1. Currents of environmentalism

This is a book about the growth of the environmental movement, an explosion of activism that recalls the beginning of the socialist movement and the First International, almost a century and a half ago. This time, in the networks society (as Manuel Castells calls it), there is no executive committee.

The environmental movement grows in reaction to economic growth. Not all environmentalists are against economic growth. Some might even be favourable to it because of the technological promises it carries. Indeed, not all environmentalists think and act alike. I separate here three main intertwined clusters in the environmental movement: the 'cult of wilderness', the 'gospel of eco-efficiency' and the 'environmentalism of the poor', which are as channels of a single river, branches of a big tree, or varieties of the same crop (Guha and Martinez-Alier, 1999, 2000). They have a lot in common, and all three are opposed by anti-environmentalists or despised or neglected by them. An explanation of the main clusters of environmentalism is now provided, which will stress the differences among them. One distinctive trait of each of them, emphasized here, is its relation to different environmental sciences. Their relations to feminism, or to state power, or religion, or business interests, or other social movements, are not less important as defining features.

THE CULT OF WILDERNESS

Chronologically, and also in terms of self-awareness and organization, the first current is the defence of immaculate Nature, the love of old-growth forests and wild rivers, the 'cult of wilderness' represented already a hundred years ago by John Muir and the Sierra Club in the United States. Some 50 years ago, Aldo Leopold's *Land Ethic* appealed not only to the beauty of the environment but also to the science of ecology. Leopold was trained as a forest manager. Later, he used both biogeography and systems ecology, together with his literary gifts and keen observation of wildlife, in order to present economic use and wilderness (wood production but also wildlife) as joint products of the forest (Leopold, 1970).

The 'cult of wilderness' does not attack economic growth as such, it
concedes defeat in most of the industrial world, but it fights a 'rearguard action' (Leopold's phrase) in order to preserve the remnants of pristine natural spaces outside the market. It arises from the love of beautiful landscapes and from deeply held values, not from material interests. Conservation biology, as it has developed since the 1960s, provides scientific support for this first current of environmentalism. Among its achievements are the Biodiversity Convention in Rio de Janeiro in 1992 (sadly, not yet ratified by the USA) and the remarkable Endangered Species Act in the USA, whose rhetoric appeals to utilitarian values but which sets a clear priority for preservation over market use. We need not answer or even ask here how the step from descriptive biology to normative conservation is taken, or in other words, whether it would not be possible for biologists to let evolution run its course towards a sixth great extinction of biodiversity (Daly, 1999). In any case, conservation biologists have concepts and theories of biodiversity (hot spots, keystone species) which show that the loss of biodiversity proceeds by leaps and bounds. Indicators of human pressure on the environment such as HANPP (human appropriation of net primary production of biomass – see Chapter 3) show that less and less biomass is available for species other than humans and those associated with humans. In some European countries (Haberl, 1997) forest areas are increasing, but this is because of the substitution of fossil fuels for biomass, and also increasing imports of feedstuffs. Europe is small and poor in biodiversity. What matters is whether the increasing HANPP in Brazil, Peru, Mexico and Colombia, in Madagascar, Papua New Guinea, Indonesia, Philippines and India, to name some of the countries of 'megadiversity', will lead to the disappearance of wildlife.

If not scientific reasons, there are other motives to preserve Nature, aesthetic and religious, even utilitarian (future edible species, future medicines) and one may also bring into play the presumed instinct of human 'biophilia' (Kellert and Wilson, 1993; Kellert, 1997). Moreover, some argue that other species have a right to exist: we have no right to annihilate them. This current of environmentalism sometimes appeals to religion as so often happens in the political culture of the United States. It may appeal to pantheism or to oriental religions less anthropocentric than Christianity and Judaism, or choose appropriate events in the Old Testament such as Noah's Ark, a remarkable instance of ex situ conservation. There is also in the Christian tradition the exceptional St Francis of Assisi concerned both about poor people and about some animals (Boff, 1998). More plausibly in a North or South American context, appeal is made to the sacredness of Nature in the indigenous beliefs which survived the European conquest, and there is always the possibility of inventing new religions.

The sacredness of Nature (or parts of Nature) will be taken in earnest in the present book because of its reality in some cultures and because it helps to clarify one central issue for ecological economics, namely, the incommensurability of values. Not only sacredness, also other values are incommensurable with economic values, but when sacredness intrudes in market society, then conflict is inevitable, as when, in the opposite direction, merchants invades the temple or indulgences were sold in the church. Over the last 50 years the cult of 'wilderness' has been represented at the activist level by the 'deep ecology' movement (Devall and Sessions, 1985) which favours a 'biocentric' attitude to Nature in opposition to an anthropocentric 'shallow' attitude. Deep ecologists dislike agriculture, whether traditional or modern, because agriculture has historically grown at the expense of wildlife. The main policy proposal coming out of this first current of environmentalism consists in keeping nature reserves, called 'national parks' or something similar, free from human interference. There is a gradation in the amount of human presence that protected territories tolerate, from total exclusion to co-management with local peoples. Co-management is seen by wilderness fundamentalists as making a virtue out of impotence. The HANPP index could become policy-relevant, once there is a critical mass of research and a consensus on calculation methods, and also its more exact relation to loss of biodiversity is elucidated. Then a country could decide to decrease its HANPP, say from 50 to 30 per cent over a period of time, and also world objectives could be established, very much as limits and quotas are now established or discussed on chlorofluorocarbon (CFC) or sulphur dioxide or carbon dioxide emissions, or on fishing of some species.

Biologists and environmental philosophers are active inside this first current of environmentalism, which irradiates its powerful doctrines from northern capitals such as Washington and Geneva towards Africa, Asia and Latin America through well-organized bodies such as the International Union for the Conservation of Nature (IUCN), the Worldwide Fund for Nature (WWF) and Nature Conservancy. Today, wilderness in the USA is not only preserved, it is also restored through the decommissioning of some dams, the restoration of the Florida Everglades and the reintroduction of wolves in Yellowstone Park. Whether wilderness will be tamed and reshaped into thematic parks (perhaps virtual wilderness thematic parks), nobody yet knows.

Since the late 1970s, the growth of wilderness environmentalism has been interpreted by political scientist Ronald Inglehart (1977, 1990, 1995) in terms of 'post-materialism', that is, a culture shift towards new social values implying, inter alia, an increased appreciation of Nature as material needs diminish in urgency because they are mostly satisfied. Thus the top US environmental sociology journal, Society and Natural Resources,
evolved out of a group doing leisure studies, as if the environment were a
Sunday luxury and not an everyday necessity. The membership of the
Sierra Club, the Audubon society, the WFF and similar organizations
increased considerably in the 1970s, so there was perhaps a culture shift
towards Nature appreciation among a part of the population of the USA.
Nevertheless, 'post-materialism' is a terrible misnomer (Martinez-Alber
and Herschberg, 1992; Guha and Martinez-Alber, 1997) in societies such as
the USA, the European Union (EU), or Japan, whose economic prosperity
depends on their use per capita of a very large amount of energy and
materials, and on the availability of free sinks and reservoirs for their carbon
dioxide.

In opinion polls, people in the Netherlands score at the top in the so-
called 'post-materialist' scale of social values (Inglehart, 1995) but the
Netherlands is an economy with a large throughput per capita of energy
and materials (World Resources Inst. et al., 1997). Against Inglehart, I
argue that western environmentalism grew in the 1970s not because the
western economies had reached a 'post-material' stage but, precisely the
contrary, because of material concerns about increasing chemical pollution
and nuclear risks. This materialistic, conflictual view of environmentalism
has been proposed since the 1970s by American environmental sociologists
such as Fred Buttel and Allan Schnaiberg.

Friends of the Earth was born around 1969 because the director of the
Sierra Club, David Brower, disagreed with his organization on several
issues, one of them being the Sierra Club's lack of opposition to nuclear
energy (Wapner, 1996: 121). Friends of the Earth took its name from a quo-
tation from John Muir: 'the earth can do all right without friends, but men,
if they are to survive, must learn to be friends of the earth'. Resistance to
hydroelectricity in the North American west, such as the Sierra Club was
offering, went easily hand-in-hand with the defence of beautiful scenery
and wild spaces in celebrated struggles at the Snake River or the Columbia
and Colorado rivers. Resistance to nuclear energy was to be based on the
dangers of radiation, worry about nuclear waste, and the links between the
civil and military use of nuclear power. Today, the problem of nuclear waste
deposits (Kuletz, 1998) is looming larger and larger in the USA. Now more
than 30 years of age, Friends of the Earth is a federation of diverse
groups from many countries. Some have a wilderness orientation, some are
concerned with industrial ecology, some are involved above all in environ-
mental and human rights conflicts caused by transnational corporations in
the Third World.

Friends of the Earth - Netherlands became well known in the early 1990s
because of its calculations of 'environmental space', showing that the
country was using environmental resources and services much beyond its
own territory (Hille, 1997) and indeed a concept such as the 'ecological
debt' (see Chapter 10) was incorporated in the late 1990s into the interna-
tional programmes and campaigns of Friends of the Earth.

THE GOSPEL OF ECO-EFFICIENCY

The currents of environmentalism are indeed intermingled. But the first
current, the 'cult of wilderness', has long been challenged by a second
current, worried about the effects of economic growth not only on pristine
areas but also on the industrial, agricultural and urban economy. A current
here baptized as the 'gospel of eco-efficiency', which focuses on the envi-
ronmental and health impacts of industrial activities and urbanization, and
also of modern agriculture. This second current of the environmental
movement is concerned about the whole economy. It often defends eco-
omic growth, though not at any cost. It believes in 'sustainable develop-
ment', in 'ecological modernization', in the 'wise use' of resources. It is
concerned with the impacts of the production of commodities, and with
the sustainable management of natural resource, and not too much with the
loss of natural amenities or the loss of the intrinsic values of nature.
Representatives of this second current scarcely use the word 'Nature';
rather, they use 'natural resources' or even 'natural capital' or 'environmen-
tal services'. Disappearing birds, frogs or butterflies 'bioindicate' that som-
ething is amiss, as did canaries in coalminers' hats, but they have not by
themselves a self-evident right to exist. This current is here called the
'gospel of eco-efficiency' in homage to Hays' description of the 'Progressive
Conservation Movement' in the USA between 1890 and 1920 as the 'gospel
of efficiency' (Hays, 1959). It is today a gospel of engineers and economis-
ts, a religion of utility and technical efficiency without a notion of the sacred.
Its main temple in Europe in the 1990s has been the Wuppertal Institute,
set in the midst of an ugly industrial landscape. Its best-known figure in the
USA a century ago was Gifford Pinchot, trained in European scientific
forestry management, but this current has roots also outside forestry in the
many studies in Europe since the mid-19th century on the efficient use of
energy and on agricultural chemistry (cycles of nutrients), as when Liebig
in 1840 sounded the alarm on dependence on imported guano, or when
Jevons in 1865 wrote his book on coal, pointing out that the increased
efficiency of steam engines could paradoxically lead to an increasing use of
coal by making it cheaper relative to output. Other roots of this current are
to be found in the many 19th-century debates by engineers and public
health experts on industrial and urban pollution.

Today, in the USA and even more in overpopulated Europe, where there
is little pristine nature left, the ‘gospel of eco-efficiency’ is socially and politically in command in the environmental debate. Key concepts are ‘Kuznets environmental curves’ (increasing incomes first increase environmental impacts but eventually they lead to decreased impacts), ‘sustainable development’ interpreted as sustainable economic growth, the search for ‘win-win’ solutions, and ‘ecological modernization’ (an expression coined perhaps by Martin Jänicke, 1993, and by Arthur Mol, who did research on the Dutch chemical industry: Mol, 1995, Mol and Sonnenfeld, 2000, Mol and Spearingen, 2000). Ecological modernization walks on two legs: one economic, eco-taxes and markets in emission permits; two, technological, support for materials- and energy-saving changes. This current rests, scientifically, on environmental economics (whose message is condensed into ‘getting the prices right’ by ‘internalizing the externalities’) and on the new discipline of industrial ecology, which studies ‘industrial metabolism’, as developed both in Europe (Ayres and Ayres, 1996, 2001) and in the USA (the Yale University School of Forestry and Environmental Studies, founded under Gifford Pinchot’s auspices, edits the excellent Journal of Industrial Ecology; a double first).

Ecology thus becomes a managerial science mopping up the ecological degradation after industrialization (Visvanathan, 1997: 37). Chemical engineers are especially active in this current. Biotechnologists tried to jump into it with promises of engineered seeds which will dispense with pesticides and will perhaps synthesize atmospheric nitrogen, though they have encountered public alarm at genetically modified organisms (GMOs). Indicators and indices such as material input per unit service (MIPS), and direct and total material requirement (DMR/TMR) (see below, Chapter 3) measure progress towards ‘dematerialization’ relative to gross national product (GNP) or even in absolute terms. Improvements in eco-efficiency at firm level are assessed by life cycle analysis of products and processes, and by environmental auditing. Indeed, ‘eco-efficiency’ has been described as ‘the business link to sustainable development’. Beyond its ‘greenwashing’ properties, ‘eco-efficiency’ describes a research programme of worldwide relevance on the energy and material throughput in the economy, and on the possibilities of ‘delinking’ economic growth from its material base. Such research has a long history (Fischer-Kowalski, 1998; Haberl, 2001). There is an optimistic side and a pessimistic side (Cleveland and Ruth, 1998) to the ‘great dematerialization debate’ which is now starting.

Classifications of the streams of a movement, as attempted in this chapter, are apt to annoy people who try to swim in their whirlpools. Nevertheless, a recent competent account of today’s American Environmentalism (Shabecoff, 2000) starts like this:

About a century ago, in the middle of a thunderstorm high in the Sierra Nevada, a gaunt, bearded man climbed to the top of a wildly swaying evergreen tree, in order, he later explained, to enjoy riding the wind. A few years later, the first head of the USDA Forest Service, a patrician, European-trained forester, was riding his horse through Rock Creek park in Washington D.C., when he had a sudden flash of insight. The health and vitality of the nation, he realized, depended on the health and vitality of the country’s natural resources. (Shabecoff, 2000: 1)

Easy to guess, the two characters described were John Muir and Gifford Pinchot, and the usual difference is traced between them: transcendental reverence towards Nature in one case, scientific management of natural resources for permanent use in the second case. More controversial, a third character is reported by Shabecoff to have presided over the birth of the modern environmental movement in the USA as Pinchot’s supporter: President Theodore Roosevelt, not an ‘eco-pacifist’ by a long shot. To this short list of three, other great precursors (G.P. Marsh) and great successors (Aldo Leopold, Rachel Carson, Barry Commoner) are added. As much as I would complain about the non-inclusion of Lewis Mumford, as much as I would like to emphasize other traditions of environmentalism, including the towering figure in the Americas of Alexander von Humboldt two centuries ago, the genealogy of US environmentalism is too well established to be modified. I accept it, as I also accept US intellectual hegemony over the environmental movements as a whole, at least since the 1970s. There have been, then, two main currents of environmentalism: the ‘cult of wilderness’ (John Muir) and the ‘gospel of eco-efficiency’ (Gifford Pinchot)

The history of environmental concern is more complicated than in my account so far. Around 1900, the American nation, like all western society, was committed to the notion of Progress; it was utilitarian. American civilization was just emerging from its frontier mentality, where it seemed natural to shoot anything you could. For example, the ornithologist Frank Chapman instituted the Christmas Bird Count in 1905 to awaken public opinion to the irrationality of the New Year’s shoots that were still common, just as the annual rattlesnake kills have remained a local sport in the southwest. Then there was also a reaction characterized by the sports fisherman’s complaints against stream pollution and dams, also against deforestation and the extermination of the bison. The Audubon movement was born (1896), more influential at the time than the Sierra Club. So the ‘John Muir versus Gifford Pinchot’ simplification of environmental currents in the USA leaves aside part of the story. In Europe and in America there were also many ecological critics of economics from the mid-19th century onwards, to whom I devoted a whole book 15 years ago. Why not quote again, for instance, from amongst the American authors, Henry Adams’ ‘Letter to the American Teachers of History’, with his (second-hand) discussion on entropy and the
economy? Why not the ‘energy imperative’ of Henry Adams’ mentor, Wilhelm Ostwald: ‘do not waste any energy, use it profitably’ (Martinez-Alier with Schlüpmann, 1987)?

In the colonial European context, Richard Grove explained the achievements and the limits of the early French and British attempts to preserve forests as long ago as in the late 18th century, at least in some small islands such as Mauritius, where the recipe seems to have been nine spoonfuls of sugar plantation for each spoonful of forest preservation—a better record than the Spaniards in colonial western Cuba or than the North Americans in post-colonial eastern Cuba in the early 20th century. Thus, as Richard Grove tells the story, a belief in the French ‘desecration’ theory on deforestation as the cause of rainfall decline led to legislation as early as 1791 in the Caribbean island of St Vincent, where some forests were strictly protected ‘in order to attract rain’. This environmental policy, also practised in other islands such as St Helena under the doctrines of Pierre Pouvre and other colonial observers, was implemented 120 years before Gifford Pinchot went up to Yale. In Brazil, Jose Augusto Padua (2000) has emphasized the explicit awareness which has existed since the early 19th century of the links between slavery, mining and plantation agriculture, and the ruin of the Atlantic forest. However, despite all such precedents, despite the very many environmental authors and writings from outside Euro-America, despite the complexities of environmental concern inside the USA itself, for the purposes of this book I reiterate the view that the two currents of environmentalism which command not only the USA but also the world scene are the ‘cult of wilderness’ and the ‘gospel of eco-efficiency’ (the latter with much European input in the last two decades). The German Greens, who used to be internationalists, have now joined the European eco-efficiency movement. The head of the European Environment Agency, Domingo Jimenez Beltran, gave a speech at the Wuppertal Institute in 1998 with the title, ‘Eco-efficiency, the European response to the challenge of sustainability’. I wrote back to him, saying I would write a book on ‘Eco-Justice, the Third World response to the challenge of sustainability’.

According to Cronon, ‘the idea of wilderness has for decades been a fundamental tenet – indeed, a passion – of the environmental movement, especially in the United States’ (Cronon, 1996: 69). There seems to be an affinity between ‘wilderness’ and the ‘American mind’ (Nash, 1982). We know, however, that there is much that is not ‘natural’ in wilderness. Thus, as Cronon makes clear (also Mallarach, 1995), the ‘national parks’ were established after the displacement or elimination of native peoples who lived in these territories. Yellowstone had no immaculate conception. Nevertheless, the relation between society and nature has been predominantly seen in the United States not in terms of changing socioecological history but in terms of a deeply held permanent reverence for ‘wilderness’. I rather believe in the Treluyer thesis, that the appreciation of Nature grew proportionately to the destruction of landscapes wrought by economic growth (Guha and Martinez-Alier, 1997: xii).

It has also been argued that, in the USA, contrary to received opinion, the second current, concerned with the efficient conservation and use of natural resources, preceded the first current, concerned with the preservation of (parts of) Nature, a chronology which is plausible because of the rapid industrialization of the USA in the late 19th century. Thus Beinart and Coates (1995: 46), in their short comparative environmental history of the USA and South Africa, considered the preservation of wilderness as being of more recent origin than the eco-efficiency current: ‘while the utilitarian ethos [of Pinchot] held sway, this preservationist tributary, only a trickle at the time, deserves attention because it would swell into the main channel of modern environmentalism’. Samuel Hays, an expert on the history of health and urban issues in the USA, concurs (Hays, 1998: 336–7).

However, in my view, the two currents of environmentalism (the ‘cult of wilderness’ and the ‘gospel of eco-efficiency’) are simultaneously alive, sometimes crosscutting. Thus the utilitarian search for efficiency in forest management might clash with animal rights. Or, in the opposite direction, real or fictitious markets for genetic resources or for natural amenities may come to be seen as efficient instruments for their preservation. The idea of bioprospecting contracts was pioneered in Costa Rica by a conservation biologist, Daniel Janzen, who evolved into a utilitarian resource economist. The Biodiversity Convention of 1992 emphasized mercantile access to genetic resources as the main instrument for conservation (see Chapter 6). Nevertheless, the merchandising of biodiversity is a dangerous instrument of conservation. The pharmaceutical companies have short time horizons (of 40 or 50 years at most), while conservation and coevolution of biodiversity is for tens of thousands of years. If the monetary returns of conservation are low in the short run, and if the logic of conservation becomes purely an economic logic, conservation will be even more threatened than before. Indeed, other American conservation biologists (Michael Soulé, for instance) complain that the preservation of Nature is losing its deontological foundation because economists with their utilitarian philosophy are taking over the environmental movement. In other words, a lamentable recent change has occurred in the environmental movement: the idea of sustainable development has overcome the idea of wilderness. This chronology of ideas is plausible, if sustainable development is taken at face value, but it is more doubtful if we see sustainable development, a twin brother of ecological modernization, as a reincarnation of Pinchot’s eco-efficiency.
Sometimes, those whose interest in the environment is exclusively in terms of preservation of wilderness exaggerate the ease with which the economy can dematerialize, and become opportunistic believers in the gospel of eco-efficiency. Why should this be so? By asserting that technical change will make the production of commodities compatible with ecological sustainability, they emphasize the preservation of that part of Nature which is still outside the economy. So the 'cult of wilderness' and the 'gospel of eco-efficiency' sometimes become bedfellows. Hence, for instance, the WWF and Shell partnership for the plantation of eucalyptus in several places in the world, the argument being that this will diminish pressure on the natural forests and will presumably also increase carbon uptake. The preface to a popular edition of Aldo Leopold's *A Sand County Almanac* (1949) by his son Luna Leopold (1970) contains a strong plea, written in 1966, against hydroelectric power in Alaska and the west which would flood a large portion of the breeding areas of migratory waterfowl. Economics should not be the deciding factor, wrote Luna Leopold 35 years ago, and in any case the economic accounts were flawed because 'alternative and feasible sources of electric power can be found'. Here we find the preservation of wilderness and a pro-nuclear position side by side. Not all American environmentalists would agree. Years earlier, in 1956, Lewis Mumford, more concerned with industrial pollution and urban sprawl than wilderness preservation, had already sounded the alarm against peacetime uses of nuclear power: 'we have scarcely yet begun to cope with the problems of ordinary industrial pollution. Yet, without even a prudent look over their shoulders, our governmental and industrial leaders are now proposing to manufacture atomic energy on a vast scale...before they have the slightest notion of how to dispose of the fissioned waste products' (Mumford, in Thomas et al., 1956: 1147).

ENVIRONMENTAL JUSTICE AND THE ENVIRONMENTALISM OF THE POOR

As seen throughout this book, both the first and second currents of environmentalism are nowadays challenged by a third current, variously called the environmentalism of the poor, popular environmentalism and the environmental justice movement. It has also been appropriately called livelihood ecology (Giri, 2000), even liberation ecology (Peet and Watts, 1996). This third current of environmentalism points out that economic growth unfortunately means increased environmental impacts, and it emphasizes geographical displacement of sources and sinks. Thus the industrial countries are dependent on imports from the south for a growing part of their growing requirements of raw materials or consumption goods, so that the oil and gas frontier, the aluminium frontier, the copper frontier, the eucalyptus and palm oil frontiers, the shrimp frontier, the gold frontier, the transgenic soybeans frontier... are advancing into new territories. This creates impacts which, before there is time to redress them through economic policy or changes in technology, have already been felt disproportionately by some social groups that often complain and resist (even though such groups do not necessarily describe themselves as environmentalists). Some threatened groups appeal to indigenous territorial rights, and also to the sacredness of Nature in order to defend and secure their livelihood. Indeed, there are long traditions in some countries (documented in India by Madhav Gadgil) of leaving stretches of habitat alone as sacred groves or forests. However, the main thrust of this third current is not a sacred reverence for Nature but a material interest in the environment as a source and a requirement for livelihood; not so much a concern with the rights of other species and of future generations of humans as a concern for today's poor humans. It has not the same ethical (and aesthetic) foundations of the cult of wilderness. Its ethics derive from a demand for contemporary social justice among humans. I see this both as a strength and a weakness. This third current points out that indigenous and peasant groups have often coevolved sustainably with Nature. They have ensured the conservation of biodiversity. Organizations representing peasant groups exhibit an increasing agroecological pride in their complex farming systems and varieties of crops. This is not only retrospective pride, there are also today many unacknowledged inventors and innovators, as the Honey Bee network proves in India (Gupta, 1996). The debate started by the Food and Agriculture Organization (FAO) on so-called 'farmers' rights' helps this trend, pushed by global non-governmental organizations (NGOs) such as RAFI (Rural Advancement Foundation International) and GRAIN (Genetic Resources Action International). Chemical and seed companies require payments for improved seeds and pesticides and they demand respect for their intellectual property rights through trade agreements, while traditional knowledge on seeds, pesticides and medicinal herbs has been exploited gratis without any recognition. This is 'biopiracy'. (See Chapter 6 for a detailed discussion.)

The environmental justice movement in the United States is an organized social movement against local instances of 'environmental racism' (see Chapter 8). It has strong links to the civil rights movement of the 1960s. One could say that, even more than the cult of wilderness, this movement for environmental justice is a product of the American mind so obsessed with racism and anti-racism. 'Grass-roots projects in inner cities and industrial areas around the country have drawn attention to urban air pollution, lead paint, transfer stations for municipal garbage and hazardous waste,
The environmentalism of the poor

and other environmental dangers that cluster in poor and minority neighborhoods' (Purdy, 2000: 6). So far, environmental justice as an organized movement has been almost confined to its country of origin, while popular environmentalism or livelihood ecology or the environmentalism of the poor are names given to the myriad of movements in the Third World that struggle against environmental impacts that threaten poor people who are in many countries a majority of the population. These include movements of peasants whose crops or pasture land have been destroyed by mines or quarries, movements of artisanal fishermen against modern high-tech trawlers or other forms of industrial fishing (Kurien, 1992; McGrath et al., 1993) that destroy their livelihood even as they deplete the fish stocks, and movements against mines or factories by communities damaged by air pollution or living downstream. This third current receives academic support from agroecology, ethnecology, political ecology and, to some extent, from urban ecology and ecological economics. It has also been supported by some environmental sociologists.

This third current is growing worldwide, emphasizing inevitable ecological distribution conflicts. As the scale of the economy increases, more waste is produced, natural systems are damaged, the rights of future generations are undermined, knowledge of plant genetic resources is lost, some groups of the present generation are deprived of access to environmental resources and services, and they endure a disproportionate amount of pollution. New technologies may decrease the energy and material intensity of the economy, but only after much damage has already been done, and moreover they may unleash the Jevons effect. Besides, new technologies often imply uncertain 'surprises' (analysed in the next chapter under the rubric of 'postnormal science'). Thus new technologies are not necessarily a way out for the conflict between the economy and the environment. On the contrary, the uncertain hazards from new technologies often increase environmental justice conflicts: for instance, over the siting of dioxin-producing incinerators, over the siting of nuclear waste disposal sites or over the use of transgenic seeds. The environmental justice movement has produced instances of participatory science, under the name of 'popular epidemiology'. In the Third World, the blending of formal and informal science, the idea not so much of 'science for the people' as of 'science with the people', characterizes the defence of the traditional agroecological peasantry and of indigenous groups, from whom there is much to learn.

The environmental justice movement in the United States became aware of itself in the early 1980s. Its 'official history' dates its first appearance from 1982, the first academic writings from the early 1990s. The notion of an environmentalism of the poor also has a 20-year history. Ramachandra Guha identified the two main early currents of environmentalism as 'wilderness thinking' (which we now call the 'cult of wilderness') and 'scientific industrialism', which we now call the 'gospel of eco-efficiency', 'ecological modernization', 'sustainable development' or 'managerial ecology'. The third current was identified from 1985 onwards as environmental 'agrarianism' (Guha and Martinez-Alier, 1997: ch. 4), similar to 'ecological narnism' (Martinez-Alier with Schlüpmann, 1987), implying a link between peasant resistance movements and the ecological critique of both agricultural modernization and 'scientific' forestry (cf. Guha's history of the Chipko movement; Guha, 1989, rev. ed. 2000).

In 1988, the Peruvian historian Alberto Flores Galindo, who was himself deeply interested in the old Nariñism from Eastern Europe and Russia, complained that the expression 'eco-narnism' demanded historical knowledge not widely available, and suggested that 'environmentalism of the poor' should be used instead. The journal Cambio from Lima in January 1989 published a long interview with the present author under the title El ecologismo de los pobres ('The environmentalism of the poor'). Under the auspices of the Social Sciences Research Council (New York), three international meetings were convened by Ramachandra Guha and myself in the early 1990s on varieties of environmentalism and the environmentalism of the poor (Martinez-Alier and Hershberg, 1992). As explained in Chapter 4, much research on political ecology was devoted in the 1990s to this current of environmentalism.

The convergence between the rural Third World notion of the environmentalism of the poor, and the urban notion of environmental justice as used in the USA, was suggested by Guha and Martinez-Alier (1997: chs 1 and 2). One of the tasks of the present book is precisely to compare the environmental justice movement in the USA and the more diffuse environmentalism of the poor worldwide, in order to show that they can be understood as one single current. In the USA, a book on the environmental justice movement could well carry the title or subtitle 'The environmentalism of the poor and the minorities', because this movement fights for minority groups and against environmental racism in the USA, but the present book is concerned with the majority of humankind, those who occupy relatively little environmental space, who have managed sustainable agroforestry and agricultural systems, who make prudent use of carbon sinks and reservoirs, whose livelihoods are threatened by mines, oil wells, dams, deforestation and tree plantations to feed the increasing throughput of energy and materials of the economy within or outside their own countries. How to do research on the thousands of local ecological distribution conflicts, which sometimes are not even reported in the regional newspapers, and which have not yet or never were picked up by local environmental groups and the international environmental networks?
In which archives will historians find the materials for reconstructing the grassroots history of the environmentalism of the poor?

What minorities and majorities are depends on context. The USA has a growing population which represents less than 5 per cent of the world’s population. Of the population of the USA, minorities comprise about one-third. In the world at large, the majority of countries, which together are the minority of humankind, have populations which in the US context would be classified as belonging to minorities. The Chipko movement, or the Chico Mendes struggle in the 1970s and 1980s, were environmental justice conflicts, but it is not necessary or useful to interpret them in terms of environmental racism. The environmental justice movement is potentially of great importance, provided it learns to speak not only for the minorities inside the USA but also for the majorities outside the USA (which locally are not always defined racially) and provided it gets involved in issues such as biopiracy and biosafety, or climate change, beyond local instances of pollution. The civil rights heritage of the environmental justice movement of the USA is also useful worldwide because of its contributions to non-violent Gandhian forms of struggle.

Thus, in summary, three clusters of environmental concern and activism are recognized:

- the ‘cult of wilderness’, concerned with the preservation of wild Nature but without anything to say on industry and urbanization, indifferent or opposed to economic growth, most worried by population growth, backed up scientifically by conservation biology;
- the ‘gospel of eco-efficiency’, concerned with the sustainable management or ‘wise use’ of natural resources and with the control of pollution not only in industrial contexts but also in agriculture, fisheries and forestry, resting on a belief in new technologies and the ‘internalization of externalities’ as instruments for ecological modernization, backed up by industrial ecology and environmental economics;
- the environmental justice movement, popular environmentalism, the environmentalism of the poor, livelihood ecology, and liberation ecology, grown out of local, regional, national and global ecological distribution conflicts caused by economic growth and social inequalities. Examples are conflicts over water use, over access to forests, over the burdens of pollution and over ecologically unequal exchange, which are studied by political ecology. Actors in such conflicts have often not used an environmental idiom, and this is one reason why this third current of environmentalism was not identified until the 1980s and 1990s. This book analyses environmental injustices of a century ago, and also of only a few months ago.

There are points of contact and points of disagreement among these varieties of environmentalism. We notice that one single environmental organization may belong to more than one variety. Even the Sierra Club has been known to publish books on environmental justice, although it has been devoted to wilderness above all. Greenpeace started some 30 years ago as an organization concerned with military nuclear testing, and also with the preservation of some endangered species of whales. It has moved towards environmental justice. It was instrumental in getting under way the Basel Convention banning exports of toxic waste to Africa and elsewhere. It has sided with, and instructed, poor urban communities in their fight against the risk of dioxins from incinerators. It has given support to mangrove communities in their fight against the shrimp export industry. Greenpeace has also gone sometimes, at least in Europe, into an eco-efficiency mode, for instance by endorsing a practical and economical eco-fridge in Germany which not only does not use CFC, but is also energy-efficient. One thing brings all environmentalists together. There is a powerful anti-environmental lobby, even more vocal in the south than in the north. In the south, environmentalists are often attacked by business and government (and the remains of the old left) as being motivated by foreigners wishing to stop economic development. In India, anti-nuclear activists are seen as anti-nationalists. In Argentina, anti-transgenic activists are seen as traitors by the agricultural export lobby.

NOTES

1. Or, rather, outside the industrializing economy, one should say, because nature protection in the form of a network of scientific nature reserves, zapovedniki, existed also in Russia under the Soviet regime (Weber, 1988, 1999).
3. For the previous lines, I am indebted to written comments made by Roland C. Clements. 28 January 2000.
4. Lecture at the School of Forestry and Environmental Sciences, Yale University, 4 February 2000, also Grove (1994).
5. "Environmentalism of the poor" was used in Gadgil and Guha (1995: ch. 4) and Guha and Martínez-Alber (1997: ch. 11). Probably, it first appeared in English (the academic equivalent of a work permit for a sans papiers) in Martínez-Alber (1991).