

## Justifying Sustainable Development: A Continuing Ethical Search

“Public discussion concerning the environment has become primarily a discourse of sustainability.”<sup>1</sup> Ethicists enter that discussion because, in the broadest sense, everything that humans value is at stake in seeking sustainable development, a sustainable biosphere. The surrounding world is the vital home for us all; if there are any duties at all they must come to focus when and where the on-going life-support system is placed in jeopardy. The broadest ethical principle underlying sustainability is that one ought to respect life. Next to taking life itself is taking the means for life. Non-sustainability puts life in jeopardy. Sustainability combines self-interest, protecting one's own life, and altruism, protecting the lives and interests of others.

The duty seems unanimous, plain and urgent; but this *prima facie* basic justification soon gets deflected by contentious objections. I examine five of these and then, concluding that sustainable development retains moral force, ask whether we can justify enforcing sustainability.

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### 1. Moral Umbrella, or Cover-Up?

There is an up-front, deep-down challenge. No one wishes non-sustainable development. But this big green umbrella covers up more than it protects, although promising to protect all that needs to be covered. Like many pluralisms, it rather easily becomes promiscuous. The generic duty, critics say, actually requires little but superficial agreement. The policy is so comprehensive, eclectic, elastic and conglomerate that really it does more harm than good because it fosters a constant illusion of consensus when there are in fact continuing contradictions. All co-opt the idea and justify their desired developments, while deep conceptual and substantive problems are glossed over with a rhetorically engaging word. Sustainable development is grand policy, asserted with vigour, and then weakened with a thousand diverse applications and analyses, leaving nothing much to do in focus. The result is business as usual, each doing his or her own thing as before. Sharachchandra Lélé concludes:

All of a sudden the phrase Sustainable Development (SD) has become pervasive ... the watchword for international aid agencies, the jargon of development planners, the theme of conferences and learned papers, and the slogan of developmental

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1. Douglas Torgerson, "The Uncertain Quest for Sustainability: Public Discourse and the Politics of Environmentalism", in *Greening Environmental Policy: The Politics of a Sustainable Future*, ed. Frank Fisher and Michael Black (New York: St Martin's Press, 1995), p. 10.

and environmental activists. ... SD is in real danger of becoming a cliché ... a fashionable phrase that everybody pays homage to but nobody cares to define ... an article of faith, a shibboleth, often used but little explained.

In short, SD is a "metafix" that will unite everybody from the profit-minded industrialist and risk-minimizing subsistence farmer to the equity-seeking social worker, the pollution-concerned or wildlife-loving First Worlder, the growth-maximizing policy maker, the goal-oriented bureaucrat, and therefore, the vote-counting politician ... In other words, SD is an attempt to have one's cake and eat it too.<sup>2</sup>

We get seduced by an attractive idea, which is in fact a smoke screen. Sustainable development is a bad idea, because we linger on in confusion, calmed by soothing rhetoric and false assurances, meanwhile postponing effective action. Beware of false prophets.

But we can be more positive. Leave the specifics unspecified. One should not expect development on diverse landscapes or with multiple peoples to take any standard normative forms. This maxim is exclusive in only one respect: no non-sustainable development. Otherwise, the maxim is globally inclusive. Over 150 nations have endorsed sustainable development. Sustainable development is a wide-angle lens, an encompassing, coalition-level policy. Broad goals, succinctly phrased, can be meaningful: "Government of the people, for the people, by the people"; "Think

globally, act locally". Maxims orient, set aspirations and thresholds, and allow pluralist strategies for their accomplishment, even though the specifics must be formed and reformed from nation to nation.

Perhaps the best strategy is to give "sustainable development" usefully specific content by identifying the alternatives: underdevelopment, poverty, hunger, malnutrition, disease, illiteracy, high infant mortality and low life expectancy. Underdevelopment grows worse where economic growth also produces increasing and unjustified inequality of wealth—if the rich get much richer and the poor get proportionately poorer. "On a global basis, the ratio of the income share of the richest 20 percent to the poorest 20 percent doubled over the past 30 years from 30:1 to 60:1."<sup>3</sup> The poor become more desperate, leading to frustration, disease, suffering, governmental instability, revolutions, environmental refugee-flight and uncontrolled immigration, further upsetting sustainable development. We can recognise non-sustainable development when we see it; there is too much on the world scene today.

Against these alternatives, positive sustainable development may be specified meaningfully enough for action:

Sustainable development seeks ... to respond to five broad requirements: (1) integration of conservation and development; (2) satisfaction of basic human needs; (3) achievement of equity and social justice; (4) provision of social self-determi-

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2. Sharachchandra M. Lélé, "Sustainable Development: A Critical Review", *World Development* 19, no. 6 (1991), pp. 607, 613, 618.

3. National Research Council, *Our Common Journey: A Transition toward Sustainability* (Washington, D.C.: National Academy Press, 1999), p. 67. See also World Bank, *World Development Report 2000/2001: Attacking Poverty* (Oxford: Oxford University Press, 2001).

nation and cultural integrity; and (5) maintenance of ecological integrity.<sup>4</sup>

These seem urgent moral duties: conserve and develop; satisfy basic human needs; be equitable and just; respect autonomy; respect integrity in both culture and nature. If sustainable development is a means to these ends, it is no mean duty. Sustainable development is respect for life.

## 2. Duties to Future Generations

"Sustainable" has the future built into the term and brings into focus inter-generational equity. "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."<sup>5</sup> The contemporary distributive principle worries whether the rich are too rich and the poor too poor. The sequential distributive principle worries whether the present robs the future of opportunity. If we were placed in John Rawls's "original position" and did not know the time and circumstances of our birth, we would advocate a world with equal opportunity transgenerationally.

Again, what seems a basic duty faces challenges. A frequent objection is that we cannot now have duties to non-existent persons, off in the future, fuzzy and faceless. We do not know their circumstances and needs. We ought to be moral to each other now; and we have to live life one generation at a time.

But, we reply, our own present lives are not so self-contained. True, values must be

embodied in those of us who are living presently, but these values are transmitted from the past through the present to the future. The self is more inclusive. Much of life's meaningfulness is in our relations with parents, grandparents, children, grandchildren, great-grandchildren. We typically do encounter "seven generations" (as Native Americans put it). One is both genetically and morally shortsighted not to count at least that far. We ought to bequeath to posterity an Earth with as much opportunity as was bequeathed to us.

To have all that we value and love truncated, or degraded, a century hence would not only be tragic to those then alive, but the realisation of this forthcoming tragedy would truncate the richness of our life now. Present and future have entwined destinies. The destruction of *our* future is a kind of murder (extinction), really a kind of suicide. Non-sustainable developments shut down hope. A now-generation, a "me" generation, is hopeless because it does not live, or love, beyond its own narrow self.

Birth and death, those end points articulating an individual life, so vital in an egoistic ethic, are submerged in the larger currents of life, which overflow those individuals that these flow through. We pass away, but we pass life on. We share a common life with posterity, not in that it now is available for reciprocal obligations, but in that a common life is transported from here to there. It would be a present wrong to deprive ourselves of a future, as it would also be wrong for us not to be instru-

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4. Peter Jacobs, Julia Gardner and David A. Munro, "Sustainable and Equitable Development: An Emerging Paradigm", in *Conservation with Equity: Strategies for Sustainable Development*, ed. Peter Jacobs and David A. Munro (Gland, Switzerland: International Union for Conservation of Nature and Natural Resources, 1987), p. 20.

5. World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press 1987), p. 43.

mental to future good. We live well only with these dimensions of retrospect and prospect.

In biology, where there have appeared any living organisms whose form of life is not sustainable, which fail to reproduce offspring that are well positioned to reproduce across generations, such organisms and their lineages soon become extinct. In ethics, in human life, this survival, which has been fact of the matter for so many millennia, ought to be so in this new millennium. We are constituted in memory and hope, and it is indeed a prophetic truth, endorsing the biological necessity, that where there is no vision the people perish. That old truth has new urgency.

Puzzled ethicists may stew over how best to sort out our duties to the future; while they do, most of us are going to find that the will to life which we have inherited from past generations flows through us and thence to the future. That is a natural urge, and readily combines with a moral ought. Such duties do result in the greatest good for the greatest number; future generations inherit that to which they have a right: opportunity for a quality life. And, alarmingly, we humans are now precariously positioned. Today, we shape the future potentially for the worse, as has no other generation before. For the first time in human history, we jeopardise the ongoing of *Homo sapien*.

A trouble is that far-off descendants, like distant races, do not have much "biological hold" on us; natural selection shaped only our conduct towards closer generations. For most of human history, in rural societies, people worried about children and grandchildren, maybe up to seven generations past and pre-

sent, but no further. Even those worries assumed that environmentally the future would be roughly like the past; the basic givens—soil, water, air, land—were presumed. Little in our behaviour affected those remote from us in time or space. People had little power to change these conditions for better or worse.

With the arrival of the industrial age and the increase of technology, people came to assume that the future would be better than the past. Only since the environmental crisis has it seemed possible, even likely, that the future will be worse than the present or past. "Sustainable development" inter-generationally is going to upset economic "discounting" of that future, an accounting device by which future goods are worth less than present ones. Discounting makes some sense where you can put money at interest, or where future goods are uncertain. But discounting makes no sense with goods that everyone is certain we will need as much tomorrow as we do today (air, water, soil, scenery). We must argue the case for selective discounting. To continue with across-the-board discounting is to commit the "telephone pole fallacy": the poles in the distance do seem to be shorter, but everyone knows that they are not. Neither are people on the horizon less valuable. To act under that illusion is immoral.

### 3. America's Duties to the World

Americans are often censured because the United States both dominates and consumes too much. We have too big an "ecological footprint",<sup>6</sup> demanding (and being wealthy enough to get) more and more. Americans get

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6. Malthis Waekernagel and William E. Rees, *Our Ecological Footprint: Reducing Human Impact on the Earth* (Gabriola Island, B.C.: New Society Publishers, 1996). *Ecological Economics* 32, no. 3 (2000) is a themed issue on the ecological footprint.

cheap textiles, and Mexicans get the pollution in their drinking water. Americans are faulted for the disruptive wealth they have gained and faulted further for not sharing it, destabilising the world. Achieving sustainable development requires Americans to cure their consumption disease and redistribute their wealth.

Put like that, however, the redistribution ethic runs headlong into some forceful challenges. No one can deny that wealth is asymmetrically distributed. The developed nations hold about one-fifth of the world's six billion persons, yet they produce and consume about four-fifths of all goods and services. Of the ninety million new people on Earth this year, eighty-five million will appear in the Third World, the countries least able to support them. Meanwhile, the five million new people in the industrial countries will put as much strain on the environment as the eighty-five million new poor.<sup>7</sup>

Nowhere does this asymmetrical distribution of either people or consumption suggest sustainable development. The critics make their point: the poor nations hardly have enough to eat, so how can fat Americans preach to them about how they should protect their environment and develop sustainably? So we have to ask whether this inequity prevents sustainable development.

Careful critics will counter that however desirable redistribution of wealth might be, this is not embedded in the principle of sustainable development *per se*. An ethical claim urging more sharing of wealth is different from an ethical claim that sustainable development is urgent. The one ought not to be disguised as the other. But then again, maybe what is disguised is the connection of the two. The current patterns, especially if amplified

by still more development of that kind, are likely to prove unstable. The social conditions that could support sustainable development will be undermined by discontent and revolution. The natural environment supporting sustainable development will be degraded by pressures from those who are impoverished of their just share.

So we do have to ask whether American wealth is justified, en route to justifying the sustainability ethic. And once again there are immediate defences: pies have to be produced before they can be divided and consumed, and who has produced this pie? Who deserves the pie? People ought to get what they earn. Most of us believe that some people can have more merit than others. The labourer is worthy of his or her hire. That really is what capitalism is all about: entrepreneurs who can produce what society needs are rewarded. That is also what fairness is all about. Fairness nowhere commands rewarding all parties equally; justice is giving each his or her due. We treat equals equally, we treat unequals equitably, and that typically means proportionately to merit. So there is nothing evidently unfair in the 4/5-1/5 distribution, not at least until we have enquired about differential earnings,

Others may point fingers and think our American wealth unjustified. In the United States, however, we rather think that our forefathers got what they got by Yankee ingenuity, hard work and thrift; they built the nation, ploughed the prairies, hoed the corn, split the rails, paved the roads, and so on. There is a commendable genius in the American blend of democracy, industry and labour; that is, in fact, what has made the United States the envy of much of the world. Similar things can be said for any prosperous nation. What the other

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7. World Bank, *World Development Report 2000/2001*.

nations need to do is imitate this, not fault us. Development reflects merit, not sin.

Those who emphasise the earnings model tend to recommend to the developing nations that they produce more, often offering to help them produce by investments which can also be productive for the developed nations (irrigation projects, hi-yield seeds). Developing nations do indeed wish to produce, but they also see the exploitation and realise that the problem is sharing as well as producing. Meanwhile, growth patterns caution us that producing can be as much part of the problem as of the solution.

Depending on the causes of asymmetrical wealth distribution, the duties required may be those of justice or charity. If I have wronged someone, I owe amends. Such an obligation of justice is considerably stronger than the obligation to charity. And, the argument continues, it is not particularly the province of either government or business to practise charity, though both are bound by justice.

So, Americans are reluctant to be saddled with guilt for their wealth or for the plight of the developing world. They might come to feel guilty about unsustainable practices in which they themselves participate, and try to do better. They might be sorry that other nations are still poor, be glad to participate in helping them develop, and worry about whether this helped development is sustainable. Americans are likely to act sustainably when it is in their own best interest, and to urge that other peoples do the same. Fortunately, what we ought to do, and what it is in our best interest to do, are complements as often as they are opposites.

#### **4. Economic Development**

The sustainability ethic seems to urge as much economic development as possible,

only to insist that we bring it into the orbit of sustainability. Once again, critics are soon objecting, saying that this both permits and prescribes the wrong goals, collapsing into maximum sustainable consumerism. But escalating consumerism is not the good life, even if we could escalate it sustainably. The economists answer in terms of quantity of goods produced and materials, which assumes "use" of them; but an ethicist needs to press ends, not means.

Producing more, even producing sustainably, is not an ultimate good. "Welfare" does not have "development" always and inevitably built into it. "Prosperity" might be of a no-growth kind. Lives can be "flourishing", and though they require sustained replacing of goods and supporting materials, they do not always require more. "Satisfaction" is as meaningful a goal as "growth". The admired developed nations may in fact be over-developed, and poor role models for the rest of the world. In fact, the whole "development" paradigm is Western, and the idea of "progress" now being foisted on the rest of the world a form of cultural imperialism. We in the West ought to listen to others as much as preach to them about quality of life. If we could break out of the sustaining quantities of the growth/development paradigm, maybe we could focus on sustaining development of the quality of life—and that in harmony with living on natural landscapes,

A "developer", typically an economist, will complain at this point that the meta-ethics have got out of hand quite as much as ethicists complain that the markets have. All developers wish to do is to meet human needs, and who can object to that? The sustainable development debate largely equates increase of production with meeting people's needs. There are in the world billions of needy per-

sons, and development is their one hope of alleviating this poverty. If such development is an evident good, then growth meeting these needs is an evident good. All the present debate requires is caution that any such development be sustainable. Put like this, sustainable development is something that every one favours.

But the objection returns. The paradigm is wrong: Develop! Develop! Develop! Sustain development! That is a sort of earth-eating mentality that regards Earth as one big pie to be consumed. More, more, more! Develop more! The maximisers have pushed the growth economy out of control, with devastating consequences looming. "Somewhere along the road to our present crisis we lost the idea of 'enough.' Somehow the twentieth century's version of progress lost its compass and began to see 'more' as the only desirable direction." This is "fatal consumption".<sup>8</sup>

In the half-century following the Second World War, there has been a massive shift of powers from nation states to global corporations. This was long obscured by the Cold War, but has become evident with the collapse of the Soviet socialist economy and the transformation of the still allegedly socialist Chinese economy into an effectively capitalist one. Capitalism is finally legitimated, the only game in town. For the economists, that seemed cause for rejoicing. But others are not so sure.

Our evolutionary past did not give us many biological controls on our desire for goods that were in short supply. We love sweets and fats, of which in Pleistocene times humans could seldom get enough, let alone too much. But now we overeat and grow fat—

unless we bring bodily appetites under disciplined control. Similarly, there are few biological controls on our desire to amass goods, to consume; for most people it has always been a struggle to get enough (indeed, for most people it still is). When we can consume, we love it and over-consume. Consumer capitalism transmutes a once-healthy pattern of desires into avarice.

Of course, greed is an ancient sin, one of the seven deadly sins. The great religions have always urged discipline over self-interests grown excessive. But with escalating opportunities for consumption, driven by markets in search of profits, we need more self-discipline, more ethics than come either naturally or traditionally. We must get our direction back under control, and the first constraint is at least to insist that any development be sustainable.

This is urgent for those who seek the greatest good of the greatest number, for those who recognise human rights to a quality life, for those who obey the Golden Rule. But if one is not so moved, this is prudent even for the self-interested developer, who wishes to be in business next decade and that his children inherit his business next generation. At the current pace, the danger the developer's children most face is a degraded environment. An imprudent developer also becomes immoral when, pressing ill-considered growth, he or she hurts those on whom these consequences fall, neighbours near or far today, or in generations to come.

The problem runs deep, right to the core of the prevailing economic system. We do not seek more intelligent and sustainable exploitation; when we seek that and that only,

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8. Robert F. Woollard and Aleck S. Ostry, eds., *Fatal Consumption: Rethinking Sustainable Development* (Vancouver: University of British Columbia Press, 2000), p. 3.

we overshoot. Maximisers always overshoot. We ought rather to seek, and enforce, harmony—sustainable development, yes—but really to prioritise a sustainable biosphere, human consumption contained within a biotic community.

### 5. The Sustainable Biosphere

Next enter the ecologists to claim that the economists, philosophers and politicians all need to be further corrected. The sustain economic/human-welfare ethic needs to be brought under a sustainable biosphere ethic. People and the earth have entwined destinies. But there are two poles. If the economy is prioritised, then anything can be done to the environment, so long as the continuing development of the economy is not thereby jeopardised. The environment is kept in orbit with economics at the centre. On this account the trajectory of the industrial, technological and commercial world is generally right because it benefits people; only the developers in their enthusiasm have hitherto failed to recognise environmental constraints.

At the other pole, claim the ecologists, the environment should be prioritised. We will demand a baseline quality of environment, and the economy must be worked out "within" such quality of life in a quality environment (clean air and water, stable soils, healthy residential landscapes, forests, mountains, rivers, rural lands, parks, wildlands, wildlife and renewable resources). The economy must be kept within an environmental orbit. One ought to conserve nature, the ground-matrix of life, and business ought to be in harmony with our residence on landscapes. The underlying conviction here is that

the current trajectory of the industrial, technological and commercial world is generally wrong. The environment is not some undesirable, unavoidable set of constraints. Rather, nature is the matrix of multiple values; many, even most of them, are not counted in economic transactions.

We now reach the fundamental/flip in "sustainable development", which is that it sees the earth as resource only. Sustainable development turns the spotlight on social development, and keeps ecological sustainability in the shadows. Better to turn the central focus on ecological sustainability, and see social development in that light. "Sustainable" is an economic term, but also and more fundamentally an environmental term. Formerly, nature was an abundant resource and commerce was the limiting factor. Now the roles are reversed: commerce is global and nature is increasingly the limiting resource. Humans now control 40 per cent of the planet's land-based primary net productivity, that is, the basic plant growth which captures the energy on which everything else depends.<sup>9</sup>

The solution is not increasingly to escape nature's constraints through smarter development. The solution is to see economy, the law of the market, within ecology, the law of our home. It was politically correct, but in fact a serious mistake, to leave "environment" out of the orienting catch-phrase "sustainable development", pretending that we were presuming it. "Human beings are at the centre of concerns for sustainable development." So begins the *Rio Declaration* of the "Earth Summit" held in Rio de Janeiro in June 1992. "Ecologically sustainable development"

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9. Peter M. Vitousek et al., "Human Appropriation of the Products of Biosynthesis", *BioScience* 36 (1986), pp. 368-73.



would have been a wiser goal, or "environmentally sound development". True, the *Rio Declaration* goes on to say that humans "are entitled to a healthy and productive life in harmony with nature", but here, too, it seems as concerned with their entitlements as with any care for nature.

Ecologists can be rather insistent about this biosphere focus. The Ecological Society of America, in a document it calls "unprecedented in its scope and objectives", makes the following declaration of principle: "Achieving a sustainable biosphere is the single most important task facing humankind today ... There is no higher priority for research."<sup>10</sup> The report laments an emphasis on sustainable commodities, "Much of the current research focuses on commodity-based managed systems, with little attention paid to the sustainability of natural ecosystems whose goods and services currently lack a market value."<sup>11</sup>

A better research priority is to understand "how to manage ecological systems so that they can remain productive to support natural processes and the human population". Research ought to be "for the specific purpose of prescribing the most effective restoration and management strategies to ensure the continuance of Earth's ecological systems".<sup>12</sup>

One way to keep the natural biospheric systems and the goods of human development entwined—with a focus on the environmental pole—is to ask about "ecosystem health". Ecosystem health gets science and

conscience together, the *is* and the *ought*. It gets people and nature together. Ecosystem science, like medical science, is science with a mission. Transcending medicine, however, ecosystem health does not have to be anthropocentric. Earth is the fundamental survival unit. A sustainable biosphere ethic is the one globally most justified.

## 6. Enforcing Sustainability

The sustainability ethic will require civic law protecting natural values, all the way—in the United States, for example—from Acts of Congress mandating clean air to those prohibiting campfires in alpine backcountry. Ethicists may be apprehensive; they dislike enforcing an ethic and prefer that it be voluntary. Others rejoin that without enforcement there cannot be the greatest good for the greatest number, the social contract will collapse, and the human right to a quality environment will be violated.

Concern for what humans have at stake will be the most persuasive part of such enforcement policy (and also politically correct) because it builds on a classical humanistic legacy, enforcing justice where persons threaten other persons, now extrapolated to environmental harms. Many environmental problems result from the incremental aggregation of actions that are individually beneficial. One may be doing what would be a perfectly good thing, a thing a person has a right to do, alone, but which, taken in combination with thousands doing likewise, becomes harmful. So these actions must be regulated

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10. Paul G. Risser, Jane Lubchenco and Samuel A. Levin, "Biological Research Priorities: A Sustainable Biosphere", *BioScience* 47 (1991), pp. 625-7.

11. Jane Lubchenco et al., "The Sustainable Biosphere Initiative: An Ecological Research Agenda: A Report from the Ecological Society of America", *Ecology* 72 (1991), pp. 374-5.

12. Risser, Lubchenco and Levin, "Biological Research Priorities: A Sustainable Biosphere".

when aggregated. Or we win individually only to lose collectively, the "tragedy of the commons". Garrett Hardin found that solutions will often require "mutual coercion, mutually agreed upon".<sup>13</sup> An action looks good, but webbed into complex systems, accumulating, it bites back.

A community nearing the carrying capacity of its resource base will find that long-term sustainability requires the suppression of short-term desires. Humans often do the wrong thing—"by nature" we might say—and law needs to "civilise" these instincts. Humans are not naturally selected to avoid these social traps. Our evolutionary history shaped us for short-range tribal survival, seldom asking us to consider even the tribal future, beyond our children and grandchildren. Humans never had to factor in the welfare of others thousands of miles away. Perhaps an ethics of the commons could work for tribes, but for national and global commerce, for a sustainable biosphere, we need regulation of the common good.

The communal good is mutual and requires broad social agreement. But it also requires enforcement, for some will be tempted to exceed the limits set by policy. This is the problem of "cheaters", who will in self-interest take advantage of co-operating others. Unless a society polices out the polluters, the rot will spread. Often we are not so much evil as thoughtless. Individuals may act as they have been accustomed to over many decades, without waking up to how these customary individual goods are aggregating to produce communal evils to which we are unaccustomed. The value tradeoffs typically come in invisible increments and in disguise—just a little more of what has always

so far been a good thing: cheap lumber permitting development and affordable housing, though we are harvesting more board feet than the nation's forests are producing annually, and also exploiting overseas supplies in poorer nations. Environmental law will be needed to curb prevailing practices.

This ethic will be voluntary, an enlightened and democratically achieved consensus, with the willing support of millions of citizens. But this voluntary compliance depends on the expectation that even those who do not wish to obey, or who do not even consider these dangers, will be required to do so. Environmental goods have long been assumed as nature's gift. Only in the last century have these goods come under jeopardy and threat. Now tacit goods have to be made explicit; assumed goods have to be guaranteed by legal enforcement. This is going to require nudging people along where they do not wish to go—not yet at least, though they may, in retrospect, be quite glad when they get there. Vested interests, often with much inertia, have to be divested. Habits have to be de-habituated. Self-interest is easy enough to rationalise under the old rationale. This is the way we have been doing it for decades; can what was right yesterday be wrong tomorrow?

Such established self-interest, combining with established and tacit goods, will quickly be asserted as individual rights. But we cannot leave old decisions in place when new information comes online, nor revise estimates of sustainability without in effect making new and different decisions. Nudging people out of their old habits and privileges is going to require enforcement. There is enforcement initially, when the

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13. Garrett Hardin, "The Tragedy of the Commons", *Science* 162 (1968), pp. 1243-8.

actors have as yet no will; but having done the required actions, the actors may afterwards come to supply the former deficiency of will.

Critics will demur that an enforced ethic is less than the best. People ought to *desire* sustainability, not be policed into it. Politically, "command and control" solutions are out of vogue. What we need instead, many cry, are "incentives". Ethically, law-like forms of ethics are also out of vogue; what we need instead is "caring". Others emphasise "virtues". Caring, virtuous persons need no rules, no policing.

Certainly, willing compliance is most desirable. Virtuous caring may be true of later stages of personal moral development, but in public life, caring in concert needs regulation. The virtuous ahead, in front, may need no laws, but those at the rear, and most of us along the way, need enforcement, reinforcement—which helps us move along.

Enforcement is more appropriate in communal space, and the environment is communal space.

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We humans are transforming the planet. In the directions in which we are now headed, there will be more people (at least half as many again as at present) and more consuming on a warmer, more polluted, less fertile, less resource-rich, less biodiverse, more weedy and pest-ridden, trashy planet, with the goods of that planet less equitably distributed. Setting new directions is demanding because it requires a more intense sense of duties to future generations, of duties of the rich towards the poor, of economics in the service of human welfare and of development in harmony with the biosphere. Ethically, this is a continuing search, ever more urgent, to justify sustainable development. □