

From Environmental Ethics to Climate Change

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***From Environmental Ethics to Climate Change:** Environmental ethics starts with human concerns for a decent, safe, supporting environment, and some think this shapes the ethics from start to finish. Environmental quality is necessary for quality of human life. Humans dramatically rebuild their environments; still, their lives, even when filled with artifacts, are lived in a natural ecology where resources, soil, air, water, climate are matters of life and death. Culture and nature have entwined destinies, similar to the way minds are inseparable from bodies. Therefore the ethics need to be applied to the environment.*

Key words: Environmental Ethics, Ecology and Health, Climate Change, Environmental Regulations.

INTRODUCTION

A great deal of the work of environmental ethics can be done from within such a best for-society account. A sustainable, healthy, and quality environment is desired by all for the benefits this brings to the human cultures residing on landscapes. Most environmental policy is of this kind. Humans are helped or hurt by the condition of their environment, and that there must be some ethic concerning the environment can be doubted only by those who believe in no ethics at all. Ethics will have a concern for what humans have at stake their benefits, costs, and their just distribution, risks, pollution levels, rights and torts, environmental sustainability and quality, the interests of future generations.

PRESENTING THE ISSUE

1. Global Health

The ecology is strikingly like medical science. Both are therapeutic sciences. Ecologists are responsible for environmental health, which is really another form of public health. In 2006 more than 34 million metric tons of chemical substances were produced in, or imported into, the United States every day. These substances ultimately enter Earth's environment; hundreds of these chemicals are routinely detected in people and ecosystems Worldwide, [1]. In the next quarter century such production is projected to double. Typically, in decades past a chemical was presumed innocent until proved guilty. But increasingly now it seems that especially the new more exotic (more unnatural) chemicals ought to be presumed guilty until proven innocent. Longstanding public policies governing chemical design, production, and use need deep restructuring in the light of new science on the health and environmental effects of anthropogenic chemicals. U.S. Congress has passed numerous laws to address these issues: notably the 1976 Toxic Substances Control Act, the 1977 Clean Water Act, the 1977 Clean Air Act, the 1980 Comprehensive Environmental Response, Compensation, and Liability Act. Those laws from several decades back accomplished much, but left many questions unaddressed. Also, once business became aware of increasing legislation enforcing compliance, they became more effective in lobbying against further legislation.

The ethical issues here are multiple, typically involving who gets the benefits and who bears the costs-equity and consent issues. There is spillover from rich to poor. The risks may be voluntary or involuntary. Workers may be advised of their higher risks but if they are financially strapped do they assume these risks voluntarily? The victims who live down water or downwind never gave any free, informed consent and usually have no means of proving their damages or asserting their rights. The wealthy (some of whom are producing the toxics, all of whom are enjoying benefits) can afford to protect themselves. The poor cannot. Such concerns are those of "environmental justice". Nevertheless, typically the rich can say NIMBY (not in my backyard); the poor cannot. But, as usual, things get more complex. While the developed countries can sometimes insulate themselves from unhealthy conditions in developing countries, this is not always the case. Developed countries, which may have thought themselves protected with their high technologies and

advanced medical systems, discover they are still linked with health, human and animal, in the developing World, even in wild nature, and vulnerable to disruptions there, to which they may also be contributing.

One of the classical proverbs of ecologists is that everything is connected to everything else. Though something of an overstatement, this proverb is true often enough to bear recalling. Increasingly, for better or for worse, it is proving true with links between ecological and human health, links that tie local to global events, in both nature and culture. The larger framework requires thinking holistically "based on the understanding that there is only one World and only one health", [2]. That links conservation concerns and medical concerns, in what is now called "conservation medicine". Human health requires thinking in ecological contexts, increasingly in more global ones. This further suggests more inclusive ethical concerns: global, international, and interspecific, beyond the immediate protection of human individuals from disease. That thought, "one World, one health," moves us toward thinking of healthy sustainable development, which, we again find, mixes human wellbeing with the health of ecosystems.

2. *Developing World Economy*

Capitalism has many defenders. Both democracy and capitalism have increased human wealth. With the collapse of socialist communism, it is the only game in town. Also the best game in town, many argue, because global capitalism promises the rest of the World what it has given to America, Europe, and similarly developed nations: a widespread improvement in average incomes. If we are to offer first World lifestyles to everyone, they will have to do what the developed West did - become enterprising capitalists. The World economic order needs to be increasingly integrated with the reduction of trade barriers such as tariffs, export fees, import quotas, protectionist policies. Markets will be more efficient when driven by competition and by national specialization, as each country can produce at home and sell widely what it has resources for and makes best. The World Trade Organization (WTO) promotes globalization. Everybody wins under laissez-faire economics, at least those who are competitive. Consequently, everybody shares/trades their pollutions.

A constant tension has been that nations with strong governments may regulate their industries and agriculture, forcing these (by permits, taxes, penalties) to be more environmentally responsible (avoiding pollution, promoting recycling). But this enlightened regulation disadvantages their industries in World markets, when other nations, with weaker or more corrupt governments, permit environmental degradation, in order to produce cheaper. China's recent economic advances have owed much to this willingness to trash its environment for profit. Breaking out of poverty requires an effective state to enforce workers' rights and environmental health. Otherwise, workers in such countries may themselves suffer as well, from water or air pollution, that their companies have no incentive to curtail. The World Trade Organization has opposed such environmental regulations by its member states. North American Free Trade Agreement (NAFTA) is often thought to be even worse in discouraging environmental regulations. The result: an environmental race to the bottom.

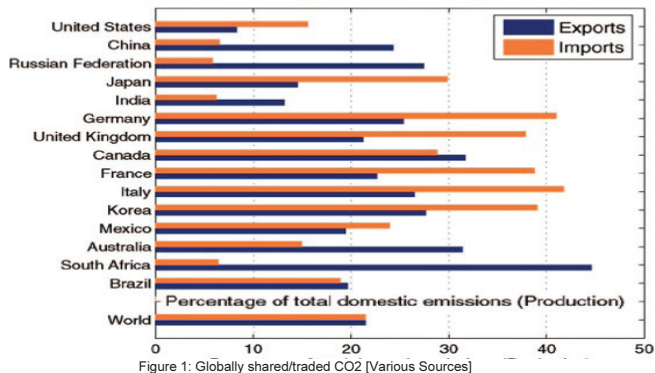
3. *Climate Disruption*

The climate is more global than the economy. Before we congratulate ourselves too much on being planetary managers, we ought to worry whether global warming is a global-scale issue that humans may be unable to deal with. The heat is first climatological, but secondly economic and political, and in the end moral. Global warming is a threat to the global Earth and is at the same time "a perfect moral storm," that is, an utter or consummate moral quandary, [3]. The storm is absolute, comprehensive, inclusive, and ultimate; there is an unprecedented convergence of complexities, natural and technological uncertainties, global and local interactions, and difficult choices scientifically, ethically, politically, socially.

Global warming is one human activity that might make everything on Earth unnatural.

Upsetting the climate upsets everything: air, water, soils, forests, fauna and flora, ocean currents, shorelines, agriculture, property values, international relations, because it is a systemic upset to the elemental givens on Earth. In past history, climate changes have disrupted societies, even destroyed them, [4]. The Intergovernmental Panel on Climate Change (2007) has raised levels of alarm and left little doubt that the unprecedented warming is human caused. Careful thinking and effective action can seem to get swamped out by the complexity of the issue. Each person's lifestyle at home, at work, at leisure, shopping, has an ever-enlarging "ecological footprint," most of all with global warming where the effects of our actions are globally dispersed CO₂ in the air moving around the globe (illustrated by import/ export in Figure 1, [5]). If we count the oceans and poles, then nearly 75% of the Earth's surface area is international space, beyond national jurisdiction, and (if humans are to claim it at all) the common heritage of mankind. Moreover, this space is critical to sustainability: the rainfall over national lands takes up water from the oceans, the ocean is a carbon sink, and polar ice determines sea levels. Climate interactions with these international regions are fundamental on a planetary scale. All persons equally depend on this common climate, but with radically different powers to affect it. Nearly 7 billion persons differentially contribute to degrading a common resource (the Atmosphere). Even in the powerful nations, there is a sense of powerlessness.

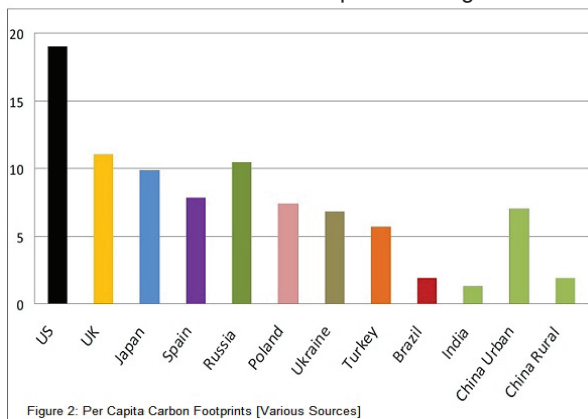
Embodied CO₂ in exports and imports



The global character makes an effective response difficult, especially in a World without international government, where, for other reasons (such as cultural diversity, national heritages, freedom of self-determination), such government may be undesirable. Some global environmental problems can be solved by appeals to national self-interest, where international agreements serve such national interests. But the damage needs to be evident; the results in immediate prospect (such as the Law of the Sea, the Convention on Trade in Endangered Species, or the Montreal Protocol on ozone depleting hydrocarbons). Global warming is too diffuse to get into such focus. Cost-benefit analyses are unreliable in the face of such uncertainties. There is something anomalous, problematic about taking the ultimate commons (the Atmosphere we all breathe, the climates in which we live) and parceling this out in private units (your right to pollute three tons of CO₂ into this Atmosphere). Even the term Climate Change, which came into effect in 1994, and has been signed "global warming" is misleading; better to speak of "climate change," or even "climate disruption." Atmospheric processes are quite complex; there may be more intensive droughts or more intense hurricanes. The climate extremes may be amplified; some winters colder, some summers hotter. Who wins, who loses, who can do what, with what result?

Generally, the developed nations are responsible for global warming, since they have emitted most of the carbon dioxide, (illustrated by carbon footprints, Figure 2, [5]).

Although global warming affects rich and poor, generally, the poorer nations are likely to suffer the most. No country is immune to climate change, but the developing World will bear the effects: some 75-80% of the costs of anticipated damages.



Where mitigating action is possible (such as limiting emissions), the present generation may bear costs, the benefits are gained by future generations. Postponing action will push much heavier costs onto those future generations; prevention is nearly always cheaper than cleanup. The preventers live in a different generation from those who must clean-up. Notice, that by 2050, when many of these adverse effects will be taking place, 70% of all persons living on Earth today will still be alive.

Concerned scientists are now asking whether geoengineering the intentional large-scale alteration of the climate system might be able to limit climate change impact. Recent prominent reviews have emphasized that such schemes are fraught with uncertainties and potential negative effects. The nuclear engineers will also offer plans to power the World with carbon-free nuclear energy, but that seems equally problematic. There are uncertainties and potential negative effects with regard to human safety, both from power plant accidents and from waste disposal, which is hazardous for millennia, as well as the dangers of use and abuse of nuclear materials to make bombs, by rogue nations or terrorists.

These complexities and difficulties are illustrated by the Copenhagen's meeting (every year since 1990), the conferences of the government parties to the United Nations Framework Convention on Climate Change (since 1994), participated by almost every nation in the World, and have failed to achieve negotiations on a global solution so far. The Framework Convention sets as a standard that global emissions are to be stabilized at safe levels "on the basis of equity in accordance with their common but differentiated responsibilities and respective capacities." Developed nations "should take the lead in combating climate change and the adverse effects thereof." It also recognizes "a right to sustainable development",[6]. Ethical concerns that became increasingly vocal surrounding Copenhagen were calls for climate justice and for increased funding for working out adaptations in the most vulnerable developing countries. These developing countries kept insisting that the developed countries were harming them (citing droughts and rising sea levels) and that increased harm was imminent and unjust. The developed countries resisted both setting any aggressive emissions targets and providing any serious funding for these developing countries. All this inability to act effectively in the political arena casts a long shadow of doubt on whether, politically or technologically, much less ethically, we humans are anywhere near being smart enough to manage the planet.

One might say: Well, obviously we should act on the best science available. But even that proves problematic. An analysis of some 1,300 climate scientists who have taken

public positions on climate change finds that the scientists who are critics of climate change are far less prominent in that field, than those who believe that climate change is serious. Some 97-98% of those most actively publishing in the field hold that climate change is serious. Of course, the skeptics say that the scientific establishment is biased against them and their views, [7].

CONCLUSION

Is there any hope, human or natural? Whether we have hope will depend considerably on what we think about human nature and our capacities to face an unprecedented crisis. Globalism, multiculturalism, and group conflict must be re-conceptualized from an ethical perspective if we are to appreciate and understand the extent to which people are likely to act on behalf of others in a global World. Humans have proved capable of advanced skills never dreamed of in our ancient past: flying jet planes, walking on the moon, building the Internet, decoding our own genome, setting aside wilderness areas, restoring endangered species, and designating World biosphere reserves. Claiming that we are biologically unable to act globally due to our genetic legacy, our inbuilt appetites, is no excuse.

This leads us to the challenge of the Global Environmental Ethics.

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The paper has been reviewed.

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