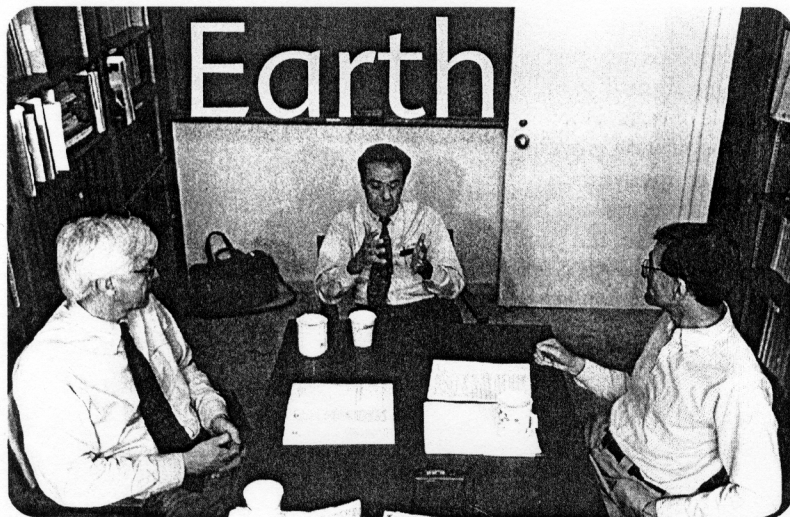


# Living heavily on the



**21<sup>st</sup>C** Let's set out down the avenue of controversy. There are parties who maintain no population problem exists, or that we are even below replacement level in birth rate; they don't agree with the idea that we should try to control population worldwide. How would you respond to those who advocate such a position?

**Cohen:** In a large part of the developed world, birth rates are below replacement levels. Do we see that as a problem or as a matter of taste? The fact that a large part of the developing world has birth rates far above replacement doesn't entail a statement like, "We should control population worldwide." Who's *we*: the rich countries? Is it up to us to control their population? I personally shy away from statements like that. I don't think it is up to us.

Being concerned about population is one way of being concerned about people's well-being. Giving people choices about how they can live their lives includes choices about whether they wish to have children, when, how many, under what conditions. Concern about population also means concern about people's material and spiritual well-being. If "we" means the United States or the rich world, then I don't espouse the statement, "We should control population worldwide," but I do think that lots of people don't have the means of controlling their own fertility that they would like to have. The rich world could invest more resources in helping people attain more autonomy in all spheres of their lives, including their fertility.

**Rosenfield:** I think the old term "popu-

lation control" is inappropriate. There are demographic issues that are of varying concern in different countries, but I too don't think we should be in the position of saying they should control their population. One of our roles is stating the facts: What are the potential impacts economically, socially; what are the projections; what do we know, in a variety of settings and worldwide. But we should really allow individuals to make their own choices. Sometimes governments will set policies based on demographic issues and facts, but individuals don't make decisions about fertility based on someone's demographic goals. They do it on the basis of their own wishes, and we should facilitate their ability to do so.

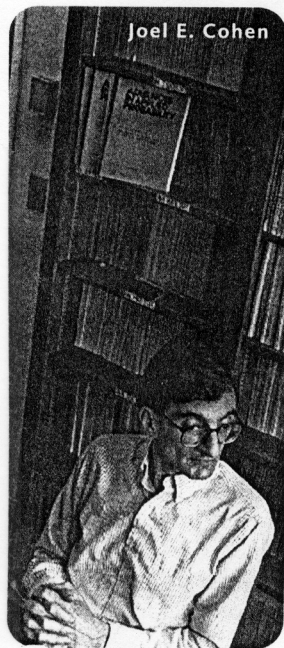
As family planning programs move forward and contraceptive services become available, fertility wishes decline. Some people say you can't do anything in family planning until there's significant economic development; I think Bangladesh has demonstrated that with reasonable access to services, even a poor country may see declines in fertility.

**Bongaarts:** Your question raises two fairly distinct issues: a population issue in the North (the developed world) and in the South. The Julian Simons<sup>1</sup> of the world

<sup>1</sup> Economist, University of Maryland; author of *The Ultimate Resource* (Princeton, 1981) and *The State of Humanity* (Cato/Blackwell, 1995); known for predictions that quality of life will improve indefinitely given present economic conditions and practices.

With the bicentennial of Malthus's predictions of overpopulation approaching, and the number of people spiraling to unprecedented levels, *21stC* asked prominent scholars in demography and public health how population dynamics affect the quality of life on Earth

Joel E. Cohen



don't believe there is a population problem in the South, even though there is substantial, rapid growth, particularly in subsaharan Africa. The consensus is that all these countries would be better off with slower growth. How much of an impact is debated. A study by the National Research Council<sup>2</sup> concluded that an alarmist view was perhaps not justified, but clearly most of these societies would benefit from lower population

growth. Simon in this regard is seen as an outlier and an unrealistic optimist. Simon claims that it would be good to have more people; that view is not shared by most analysts. In the developing world, most countries now realize that they would be better off if growth was somewhat slower. This is not something that international conferences have to tell these governments.

Now, what about the North? Birth rates there are below replacement in a number of areas. Many governments don't like that; they like to have a population that's fairly stable. As a consequence of below-replacement fertility, you get an aging population in which the population curve is top-heavy: many people over 65 and a smaller labor force to support that older population. This creates all sorts of problems that we are now encountering in the U.S. as well in Europe: How do we support, over the next 20, 30 years, the rapidly

## JOHN BONGAARTS, JOEL E. COHEN, ALLAN ROSENFELD

aging population? Either rapid growth—3, 4 percent a year, as we now observe in Africa—or a negative growth rate of 1 or 2 percent a year, where the population is declining: Either of those extremes is undesirable. Then the question is, what about rapid growth? The first and most obvious thing is to help women implement their reproductive preferences. If we could help all women to implement their preferences exactly, population growth would be lower by about 2 billion in the year 2100.

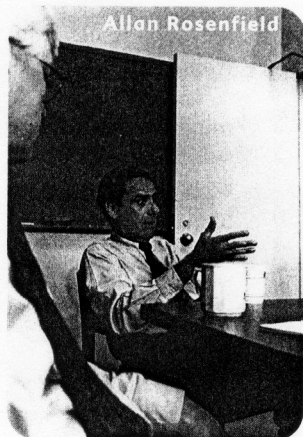
### Hard numbers, hard choices

**Rosenfield:** The world population is going to reach 6 billion in 1998—

**Cohen:** Just in time for the 200th anniversary of Malthus's *Essay on the Principle of Population*. Very convenient.

**Rosenfield:** We add about 90 million people to the world each year. If the population stayed at 2 percent, we'd be doubling every 35 years or so. It doesn't take a brilliant mathematician to carry that out into astronomical figures, were it to continue. We hit 2 percent in the '60s, and it's been slowly coming down since then. It took all of known history up to about 1830 to reach 1 billion people; now we add a billion people in about 11 years.

Allan Rosenfield



<sup>2</sup> National Research Council, *Population Growth and Economic Development: Policy Questions*. Washington, D.C.: National Academy Press, 1996.





**Bongaarts:** This brings up another issue that I think is sometimes misunderstood. If you look at statistics on reproductive behavior, you see incredible changes in the last 25 years. The average number of children born to a woman has gone from 6 in the 1960s to about 3½. The proportion of couples using contraception has gone from a few percent in 1960 to 55 percent today. So many people say, "This is great news; contraceptive use is close to what it is in the developed world; fertility is rapidly declining; what's the problem?" Well, there is a disjunction between what happens to fertility decline and to population growth. Even if immediately every woman in the world would bear just two surviving children, growth would continue for 50 or 75 years more. The reason for that is population momentum, the result of a young age structure. For example, in Africa today, about half the population is under 15. If these boys and girls all become parents, most of them having just two children, then growth will continue because there are so many of them.

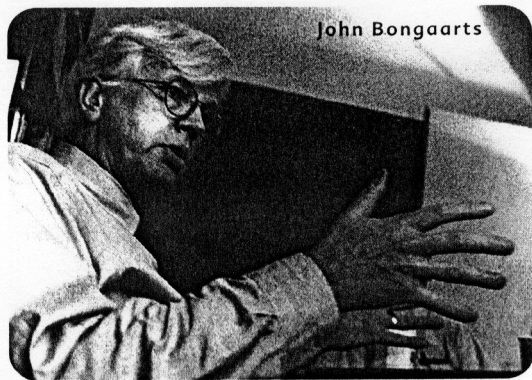
We're going to have at least a few more billion people even if we see rapid decline to replacement fertility.

What can you do about it? In the past, policy makers ignored the age structure. But there is a way one can at least offset some of this momentum: delaying child-bearing. Efforts to increase the age at which girls marry or have their first birth, or increase the spacing of births, should be included in a comprehensive population policy.

**Rosenfield:** The Cairo conference stressed the status of women, the education of women, jobs for women. These are all powerful influences on social well-being as well as population growth. Those are tough issues in many societies where women are not empowered.

**21stC:** Another conference comes to mind: Rio, and the question of tying population issues to economic and ecological issues. The resources consumed by industrialized nations are disproportionate, and we may be reaching "better" fertility levels as nations industrialize, but we're straining the resources of the planet more severely. Is the issue not so much the numbers of people as the manner in which they live?

**Cohen:** Culture or values determine when people view themselves as well off. More material consumption may not always lead people to view themselves as better off. People are going to say, "I have enough clothes, a car that runs, enough food. I don't need more material stuff."



The capacity to be excited by science or art, or to entertain one another, knows no bounds. You can have growth in an economy that incorporates those things without growth in material throughput. I don't think we have to reduce our standard of living if we define standard of living to include more good concerts, playing Beethoven better and better. If everybody in the world wants to run around in a new Mercedes-Benz, it isn't going to work.

**Bongaarts:** If you look ahead over the next several decades, we have a pretty good idea what's going to happen. World population will put stress on the environment.

There are three reasons for that. Population

**“Waiting for catastrophe to ‘solve’ the problem of population growth is the wrong way to go”** will almost certainly grow by several billion more. Every-

one in the world wants economic growth. So in the  $I = PAT$  equation—environmental impact measured by population, affluence, and technology—the third factor, the amount of damage a unit of economic production does to the environment, is the part we can do something about.

**21stC:** Certainly we have a hard time addressing people in developing countries and saying "You can't develop; we already developed."

**Bongaarts:** That's right. So I think GNP per capita 50 years from now will be up for most everyone, so the question is "How can we minimize this impact?" Right now we're using fewer tons of coal equivalent or barrels of oil equivalent per dollar GDP than in the past. That trend can be accelerated. Fifty years from now, nobody will be driving a Cadillac; we'll be driving something smaller that may get 100 or 200 miles per gallon. Instead of burning coal, we will have photovoltaic energy; the price of photovoltaic energy per watt is coming down rapidly. It's going to be close to competitive with traditional fossil-fuel energy in the near future; it already is in a number of places in the world. We will go through a transition from energy-damaging technology to energy-friendly technology, and we should accelerate that transition as much as we can.

## Bracing ourselves for the worst

**21stC:** We can't foresee catastrophes, but we can concoct scenarios that incorporate some of them. What kinds of scenarios might lead to better or worse outcomes, not just for optimizing the numbers but for the quality of our species's existence on this planet, which is inseparable from the quality of other species's existence?

**Bongaarts:** We could look back on some of the biggest disasters we've had in the last few decades. The famine in China in the late '50s and early '60s qualified as an unmitigated disaster: Around 30 million people died in a couple of years. How much did that affect population growth? Very little. Within two or three years, growth had gone back to normal and had made up the 30 million people. Ten years ago, some analysts believed the AIDS epidemic was going to cut population growth in Africa and spread to other continents. Even though the epidemic has a large effect on death rate, infant mortality, and life expectancy, population growth has so much momentum that even in places where the epidemic is most severe, population growth will stay substantially positive.

**Cohen:** Waiting for catastrophe to "solve" the problem of population growth is the wrong way to go. We have to take a positive, constructive response that would deal with the problem. Let me give you some statistics on warfare. It's estimated that the total number of people who were killed in the First and Second World Wars, civilian and military, could have been as high as 90 million. The upper end of the number of people killed in the wars since the end of World War II is 50 million. That makes 140 million, and throw in another 60 million for odds and ends and small warfare: You get 200 million. In 1900 we had about 1.6 or 1.7 billion. World population has increased by almost 4 billion in this century, of which wars removed 200 million, less than 5 percent. If civilization is destroyed, there are going to be a lot of hungry people around, but major warfare is just the wrong way to address the problem: It's expensive, it kills people in the prime of life, it's incredibly destructive, it's wasteful—and it doesn't accomplish the job.

**21stC:** What about policy scenarios?

**Cohen:** One challenge for future policy is the growing inequity in the distribution of income. In 1960, the ratio of income per person in the top fifth of the world's population to the bottom fifth is about 30:1. In

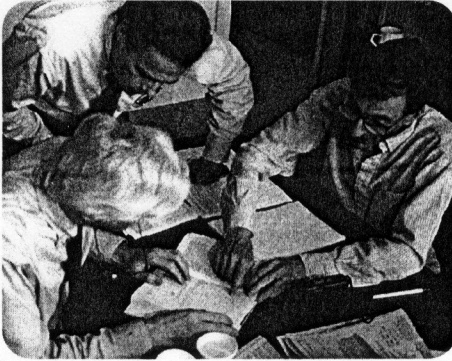
1970 it's about 45:1. By 1991 it's about 60:1. That's an extreme inequity in the distribution of income. I believe it's economically and socially unstable, in addition to being simply unjust. The income distribution is also getting more unequal within the United States, and that's really dangerous. The positive side is that in the last decade there have been some promising innovations. When all the countries in the world saw the chlorofluorocarbons eating away our ozone layer, and that our well-being depended on everybody's cooperation, there was a worldwide agreement to control production of those substances over time, to fund people to reduce them. That was absolutely without precedent. Another example is the Global Environment Facility introduced at the Rio conference, which said there are environmental externalities that countries have, and it's in the self-interest of the rich countries to provide funding to the poorer countries, to take environmental actions that will benefit the rich countries along with the poor countries. Now, it's a very small experiment—\$2 billion, \$3 or \$4 billion—but it's one that has not been tried before, as far as I know. And I think that a positive new policy trend would be increasing recognition of externalities at the international level and governments willing to bind themselves to a concern about other people's well-being.

**21stC:** OK. Can we realistically expect it to happen?

**Cohen:** It's happening, I think, by force of circumstance.

Eventually it's going to sink in on people. The reason the chlorofluorocarbon ban worked was people could see the causal connection: You eat away the ozone, you get skin cancer, bang! And politically it was acceptable. Now, if we can

communicate to the people that it's in our self-interest to help all people live better lives, people can learn. (1)



**JOHN BONGAARTS, Ph.D.**, is vice president in charge of research at the Population Council. **JOEL E. COHEN, Ph.D., Dr.P.H.**, professor of populations at both Columbia and Rockefeller universities, is the author of *How Many People Can the Earth Support?* (Norton, 1996). **ALLAN ROSENFELD, M.D.**, is dean of Columbia's School of Public Health and chairman of an Institute of Medicine committee on contraceptive research and development.

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