Trexler, Adam. *Anthropocene Fictions: The Novel in a Time of Climate Change*. UP of Virginia, 2015.
- U.N. Department of Economic and Social Affairs. *World Population Prospects: 2015 Revision, Key Findings*, 2016. https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.

- Wagner, Gernot, and Martin L. Weitzman. *Climate Shock: The Economic Consequences of a Hotter Planet*. Princeton: Princeton UP, 2015.
- Weisman, Alan. *Countdown: Our Last, Best Hope for a Future on Earth?* Boston: Back Bay-Little, Brown, 2013.
- Wilson, Edward O. *The Diversity of Life*. New York: Norton, 1993.
- Wilson, Edward O. *Half-Earth: Our Planet's Fight for Life*. New York: Liveright-Norton, 2016.
- Winter, Jay and Michael Teitelbaum. *The Global Spread of Fertility Decline: Population, Fear, and Uncertainty*. New Haven: Yale UP, 2013.