
Get Off the Train and Walk

I wish I could be as cheerful as David Orr (2003; this issue) about our future, but I can't. If an "optimal" human population size is in the vicinity of 2 billion people (Daily et al. 1994), then what are our chances of reaching such an optimum before catastrophe overtakes us in the form of depletion of natural capital, war, terrorism and civil breakdown, famine, or maybe a new global epidemic? I think they are small, especially with the government of the most powerful nation in the world now led by an unelected puppet controlled by a gang of anti-environmental oil people dedicated to widening the gap between rich and poor, attacking other countries to gain control over petroleum reserves, and destroying the environment for short-term profit. Nonetheless, we have no choice but to try.

I agree, of course, with Orr's conclusion that we are losing the struggle to create a sustainable society—and with many of his prescriptions for reversing the current plunge toward disaster. The essential problem we face is the ever-increasing scale of the human enterprise, a 20-fold expansion in the last 150 years as a result of the multiplicative impacts of population growth, increasing per capita consumption, and the environmentally faulty technologies (and social, political, and economic arrangements) that societies use to service that consumption (Holdren & Ehrlich 1974). Of these, population, consumption, and power relationships have largely dropped off political radar screens—including those of environmentalists. Today we know how to end population growth humanely and start a slow decline to a sustainable number of human be-

ings. Among the winning strategies are the education and empowerment of women and the supplying of contraceptives to all sexually active people. But progress in applying that knowledge has been too slow and spotty, largely because of lack of political will and the determined efforts of the environmentally ignorant and politically powerful to deny the existence of a population problem.

A recent egregious example is an article by Nicholas Eberstadt (2002) of the Competitive Enterprise Institute, a conservative "think tank." The piece displayed total unfamiliarity with the critical environmental problems associated with population growth and neglected the long-term impacts those problems have entrained. It reiterated the Netherlands Fallacy (that high population density in a few areas means there can be high density everywhere) more than 30 years after it was first prominently exposed as fallacious (Ehrlich & Holdren 1971). And Eberstadt makes the elementary error of assuming that rising life expectancies or per capita gross domestic product proves there are no population problems, without asking what those figures would be if the populations had been smaller. The article also shows no recognition of the tight connection between human population size and vulnerability to disease and what that may portend (Daily & Ehrlich 1996).

The problem of controlling runaway consumption is much more difficult than curbing population growth. There has been little analysis of how to judge overconsumption (Arrow et al. 2001), and scholars are just beginning to look hard at how promotion of increasing consumption has

become an ideology in much of the world (Cross 2000). Controlling this component of the $I = PAT$ equation is likely to be the most difficult challenge, especially since so much political and economic power is disproportionately vested in the rich and will be applied to keep the ideology of competitive acquisition (Schor 1998) healthy as long as possible.

Although the roles of population and consumption in generating the human predicament have been largely ignored in recent discourse, that of changing toward more benign technologies has been widely discussed. Nonetheless, automobiles remain needlessly inefficient, dominant in urban transportation, and a prime source of pollution, and their numbers are increasing rapidly. We are not, as we should be, redesigning cities around the needs of people rather than cars. While people should be able to walk to work, most of us will continue to drive. Economic power overwhelms what we know we should be doing for our own health and that of biodiversity. Australia, a leader in solar technology, is still building coal-fired power plants. Thousands of novel bioactive compounds are spewed into the environment, despite rising cancer rates (Clegg et al. 2002) and ominous signs of hormone disruption. Here again, power is key—the power of corporations and their paid politicians to do business as usual with no attention to a precautionary principle.

Orr's suggested cures all go in the right direction, but I wonder if they can get the job done. How many conservation biologists have become politically active as our civil liberties have started to follow biodi-

versity into oblivion and environmentalists are described as terrorists? If environmental scientists don't all take a stand, what hope is there to rally citizens less familiar with the gruesome trends humanity is facing? I've been told that we population biologists have no business mucking around in politics. Wrong! We have a moral imperative to do so. We have special expertise in areas that are critical to our grandchildren's futures. Failing to oppose a profoundly ignorant creationist president who thinks bombs are "nuclear" and not excoriating the "opposition" party, which is rolling over and playing dead, is in my view a gross abrogation of responsibility. As I have suggested elsewhere (Ehrlich 2000), we should be actively trying to set up more forums modeled on the IPCC (Intergovernmental Panel on Climate Change) to educate the public on critical issues such as loss of biodiversity, overconsumption, and the decay of the epidemiological environment. We need to generate much more ethical discussion within our society, focusing on issues such as what human life is all about and

what each generation's stewardship responsibilities should be. With the government largely in the hands of know-nothings, we must turn to industry to see if more smart businessmen can be persuaded to act in their own self-interest and ours (e.g., Daily & Ellison 2002). We must be very active in raising the questions, telling what we view as the unvarnished truth, and entering vigorously into the debate about the answers. If we don't raise the level of discourse on environmental issues (broadly defined to include security), who will?

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