

# **Population Growth and Decline in the Late Twentieth Century: Reflections on Two Related Cultures of Fear**

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## **Abstract**

The paper places population accounts in historical perspective, proposing that it might be well worth to set recent fears of population decline in the Northern hemisphere against the backdrop of alarmist predictions of overpopulation in the 1960s and 1970s. I argue that these two cultures of fear are closely related. They both draw on scientific models that tend to reduce population development to mathematical expressions, statistics, and simple visual representations. Constructions of populations as statistical aggregates tend to disregard local differences; they divert from important social aspects; and they favor solutions of arithmetic balance and efficiency over political negotiations of global and historical disparities of wealth and power. I base my argument on Michel Foucault’s 1967 anticipation of a “human topography” that involved the “storage,” “circulation,” and “classification of human elements,” that is, the siting and placement of humans according to scientific and economic expertise. Models both of growth and of shrinkage run the risk of naturalizing and rationalizing concepts of nation, race, community, territory, and resources; they both implicate measures of population management and control; and they base visions of human survival on economies of circulation, efficiency, and liability.

## **Zero Population Growth!**

In 1971, a US drama about the earth of the near future was released: The movie *Z.P.G. Zero Population Growth*, directed by Michael Campus, portrays a world in which overpopulation is threatening to destroy what remains of planet earth. In the effort to ensure the last hope for survival of the human race a “world council” rules having children strictly illegal for the coming thirty years. To bear a child shall be the greatest of crime, punishable by death. Set in an unidentifiable, thickly polluted metropolis the movie tells the story of a young American couple that, upset with the condition of having to make do with a surrogate robot baby, secretly gives birth to a child that the couple hides carefully from friends and neighbors. Eventually, however, the young family is discovered by a neighboring couple, itself with a strong desire for a child. A fight about of proprietary rights ends in blackmail, betrayal, finally, disclosure of the child to the authorities, arrest, and approaching elimination. By way of the junk-littered canals beneath the city, the family can escape in a tiny rubber dinghy that takes them to an abandoned beach, a former radioactive zone where they set out to make a new start.<sup>1</sup>

## **Human Ecology around 1970: Forecasting “Standing Room Only”**

The movie *Zero Population Growth* was by no means some strange or singular phenomenon around 1970. The well-known human ecologist Paul Ehrlich was one of the three original incorporating members of an activist group named “ZPG – Zero Population Growth” founded in 1968 to raise public awareness of the so-called “population problem.” The organization sought to confront the U.S. white middle class with its lifestyle of using up far more than its global share of natural resources and adding more than its share to environmental pollution. Zero Population Growth literally meant to secure a birth rate of 2.2, or whatever number would warrant the desired reproductive rate of 1.0. The initial mission was to encourage citizens to reduce family size: “Stop at Two” and “Control Your Local Stork” were some of ZPG’s catchy slogans advertised on bumper stickers, flyers, and posters, in public service announcements, magazines, and organized protest marches. In the first year the popularity of Ehrlich’s famous book *The Population Bomb* briefly boosted group membership to more than 30,000. ZPG founded its own “Population Education Department” and in 1975 formed a “Population Education Program.” The department produced classroom texts and a video titled “World Population” that was used as an educational tool in public exhibitions, museums, and zoos. ZPG did not confine its actions to showing movies and handing out condoms. The organization also urged changes in population policy and abortion legislation, and it opened vasectomy clinics.<sup>2</sup>

In the 1960s and 1970s the revival of the Malthusian population-resources-environment predicament fuelled fears of “population explosion” and “ecocide” in the Western world. Ecologists related the exponential growth of human numbers to the apparent limits of the earth as a “small planet,” to the effect, as Harvard biologist Karl Sax termed it, that the earth would soon provide “standing room only” to its human inhabitants.<sup>3</sup> Human ecology based global population mathematics on earlier statistical models from population biology, which described the self-limiting growth of self-contained biological populations. The “law of population growth” condensed population development to a simple mathematical expression and visual representation of the S-curve or “logistic growth curve.” In the late 1960s and early 1970s, scientists used the logistic growth models to naturalize and to rationalize the perception of a limited cargo space of the earth, its ecological “carrying capacity.”<sup>4</sup>

The “law of growth” represented world population growth and management as a mathematical problem of accounting. Constructing populations as statistical aggregates resulted in the notion of a human “surplus,” which could be numerically expressed. Such

mathematical balancing of population numbers also leveled social differences. Suggestions for “population control” based visions of human survival on strict economies of efficiency and liability. These approaches favored simple and seemingly rational mathematical solutions over difficult political negotiations. Accordingly, technoscientific interventions and administration claimed to provide the best and quickest answers to problems that had developed over long periods of time and often involved political struggles resulting from regional disparities, imperial wars and colonial exploitation.

### **Population Studies and Bioeconomy**

It might be well worth to set more recent fears of population decline in the Northern hemisphere against the backdrop of the alarmist predictions of overpopulation in the 1960s and early 1970s. I argue that the two cultures of fear emerging from population growth and population decline are quite alike and historically also closely related. They both draw on scientific models that tend to reduce population development to mathematical expressions, to statistics, and to suggestive visual representations. Such representations of populations as self-contained entities in terms of population dynamics or population explosion trim human beings to fit single common denominators for the sake of accountability. Demographic accounting practices, formal mathematics, statistics, and the corresponding vocabularies are constitutive of quantitative collectives like “populations” and “world population” acquiring shape. Population studies aggregate people into comparable numerical entities so as to make them “accountable”: commensurable for the sake of statistical balancing and of counting “net gains”, but also to be held accountable for their reproductive behavior.

Thus, I contend that the past fears of population explosion and the current fears of shrinkage in the Northern hemisphere are both based on similar long-standing Western biases. Sweeping constructions of populations as statistical aggregates tend to disregard specific local situations; they often divert from important social aspects; and they favor solutions of arithmetic balance and efficiency over political negotiations. The current discourse of depopulation also tends to disregard global dimensions (for instance, of a still rising world population) and rather concentrates on national and regional developments.

My point of view is informed by the notion of “human topography” brought forth by the French philosopher Michel Foucault.<sup>5</sup> In 1967, at the height of fears of ecocide and overpopulation, Foucault anticipated what he called the “storage,” “circulation,” and “classification of human elements,” that is, the siting and placement of human beings

according to a combination of mathematical, geographic, scientific, and economic expertise. I argue that notions and assessments of a population crisis – “explosion” or “shrinkage” – reformulate themes of contested living space along the lines and divides of biological, ecological, and bioeconomical *eligibility* or *entitlement*.<sup>6</sup> To illustrate this position I will examine the moral philosophy of reproduction that US biologist Garrett Hardin proposed around 1970, a moral philosophy based on bioeconomy.

### **The “Tragedy of the Commons”**

In the climate of fear in the Western world, Garrett Hardin, professor of human ecology at the University of California at Santa Barbara, could well claim that parenthood was not a *right* but a *privilege* to be granted to responsible parents.<sup>7</sup> He was addressing not only the “underdeveloped” countries but also, and primarily, the affluent nations of Europe and North America. Hardin became well known for his propositions to “close the commons” in breeding.<sup>8</sup> In a legendary *Science* article of 1968 titled “The Tragedy of the Commons,” Hardin attacked the idea and practice of global common goods like the air and the sea that could be accessed and used freely by everybody. The contamination and scarcity of any commonly owned natural resource, he warned, would necessarily increase, as it would inevitably be overused within a limited world. In his opinion the same held true for the hitherto common access to procreation. Hardin demanded a “fundamental extension in morality” that required that society abandon the “present policy of *laissez-faire* in reproduction.”<sup>9</sup> „Freedom to breed,“ said Hardin, was „intolerable“.

Although he criticized too simple reproductive schemes, when he stated: “I’m afraid there are more patterns of marriage and sex than are dreamt of in Doris Day’s philosophy,”<sup>10</sup> Hardin, like his fellow human ecologists, built his work on a heteronormative matrix, acting on the simple assumption of two unequivocal sexes and corresponding categories of gender, gender identity, and sexual orientation to conceptualize the growth of populations in terms of a male-female reproductive nucleus. Hardin did not contest the Malthusian laws according to which humans would ‘naturally’ breed and thus increase exponentially. He actually affirmed and amplified the notion of humans as rational beings that would ‘naturally’ attempt to secure and maximize their own advantage. Societies including behavior of solidarity or altruism had no place in his theory. It rested on the deeply western perspective of the time, according to which any collective or socialist forms of joint property, and of joint property management, were excluded.<sup>11</sup>

Hardin did not take social and political relations serious on their own account or develop utopian forms of society, but based his image of social systems on biological principles. Refuting long-standing moral philosophical traditions of the West, he introduced biology as the new moral philosophy. With reference to Charles Darwin and his grandson Charles Galton Darwin he claimed that a society could not trust any longer neither the individual conscience nor appeals to individual responsibility. According to the principles of natural selection the conscientious people would quickly become extinct in favor of the ruthless and egoistic. Natural selection would favor *homo progenitivus* (“reproductive man”) at the expense of *homo contraciens* (“contraceptive man”). To counter this effect, humans would have to borrow inspiration from Darwin and imitate the process of natural selection, that is, determine new criteria to decide who was to succeed to produce offspring and survive.

Hardin’s aim was to realize not the *maximum* population that the 19<sup>th</sup>-century British philosopher and social reformer Jeremy Bentham might have thought of when formulating his goal of “the greatest good for the greatest number.” This goal Hardin thought impossible to realize. Rather, Hardin strove to achieve an *optimum* population, a capable and stable solution less than the maximum. He deemed necessary “corrective feedbacks,” forms of “mutual coercion” mutually agreed upon, that is, collectively agreed. Among his most important suggestions was to abandon the welfare state to stop promoting “overbreeding” financially by the state; he also denied the validity of the Universal Declaration of Human Rights that had been agreed upon in 1967 by the United Nations. Hardin opposed the Declaration because it described that the family as the natural and fundamental unit of society. This official institutionalizing of the family would leave all choices and decisions with regard to its size with the family. He also discussed the advantages of a private legal inheritance based on biological inheritance and genetic kinship and on a Darwinian concept of “fitness.”

### **Too Many and Too Few? Absolute Numbers and Differential Reproduction**

Human ecology fought with absolute population numbers, attained from highly aggregated statistical accounts. I suggest, however, that there were issues more threatening than the *absolute* number of national populations or the world population that had reached 3 billion by 1960. It was not all about “too many,” to quote the Swedish food scientist Georg Borgstrom in 1969.<sup>12</sup> I argue that contemporaries were more frightened by the effects of “differential reproduction” Darwin had outlined, that is, by some people reproducing ‘irresponsibly’ at the expense of others. To steer against the principle of differential reproduction and to improve

the world population Hardin brought forth what he called “Lifeboat Ethics,” emphasizing the necessity of applying strict principles of selection to the occupants of the limited earth. Storing lives and securing survival in a lifeboat according to Hardin depended solely on the economic allocation of provisions and the disposal of dead weight. On this ethical basis he made his “Case Against Helping the Poor,” arguing against the “fundamental error of the ethics of sharing” in international-aid programs and urging wealthy nations to close their doors to acts of charity like immigration and food aid to the poor. The population of poor countries, so his argument, would simply “convert extra food into extra babies.”<sup>13</sup> The optimum world population, the population that would be able to survive on the planetary lifeboat, would have to be reached via a Darwinian process of selection that reflected a nation’s “fitness.” He defined fitness according to classical liberal logic of achieved economic prosperity. His classification into top nations or groups to be rewarded and communities not able to economize cleverly to be punished shows that his disposition of human lives left the historical roots of disparities of wealth through colonial history and postcolonial power relations unnoticed and untouched. Socially and historically developed problems he defined as biological in origin and individual in character.

Today there are twice as many people on earth as there were during the 1960s, and that number is increasing. Yet the absolute number of six and more billion seems less threatening than the absolute low numbers of populations in the former West and the Northern Hemisphere. In Europe and Japan, the “demographic transition,” the move from high to low birthrates anticipated for highly industrialized countries, has led to dismal forecasts of a shortage of young and an excess of old people; the bleakest anticipations have warned of the “depopulation” of entire regions. In just a few years, these concerns have attained a breathtaking media presence. But the current “demographic crisis” is not about ‘too few,’ either. All absolute numbers again seem weak in comparison to present fears of differential reproduction, which again identify people of certain income, education, religion, or national tradition as preferable and certain regions, or social and ethnic groups, or certain genders as threatening to the wellbeing of the collective. Scientific models both of population growth and of population decline run the risk of naturalizing and rationalizing concepts of nation, race, community, territory, and available resources.

When the population of the United States of America reached 300 million people in 2006, it gave cause to celebration and to anxiety. In terms of absolute numbers, the new citizen was highly welcomed. The U.S. takes pride in being the third strongest nation on earth, demographically, directly following China and India. Proclaiming a “net gain” of one person

every 13 seconds corresponds to the traditions of a national political economy assessing the power of the state in terms of the numerical strength of its population. But the faceless child of statistical calculations also gave rise to concerns. When and how this new American actually entered the country is not known. It might have been a newborn, but more likely it was an immigrant stepping off a plane or boat or illegally crossing the border. If it were a baby it might have been of white Anglo-Saxon protestant descent, but more likely it was of one of the many other colors and religions that are on their way of holding the majority in the country. People still perceive the “commons in breeding” as a retrograde concept. Then, it was the irresponsible exploitation of limited earthly resources that led to antinatalist policy suggestions. The pronatalist thinking today is still directed at specific people and closing the commons of procreation to others. Hardin’s 1970 claim of parenthood as a *privilege* instead of a right seems to resonate well with that thinking. Freedom to breed, or not to breed, is still intolerable.

### **Children of Men**

Famines forecasted by population ecologists around 1970 did hardly turn out as predicted, which in turn gives cause to skepticism against present alarmism. But even setting aside these problems of ecological and demographical practice a crucial issue remains regarding the legitimacy of state interference in population issues. The example of Hardin and other human ecologists shows that we need to reflect on whether population politics are a legitimate area of state politics at all, and under which conditions state population policies can be justified. Such politics are in question whenever statistical aggregates of populations are biologized to exhibit certain reproductive behavior and fertility. The shift from social entities (people) to natural entities (populations) as a state target is highly problematic, whether exerted for reasons of resource security in the 1970s or for the sake of border security in the present.

In 2006, another US movie entered the cinemas: *Children of Men*, directed by Alfonso Cuarón, is based on the dystopian novel by the British author P. D. James (published 1992) about a world without offspring after a sudden and inexplicable worldwide fertility crisis.<sup>14</sup> There are many similarities to the movie *Z.P.G. Zero Population Growth*. People have to make do with surrogate children. In an aging society people are obsessed with the desire for children of their own – their own blood, their own ethnic background, their own culture. And when a single secret birth occurs, a governmental hunt for the baby sets in, albeit for altogether different reasons: not to punish the irresponsible parents and to kill the child but to

secure the child to reinforce the power of the state. The North no longer castigates but rigorously demands accumulation and multiplication.

Both movies illustrate the effects of a conservative logic of population accountancy, along with its inherent threats and constraints. But there are also important differences. *Children of Men* places the population question into different contexts of national security, global capitalism, global environmental degradation, and global economic and environmental migration. The movie stages the rigid system of European border control against refugee and migration pressures from poorer parts of the world, presenting effects of globalization at large and showing how the West keeps profiting as it did in the past from global inequalities in economic and technological power.

Both movies end on a hopeful note. Both families are able to escape in a small lifeboat. Interestingly, however, *Children of Men* shows a postmodern version of the “nuclear family”: the black mother is an illegal immigrant from Africa, a refugee unwanted in the country. We never learn (or care) about the origin of the child. This “family” is made up of three human beings of different skin color who are hardly bound by ties of blood but share only ties of dependency, of chosen solidarity, and of mutual protection. And this is hopeful indeed!

## Notes

- 1 Z.P.G. *Zero Population Growth*, directed by Michael Campus, starring Oliver Reed and Geraldine Chaplin, USA, Paramount 1971.
- 2 Details are taken from “30 Years of ZPG,” *The Reporter*, December 1998, pp. 12-19, *The Population Connection*, <http://www.populationconnection.org/site/DocServer/1219thirtyyears.pdf?docID=261>. Following this article on the history of the organization between 1968 and 1998, according to some reports “the years between 1969 and 1972 saw the membership of ZPG briefly blossom to more than 35,000 members,” p. 13. Ehrlich, Paul R., *The Population Bomb*, New York, Ballantine 1969 [1968].
- 3 Sax, Karl, *Standing Room Only: The World’s Exploding Population*, Boston, Beacon Press 1960 [orig. 1955 *Standing Room Only: The Challenge of Overpopulation*].
- 4 See Höhler, Sabine, “‘Carrying Capacity’ – the Moral Economy of the ‘Coming Spaceship Earth,’” *Atenea. A Bilingual Journal of the Humanities and Social Sciences* XXVI (2006) 1, pp. 59-74 (special issue “Humans and the Environment”).
- 5 Foucault, Michel, “Of Other Spaces,” *Diacritics* 16 (1986) 1, pp. 22-27 [orig. French “Des Espaces Autres,” lecture manuscript 1967].
- 6 Höhler, Sabine, “The Law of Growth: How Ecology Accounted for World Population in the 20th Century,” *Distinktion. Scandinavian Journal of Social Theory* No. 14 (2007), special issue “Bioeconomy,” eds. Thomas Lemke and Lars Thorup Larsen, pp. 45-64.
- 7 Hardin, Garrett, “Editorial: Parenthood: Right or Privilege?” *Science* 169 (1970), p. 427.
- 8 Hardin, Garrett, “The Tragedy of the Commons,” *Science* 162 (1968) 3859, pp. 1243-1248, quote p. 1248.
- 9 *Ibid.*, p. 1244.

- 10 Hardin, Garrett, *Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle*, New York, The Viking Press 1972 [1968], p. 192.
- 11 For this and the following quotes see Hardin, "The Tragedy of the Commons."
- 12 Borgstrom, Georg, *Too Many: A Study of Earth's Biological Limitations*, New York, Macmillan 1969.
- 13 Hardin, Garrett, "Living on a Lifeboat," *BioScience* 24 (1974) 10, pp. 561-568, quote p. 564. Hardin, Garrett, "Lifeboat Ethics: The Case Against Helping the Poor," *Psychology Today* 8 (1974) 4, pp. 38-43, pp. 123-126.
- 14 *Children of Men*, based on the novel by P. D. James (1992), directed by Alfonso Cuarón, starring Clive Owen, Julianne Moore, and Michael Caine, USA/GB, Universal 2006.