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The Ecologist

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The Ecologist

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Small is Beautiful: BIG is Subsidised

by the Editors

An introduction to the free 60-page booklet accompanying this issue of *The Ecologist*.

WITH THE GLOBALISED ECONOMY HE has so assiduously promoted crumbling on all sides, President Clinton's October address to the annual meeting of the World Bank and the International Monetary Fund (IMF) contained an unusual admission. A "new architecture" was needed for the global economy, Clinton said: some alterations in the current design would be required if similar collapses in the future were to be avoided.

What is most surprising about the President's remarks is the clear admission that the global economy follows a planned blueprint. Among its supporters, the rise of a corporate-dominated global economy has long been considered a natural process like evolution or continental drift – not a process planned and implemented through conscious choice.

If policy-makers inside and outside of government play a role, the argument goes, it is only to ensure that nothing impedes the invisible hand guiding globalisation's preordained progress. And if the corporate-led global economy is inevitable, then of course there is no point in questioning it, or working to implement alternative designs.

But as President Clinton implied, the globalized economy is far from evolutionary: it is, in fact, the direct product of planning and policy-making, and its creation has been heavily subsidised for many decades. More importantly, its course can be changed.

The supplement accompanying this issue of *The Ecologist* (subscription and ordered copies only) aims to make clear how public policy and taxpayers' dollars have given shape to and maintain today's corporate-dominated global economy, and how they have systematically undermined smaller-scale, more democratic modes of economic organisation around the world.

The current global architecture favours gigantism on many levels: from the borderless worldwide trading arena itself to the huge transnational corporations (TNCs) that dominate it: from mammoth monocultural agribusinesses to the urban metropolises in which concentrated populations increasingly consume the same mass-produced goods, entertainment and news

reports, and respond to the same globally-transmitted advertising messages. The systemic support given to this model stands in sharp contrast to the steady subversion of a more vernacular architecture – one comprising a diversity of economies which are smaller in scale, more decentralised and more dependent on local resources.

As *Small is Beautiful: Big is Subsidised* points out, the design of the global economy depends in part upon international agreements like the GATT and NAFTA, and on such supranational bodies as the World Bank, the IMF, and the World Trade Organisation. But there is far more to the architecture of globalisation. Transport infrastructures to facilitate long-distance trade are needed, as are communications networks to homogenise people and cultures worldwide, and to enable TNCs to monitor and co-ordinate their global enterprises.

Educational infrastructures are required to prepare children in every culture for their future roles as consumers, producers and corporate managers, and to implant in them the technophilic worldviews of industrialism. Research infrastructures are needed to provide industry with continual innovations to raise productivity, keep consumption high and draw ever more resources from the planet. Regulatory bodies are required to limit the damage caused by corporate excess and to assuage public uneasiness about the pace of technological change. A military infrastructure is needed to keep the less stable elements of the architecture in place.

These support systems are not paid for by the large enterprises that stand to benefit from them, but by ordinary taxpayers. So too are the costs of environmental and social breakdown, which follow the industrial model everywhere it is imposed.

Small is Beautiful: BIG is Subsidised highlights examples of the way larger scale is promoted by public policy in every corner of the world, from the most industrialised economies to the least. In so doing, it not only disproves the notion that the trend towards ever-larger scale is inevitable, but shows that it is within our hands to move in a quite different direction.○

Burning Forests: Arson by Developers?

by Homero Aridjis

WHILE MEXICO and the world were being consumed by World Cup fever, almost one third of Los Chimalapas, the most biodiversity-rich ecosystem of the Americas, was ravaged by over 60 fires. The worst fires are still raging in El Espinazo del Diablo (literally "the Devil's backbone"), the biological corridor that links the Selva El Ocote Biosphere Reserve, an area of 48,140 hectares of upland forest, with the moist tropical forest of Los Chimalapas. The area straddles the states of Oaxaca and Chiapas, and is full of important archaeological sites – some of which have been flooded by the Netzahualcōyotl dam. The danger, even now, is such that, even if the rains do come to the rescue, it could be another two weeks before the larger fires are extinguished, since several are currently out of control, and some are underground. The carnage has not only devastated irreplaceable flora and fauna of Mexico, but has also upset the economy of the people who live in the area, and whose children will know only an altered climate, calcinated rocks, piles of ash, and serious water shortages. In short: poverty.

• • •

The area has provided a 'paradise on earth', but it has also been the scene of squalid human conflicts, beginning with the border disputes between the states of Chiapas, the clearcutting by loggers and ranchers, the damage caused by the traffickers of flora and fauna and the threat of government and business projects, such as the 240-kilometres-long, four-lane Chiapas toll road from Veracruz to Ocozacoautla, whose original design would have cut through the El Ocote Reserve, the far north-eastern sector of Los Chimalapas, and the far eastern end of Uxpanapa. Equally if not more disturbing is the plan to build a trans-isthmian corridor which would consist of a high-speed train joining the Pacific to the Gulf of Mexico, and a four-lane highway from coast to coast: it would be a "dry canal" (a dream since the early 20th century of both Mexican and foreign governments) – an alternative to the Panama Canal. In February 1998, Carlos Ruiz Sacristan, Secretary of Communi-

cations and Transportation, declared triumphantly that the Tehuantepec Isthmus Integral Development Program would begin this year; he described it as "a consensus-backed project" with an investment of 250 million to 300 million dollars. But Luis Miguel Robles Gil of the Chimalapas Defense Committee said that a project of this magnitude "would lead to soil depletion, the disappearance of species, attrition of ground water supplies, the indiscriminate use of agro-chemicals, high levels of contamination of the bodies of water, and strong pressure on the forests."

Researchers Ana Luisa Anaya and Marcela Arvarez have estimated that a single hectare of undisturbed tropical vegetation in Los Chimalapas may be home to as many as 900 plant species and more than 200 animal species. According to the booklet *Reservas de la Biosfera y Otras Areas Naturales Protegidas de Mexico* (Biosphere Reserves and Other Protected Natural Areas of Mexico), the forest com-

The Mexican government and private sector are known to have a great many ambitious development plans for the region, and so it has been suggested among others by Rosendo Montiel that the fires are no accident. "It's very peculiar that virgin forest, where the animals are tame and the damp vegetation hard to burn, should have caught fire in a straight line."

plex of Los Chimalapas, Uxpanapa and El Ocote is one of the most important centres of biodiversity in Mexico and worldwide. In addition, since it is the habitat of threatened, rare and endemic species, and given its complex of caves and caverns, geological formations and archaeological wealth, it is a priority conservation zone. In the Selva El Ocote there are over 2,000 species of plant and fungus, 12 precious



For nine months, the author, a Mexican poet and international spokesman for freedom of expression, has not stepped out of his house without the bodyguards that shadow him everywhere. He has been the victim of repeated death threats which many people believe are connected with his outspoken criticism of indiscriminate economic development.

tropical woods such as mahogany, and the Chamaedora (xiate) palm. And in terms of animal wildlife, El Ocote has more than 500 species of higher vertebrate, 3,000 species of insect and arachnid, 445 species of diurnal butterfly, 31 species of amphibian, 62 species of reptile, 184 species of mammal (such as the jaguar, the ocelot, the white-lipped peccary, the howler monkey, and the spider monkey, all in danger of extinction). Also native to the area is the American crocodile. There are 350 bird species, 38 of them migratory birds from the United States and Canada, two of the three species of toucan found in Mexico, and the King vulture, Harpy Eagle, White Hawk, Quetzal and Scarlet Macaw. Large groups of these species have been seen trying to escape the flames.

• • •

We will not know the extent to which unique species have become extinct in the Selva El Ocote and Los Chimalapas, nor the negative effects in the Grijalva and Usumacinta watersheds, until the flames are put out. But no matter how much money, if any, is spent on reforestation of the area, if the Espinazo del Diablo is fractured by fire, and if the biological corridor is destroyed, the effects will be largely irreversible, and the world will have lost one of its most valuable treasures. We will

have brought about yet more extinctions in the name of development.

The Mexican government and private sector are known to have a great many ambitious development plans for the region, and so it has been suggested, among others by Rosendo Montiel, coordinator for ecological land management for Maderas de Pueblo del Sureste, a community-based group working in Los Chimalapas, that this holocaust of nature, endless fires throughout the forests, is no accident: "It's very peculiar that virgin forest, where the animals are tame and the damp vegetation hard to burn, should have

caught fire in a straight line. The Americans say that someone could have dropped so-called ping-pong balls from the air, which are balls impregnated with chemical substances used in the United States to set counter-fires and which cause flames to spring up. In Mexico, as in Brazil and Indonesia, fire has been an efficient means of doing away with the forest."

A protected reserve, for wildlife and peasants alike, has yet to be created in Los Chimalapas, as its inhabitants would like. In June, during a meeting between Mexican Minister of the Environment Julia Carabias and people from the local com-

munities, the latter said that it was of no use to them for the government to establish the biosphere reserve instead of a reserve managed by the peasants themselves. "El Ocote is a biosphere reserve and it is burning. Timber is being looted, and the people live in worse conditions of misery."

Who can blame them? Why would anyone want a paradise protected on paper, but ecologically devastated in practice? ○

Homero Aridjis is a poet, novelist, founder and President of the environmental activist Group of 100, former ambassador of Mexico and current President of International PEN.

Technological Fundamentalism

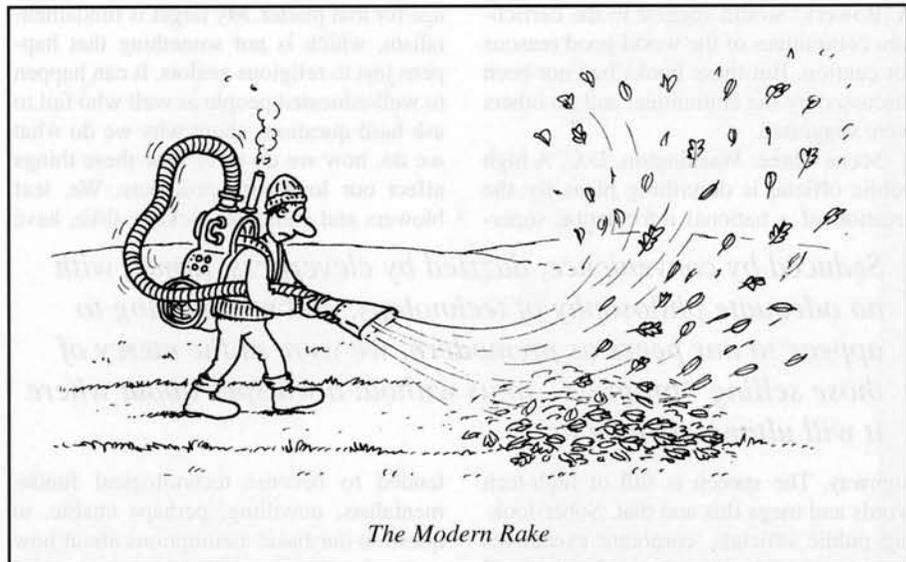
by David W. Orr

"The implied objective of 'progress' is – not exactly perhaps the brain in the bottle, but at any rate some frightful subhuman depth of softness and helplessness."

– George Orwell

SCENE ONE: Entry to a classroom building. With a deafening noise he revved up the two-cycle engine on a blower preparing to clean the leaves, paper and cigarette butts that had accumulated in the entryway. He made considerable progress herding the debris away from the building and down the sidewalk until cigarette butts lodged in the seams in the concrete. Turning, he blasted the miscreant trash at right angles, but this only blew the debris onto the grass, posing still greater difficulties. Moving cigarette butts and bits of paper in an orderly fashion through grass is a challenge, even for a machine capable of generating gale-force winds. Then the apparatus stalled out – "down time" it's called. In that moment of sweet silence, I walked over and inquired whether he thought a broom or rake might do as well. "What do you say?" he responded. "Can't hear anything; my ears are still ringing!" I repeated the question. "S'pose so," he said, but they think I'm more productive with this piece of *&!@."

Perhaps he is more productive. I do not know how experts calculate efficiency in complex cases like this. If, however, the goal is to disrupt public serenity, burn scarce fossil fuels, create a large amount of blue smoke, damage lung tissue, purchase expensive and failure-prone equipment, frazzle nerves, interrupt conversations and



improve the market for hearing aids, then rakes and brooms cannot compete. When the technology and the task at hand are poorly matched, however, there is no real efficiency. In such cases the result, in Amory Lovins' telling phrase, is rather like

we were casually asked to pronounce our blessing on a plan to link the entire campus so that everyone would be able to communicate with everyone else via computer, 24 hours a day, without leaving dormitory rooms or offices. This, we were told, was

If the goal is to disrupt public serenity, burn scarce fossil fuels, create a large amount of smoke, damage lung tissue, purchase expensive and failure-prone equipment, frazzle nerves, interrupt conversations and improve the market for hearing aids, then rakes and brooms cannot compete.

"cutting butter with a chainsaw".

Scene Two: Committee meeting. I serve on what is called with some extravagance the Educational Plans and Policies Committee. It is a committee to which one is elected, or sentenced, depending on one's view of committee duty. In one meeting

what our competitor colleges were doing. We were assured that this was the future. Information, we were informed, is doubling every six months. Electronic networking was judged to be an adequate response to that condition of information overload. Curious, I inquired what was

Editorials

known about the effects of computers on what we and our students think about or how well we can think about it. In other words, are there some things worth thinking about for which computers are ill-suited. Can computers teach us to be properly sceptical of computers? Would people so wired and networked still want to talk to each other face to face? Would they remember how? Would they be sane? Or civil? Would they still know a tree from a bird? And after all the hype, what is the relation between information, knowledge and wisdom? My fellow committee members, thoughtful persons all, stirred impatiently. After an awkward pause, one said: "We've been through this before and don't need to rehash the subject." I asked, "When?" Another awkward pause. No one could recall when that momentous conversation had occurred. "Well it's all in the literature," said another. I asked for citations. None was forthcoming. What I had read on the subject by Joseph Weizenbaum,¹ Theodore Roszak,² Neil Postman³ and C. A. Bowers,⁴ would suggest to the curriculum committees of the world good reasons for caution. But these books had not been discussed by the committee, and no others were suggested.

Scene Three: Washington, D.C. A high public official is describing plans for the creation of a national information super-

Seduced by convenience, dazzled by cleverness, armed with no adequate philosophy of technology, and not wanting to appear to our peers as premodern, we were at the mercy of those selling "progress" to us without a whisper about where it will ultimately take us.

highway. The speech is full of high-tech words and mega this and that. Sober-looking public officials, corporate executives and technicians glance at each other and nod approvingly. Members of the press dutifully scribble notes. TV cameras record the event. The questions that follow are mostly of the "gee whiz" kind. From



An Economic Butter-knife

We, leaf blowers and computer jockeys alike, have tended to become technological fundamentalists, unwilling, perhaps unable, to question our basic assumptions about how our tools relate to our larger purposes and prospects.

the answers given one might infer that the rationale for a superhighway is: (a) it will make the American economy more "competitive" because lack of information is what ails us; and (b) it's inevitable and can't be stopped anyway.

• • •

I am neither for nor against leaf blowers, computers, networks, or the information age for that matter. My target is fundamentalism, which is not something that happens just to religious zealots. It can happen to well-educated people as well who fail to ask hard questions about why we do what we do, how we do it, or how these things affect our long-term prospects. We, leaf blowers and computer jockeys alike, have

tended to become technological fundamentalists, unwilling, perhaps unable, to question our basic assumptions about how our tools relate to our larger purposes and prospects.

Scene One is an obvious case of technological overkill in which means and ends are not well calibrated. The deeper problem, noted by all critics of technology from Mary Shelley and Herman Melville on, is that industrial societies are long on means but short on ends. Unable to separate "can do" from "should do", we suffer a kind of technological immune deficiency syndrome that renders us vulnerable to whatever can be done and too weak to question what it is that we should do.

In Scene Two, the committee did not know how computers affect what we pay attention to and how this, in turn, affects our long-term eco-

logical prospects. Not knowing these things and being unwilling to admit them as honest, even important questions, we did not know whether all of this technology could be used for good or not. Assuming that it could be used to good effect, we did not know how to do so. Seduced by convenience, dazzled by cleverness, armed with no adequate philosophy of technology, and not wanting to appear to our peers as pre-modern, we were at the mercy of those selling "progress" to us without a whisper about where it will ultimately take us.

In Scene Three, much of the same is true on a larger scale as we approach the entry ramp of the "information superhighway". Smart and well-meaning people believe this to be the cat's meow. But by what standard should we judge this enterprise? Will it, on balance, help us preserve biotic potential? Will it help to make us a more sane, civil and sustainable culture? In this regard it is enlightening to know that a substantial part of the traffic now appearing on the superhighway so far built has to do with the distribution of pornography. Furthermore, the phrase "information superhighway" invites comparison with the interstate highways built in the United States between 1956 and the present. Any fair accounting of the real costs of that national commitment would include the contributions of the interstate system to the following problems:

- Damage to urban neighbourhoods and communities
- Highway deaths
- Loss of biological diversity
- Damage to fragile landscapes
- Urban sprawl
- Polluted air
- Acid rain
- Noise pollution
- Global warming
- Destruction of an extensive national railway system
- Distortion of American political life by an automobile lobby
- The foreign policy consequences of dependence on imported oil.

We, the children of the people who made or acquiesced in that decision, might prefer that these costs had been forthrightly discussed in 1956. Years from now what might our children and grandchildren wish we had thought about before we built an "information superhighway"? We cannot know for certain, But we might guess that they would want us to have asked something like the following:

First, they might wish that we had been clearer about the purposes of the information superhighway. What problem was it intended to solve? What was the master

The twentieth century is littered with failed technologies, once believed to be good in their time and promoted by smart and well-meaning people.

idea behind it and how might it support or undermine other master ideas in Western culture having to do with justice, fairness, tolerance, religious freedom and democracy?²⁵ Looking back, the rationale behind the interstate highway system was never much debated. To the contrary, it was presented as a combination of "national security" and "economic competitiveness", phrases that for nearly 50 years have been used to foreclose debate and conceal motives that should have been publicly examined.

Second, our descendants may wonder why we were so mesmerized by the capacity to move massive amounts of information at the speed of light. What kind of information for what purposes needs to be moved in such great quantities at that speed? At what velocity and volume does information become knowledge? Or wisdom? Is it possible that wisdom works inversely to velocity and volume? The bottle-neck in this system will always be the space between our two ears. At what rate

can we process information, or sift through the daily tidal wave of information to find that which is important or even correct? It would seem sensible to move the smallest possible amount of information consonant with the largest possible ends at a speed no faster than that at which the mind can assimilate it and use it to good purpose. This speed is probably less than that of light. Relative to our long-term ecological prospects, the most valuable information may prove to be that which is accumulated slowly and patiently – the kind of information that is mulled over and sometimes agonized over and with the passage of time may become cultural wisdom.

tyre manufacturers. It was less useful to those unable to afford cars, who once relied on trains or buses. It was decidedly not beneficial to those whose communities were bulldozed or bisected to make way for multiple-lane expressways. Nor was it useful to those who had to spend a significant part of their lives driving to their newly dispersed workplaces. Accordingly, our descendants might wish us to ask whether access to the information superhighway will be fair. Will it be equally open to the poor? Will it be used to make society more or less equitable? Or more sustainable? Or will it be said of the information superhighway that it, like the

For a technological society, Garrett Hardin's query "what then?" is the ultimate heresy. But, standing, as we do, before such technological choices as nanotechnologies, genetic engineering, virtual reality machines and information superhighways, no previous society needed its heretics more than ours.

Third, future generations may wish that we had asked about the distribution of costs and benefits from the information superhighway. Looking back, the interstate highway system was a great boon to the heavy construction industry, car makers, oil companies, insurance companies and

"computer, as presently used by the technological elite, is... an instrument pressed into the service of rationalizing, supporting and sustaining the most conservative, indeed reactionary, ideological components of the current Zeitgeist?"²⁶

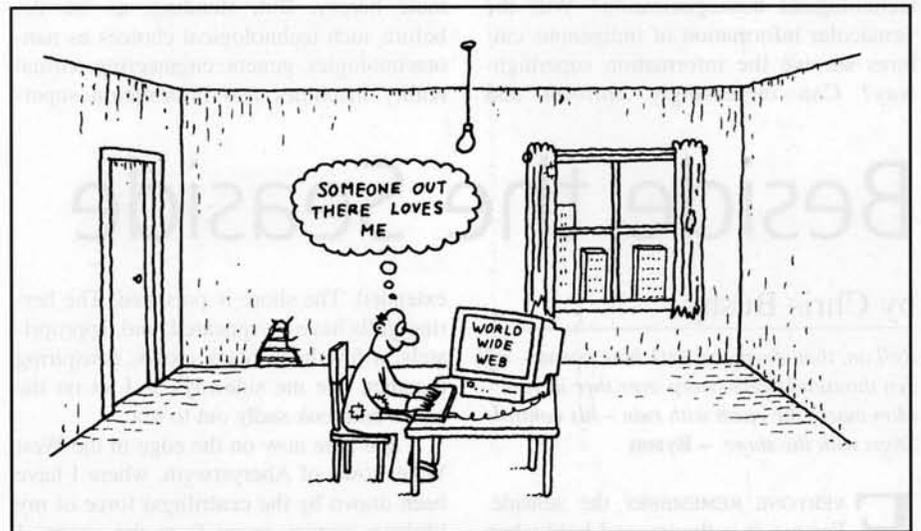
Our descendants will also wish that we

Cyber-sickness

According to the findings of a two-year study, published in *American Psychologist* in September, there is a direct correlation between "surfing the Internet" and depression, loneliness, and the breakdown of social relationships.

About seven million people in Britain have access to the Internet, and an increasing number appear to be succumbing to a malady known as internet addiction syndrome (IAD). The study shows that interaction with friends and family declines in direct relation to the amount of time spent online, while loneliness and depression increase. Significant numbers of marriages have broken down as a result, and users commonly fall deeply into debt, and work or study suffers – largely because those concerned have spent all night browsing and find it hard to keep awake.

Symptoms, according to Kimberly Young, a psychologist at the University of Pittsburgh and author of *Caught In The Net*, include lying to family or colleagues about the amount of time spent on the internet; restlessness, irritability and anxiety when not at the computer; and repeated but unsuccessful attempts to cut down on the time involved. Spending more than five hours a day online is generally considered a



danger sign.

The Internet, according to the author, could be as addictive as drugs, alcohol or gambling. "In Cyberspace, a shy person can become outgoing, a non-sexual person can be sexual, a non-assertive person can be forceful or an aloof person can be gregarious... It may not be long," she warns, "before Internet addicts are attending drying out centres to rediscover some basic social skills – holding a normal conversation, for instance."

The internet addiction service run by Marissa Hecht Orzack, a psychologist at

Harvard University's McClean Hospital in Belmont, Massachusetts, has received hundreds of requests for help.

According to Andre Levy, a London-based computer expert, "People who use the Internet to a great extent are living their lives in a substitute world, one in which they have no physical interaction."

Adapted from "Trapped in a Web of Misery" an article by Jon Ashworth in *The Times*, Wednesday, September 2nd, 1998, page 15.

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had asked who will pay for the information superhighway. By one estimate, automobiles receive about \$300 billion in various public subsidies each year.⁷ They are supported by public road-building revenues, various taxes and tax loopholes, and by Defense Department expenditures to prepare for and fight wars to guarantee our access to oil. Might the same be true of the costs of the information superhighway?

Fourth, our descendants may wish that we had asked whether the standardization and uniformity imposed by information technology will homogenize our thoughts and language as well. For comparison, automobiles, interstate highways and their consequences have served to homogenize American culture. Because of the scale of our automobility, our economy is less diverse and less resilient than it otherwise might have been. Our landscape has been rendered more uniform and standard to accommodate 200 million cars and trucks. Highways and automobiles have exacted a sizable toll on wildlife and biological diversity. Automobiles destroyed other and slower means of mobility including walking and bicycling. Will the imperatives of the information superhighway have analogous effects on our mindscapes? Will standardization and uniformity, shaped to fit information technology, homogenize our thoughts and language as well? Can cultural differences or cultural diversity survive technological homogenization? Will the vernacular information of indigenous cultures survive the information superhighway? Can increasingly uniform and

standardized societies protect cultural diversity? And if they cannot, can they protect biological diversity?

The twentieth century is littered with failed technologies, once believed to be good in their time and promoted by smart and well-meaning people. Automobiles, H-bombs, CFCs, toxic chemicals and television all promised great things. These things failed in large part because they succeeded too well. They became too numerous, or too efficient at doing one thing, or intruded too much in places where they were inappropriate. A world with 100 million automobiles, for example, is probably O.K. One with 500 million cars has more problems than I can list and fewer options for solving them than one might wish. Moreover, each of these technologies has caused unforeseen ecological and social problems which we wrongly call "side effects". There are, however, no such things as side effects, for the same reason that many technological accidents, as sociologist Charles Perrow once pointed out, are "normal accidents".⁸ Given human errors and acts of God, all such happenings are predictable events. What some call "side effects" of technology are the fine print of the deal, when we think we are buying only convenience speed, security and affluence.

For a technological society, Garrett Hardin's query "what then?" is the ultimate heresy. But, standing, as we do, before such technological choices as nanotechnologies, genetic engineering, virtual reality machines and information super-

highways, no previous society needed its heretics more than ours. Information superhighways: what then? Ultimately the answer, as Paul Valéry once noted, has to do with "the habits it inflicts on us," and how it "modif(ies) the physiology of our minds, our perceptions of all sorts, and above all what we do with our perceptions, and . . . the place and function of the mind itself."⁹ Minds and perceptions so modified have different ecological prospects as well. Stripped of all the hype, the information superhighway is only a more complex, extensive and expensive way to converse. But conversations conducted on that highway must ultimately be judged, as all conversations must be judged, not on the amount of talk or its speed, but by their intelligence, wisdom and by what they inspire us to do.○

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Beside the Seaside

by Chris Busby

*Roll on, thou deep and dark blue ocean – roll,
Ten thousand fleets sweep over thee in vain;
Man marks the earth with ruin – his control
Stops with the shore. – Byron*

EVERYONE REMEMBERS the seaside. For me, it is the image I hold when I lie in bed and compose my mind for sleep. When we were young, the colours, smells and sounds of the sea were vivid, particularly the brightness. The brilliance of the quality of the sky we feel, even now, when our journey to the seaside finds the last hill, when the sea stretches out before us and we feel that we have come home again. The world seems to open wide and deny us nothing here in this magical line between control, order and the unpredictable.

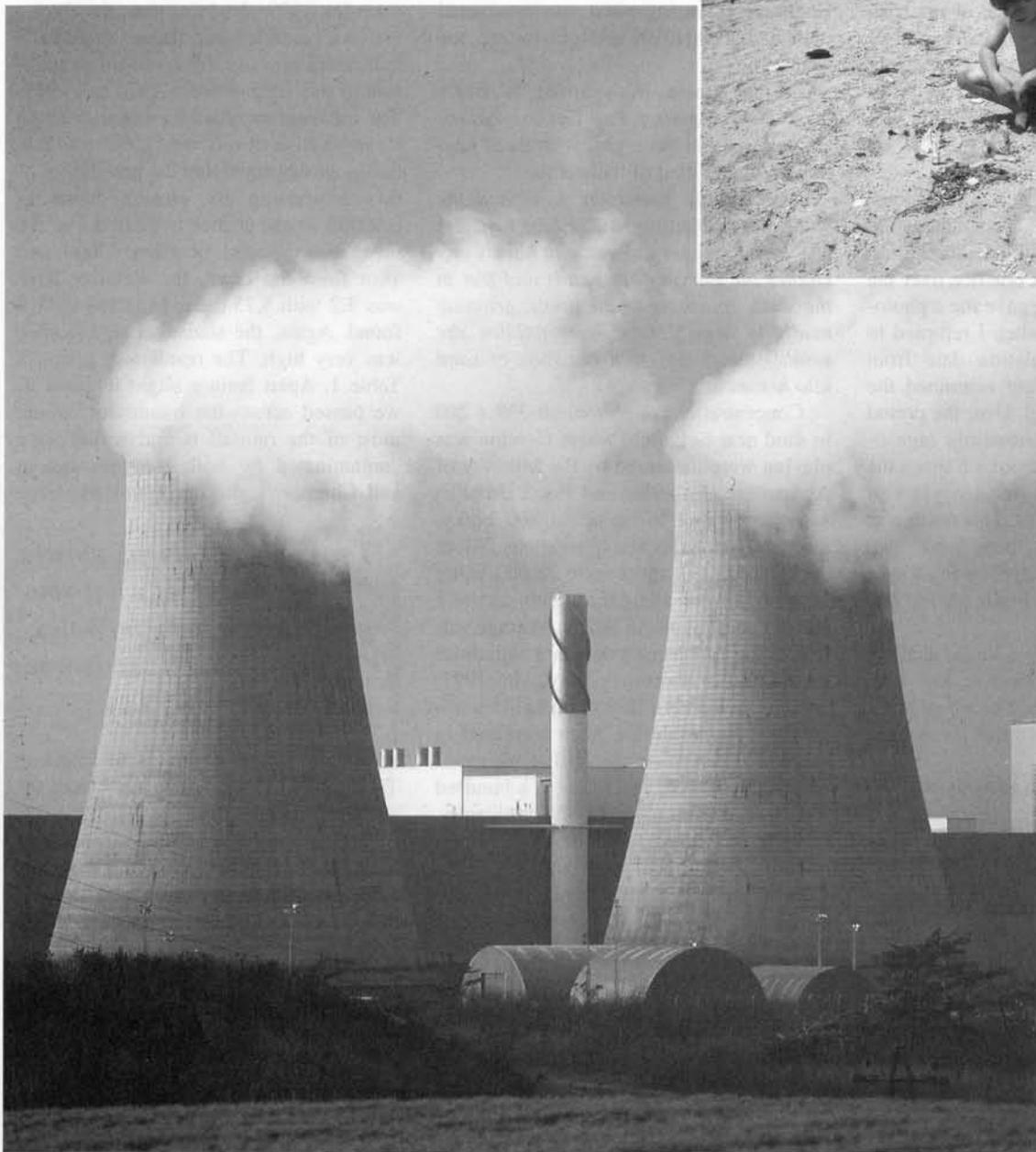
But the seaside now lies in the shadow of the Dark Tower. Man's dominion has

extended. The shore is poisoned. The herring gulls have disappeared, and, appropriately, a few large black crows, conspiring together, eye me sideways as I sit on the beach and look sadly out to sea.

I live here now on the edge in the West Wales town of Aberystwyth, where I have been drawn by the centrifugal force of my lifelong journey away from the centre. I have just processed the first batch of data from the Wales Cancer Registry Small Area database which covers the period 1974 to 1990. It has taken three of us six months' work to analyse and it shows that the risk of childhood leukaemia in the 0-4 age range near the Welsh shore of the Irish Sea is just under five times the national average. It also shows that the risk falls continuously in proportion with distance from the sea until the border with England is reached where it compares with the national level. My daughter Rosa is just four.

At the 13th Annual Standing Confer-

ence on Low Level Radiation, held at the University of Greenwich in July, one of the speakers referred jokingly to a leaflet put out by the anti-nuclear movement some years ago. Its invitation was, "Come to Sellafield before Sellafield Comes to You!" Well Sellafield has certainly come to me! And to the population of Wales and of Ireland, and presumably of the West of Scotland and also the West Country, to say nothing of the people in Norway, Greenland, the north of Canada and probably most of the planet, if we consider the huge quantities of radioactive waste that have been emitted by this plant since it began operation in the early fifties. It came to West Cumbria first, where the large population of the herring gulls of Ravenglass mysteriously disappeared in the mid-eighties at around the time that the child leukaemia cluster of ten times the national average at Seascale near Sellafield rang the first alarm bells.



DAVID DRAIN/STILL PICTURES



ANDRE NASLENNIKOV/STILL PICTURES

The risk of child leukaemia near the Welsh shore of the Irish sea falls continuously in proportion with distance from the sea. Left: Sellafield Nuclear Power Station.

In 1996 the Medical Officer of Health for Wales, Dr Deirdre Hine, gave permission for the Wales Cancer Registry to release to the Low Level Radiation Campaign the entire Small Area cancer incidence dataset for the period 1974 to 1989. Even at the time, this was an unprecedented action. In 1998, with the increasing secrecy of the cancer registries in England and Wales, the release of such data would be automatically refused. But in 1996, there was considerable pressure on the Wales Cancer Registry from the Welsh County Councils, the anti-nuclear local authorities, the Low-Level Radiation Campaign, several MPs and even the Irish, represented by Trevor Sargent, TD. He wrote to Dr Mary Cotton, the Medical Director, to say that the data was required to assess the effect of Sellafield on coastal populations and to affirm that he would be asking the Irish Attorney General to obtain the data from Wales. Our own concerns relat-

ed to our discovery of a four-fold increase in bone cancer in Wales, which we believed to be evidence that strontium-90 from weapons fallout had been responsible for the epidemic of all kinds of cancer, but especially bone cancer, that had begun in Wales in 1974. In the event, shortly after the data was given to us, the Wales Cancer Registry totally revised and 'revalidated' their bone cancer data, claiming that the registered excess was an error. In an extraordinary development, reminiscent of the historical airbrushing associated with Stalin and Chairman Mao, before anyone could question how they were able to retrospectively bring back to life all the dead bone cancer victims, the organization was closed down by the government. The collection of cancer data was moved to a new Wales Cancer Intelligence Unit (WCIU) under the directorship of the aptly named Dr Steward.

A year later the database acquired new

importance. In October 1997, I visited Carlingford, a small fishing port on the east coast of Ireland and about a hundred miles from Sellafield. I was there at the request of the Irish Green MEP, Nuala Aherne, to speak at one of the Sellafield conferences that regularly take place in that part of the world. There, as at all the other conferences, there were many stories and reports of increases in cancer and genetic illness, congenital malformation, Down's syndrome and so forth, all of them associated with the radioactive pollution from Sellafield. The people have become so incensed by this pollution that they formed themselves into a group called STAD, Stop Thorp Alliance Dundalk, and four of them are suing the Irish Government and British Nuclear Fuels over these releases. I suggested that since Ireland has had no national cancer registry until very recently, the evidence that they needed for their case could not be obtained on the Irish coast but

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might exist on the Welsh side of the Irish Sea. I told them of our database; they agreed to support an analysis to see if it confirmed the coastal effect they believed to exist. The local health authority is predictably unhelpful: they say there is no firm evidence.

At the same conference was a local retired GP, Dr Andrew MacDonald. He was presenting an account of cancer incidence in the Carlingford practice over the period 1965 to 1985. He gave me a photocopy of his tables and when I returned to Wales I obtained population data from Nuala Aherne's office and examined the cancer rate in Carlingford. Over the period 1965-1985, childhood leukaemia (age 0-14) in Carlingford was about 4.6 times the national average. In the first ten years of this period it was 7.9 times. This result was statistically significant; there were also statistically significant increases in all ages leukaemias and thyroid, brain, gastric and skin cancers.

Carlingford Lough is a large, shallow sea inlet, with drying sand at low tide, renowned for its shellfish. The silt contains 18 becquerels per kilogram of plutonium-

Levels of plutonium in children's teeth have been found to decrease with distance from Sellafield and the Irish Sea over the whole of the UK.

239+240, a radioactive product traceable to Sellafield and a known cause of cancer and leukaemia. In 1990, Freda Alexander of the Leukaemia Research Fund found excess child leukaemia in a study which aggregated wards adjacent to estuaries and sandy bays on the west coast of England and Wales: what she wanted to know was whether or not the excess was due to the radioactive silt, blowing about and being inhaled. In 1997, Professor Jean Francois Viel in a study published in the *British Medical Journal* found that child Leukaemia excess near the Cap de la

Hague reprocessing plant was associated with eating shellfish and playing on the beach.

Let me quote from Susan D'Arcy's book, *Still Fighting For Gemma*, where she talks of her little girl, who lived near Sellafield and died of leukaemia:

"...(Gemma) found the sand and the salt water fascinating. In her first summers she would stagger around with hardly any clothes on, burying her hands and feet in the sand, splashing in the pools, grinning madly to herself. Like every toddler, she would sometimes cram handfuls of sand into her mouth."

Concentrations of plutonium-239 + 240 in sand near Sellafield where Gemma was playing were measured by the Ministry of Agriculture, Fisheries and Food (MAFF) and were found to be up to 800 bq/kg, thousands of times above weapons fallout background. Hot spots up to 28,000 bq/kg have been found along the Cumbrian coast and the coast of North Wales. Average values for the Welsh coast compare with those on the Irish shores in Rhyl, in 1991, 30bq/kg in Cemlyn Bay, 40bq/kg. Plutonium from Sellafield has been measured in sheep droppings on the Welsh mainland and from Harwell, in soil up to a hundred miles away from the coast. Very recently, Nick Priest has measured the levels of plutonium in children's teeth and has found them to decrease with distance from Sellafield and the Irish Sea over the whole of the UK. Measurements made near the Atomic Weapons Establishment Aldermaston, in an area where there is another child leukaemia cluster, show that Plutonium levels in soil and dust are more than 20 times background. The same story has been repeated at the Dounreay plant in Scotland. We obtained a powerful computer and began to look at the Wales data. What did we discover?

First, we filtered out all the South Wales industrial counties. We then aggregated the remaining small 'Areas of Residence' so as to define a number of strips of land at different distances from the coast. The closer strip was located 800 metres from the sea. Based on England and Wales combined

rates for 1979, the base year we always use, we predicted that there should be 5 leukaemia cases in the aggregate population of this strip between 1974 and 1989. The database recorded 23 cases, giving a Relative Risk of 4.6. Using Poisson Statistics we can show that the probability of this happening by chance alone is 0.00005 or one chance in 20,000. For the next strip, located between 0.8km and 1km from the coast, the Relative Risk was 3.2 with 5.75 cases expected and 19 found. Again, the statistical significance was very high. The results are given in Table 1. Apart from a slight increase as we passed across the mountains, where most of the rainfall is and which were contaminated by both weapons fallout and Chernobyl, the trend was the same

The computer-speak phrase, "What you see is what you get", has become in Wales, "What you don't see is what gets you!"

across the whole of Wales to England. The trend was clear: the further from the sea, the lower the risk.

This is a very large study. Because of the huge numbers of children, the results have very high statistical significance, both in the increases and the trend with distance. The result tells us that living near the Irish Sea is associated with a high risk of child leukaemia. The only explanation is Sellafield. The computer-speak phrase, "What you see is what you get", has become in Wales, "What you don't see is what gets you!" The models that say this is impossible are faulty, and based on old science.

We sent our findings to Michael Meacher, the Environment Minister, in time for the OSPAR conference on marine pollution, which was held in Sintra, Portugal on 24th July. At the last minute, unexpectedly, Mr Meacher was replaced by John Prescott. The demands of the Irish, Norwegian and Danish governments for the closure of the Sellafield pipeline were ignored. There was a widely held belief that Michael Meacher had been prepared to take such a drastic step.

I was rereading Byron's *Childe Harold's Pilgrimage*, and I came across the following passage in Canto XXVI:

*Britannia sickens, Cintra! at thy name
and folks in office at the mention fret
And fain would blush, if blush they could,
for shame
How will posterity the deed proclaim!*

How indeed! ○

Table 1. Relative Risk of Leukaemia (ICD 204-8) in children aged 0-4 over the period 1974-89 at various distances from the Irish Sea.

Range of distance from the sea:	Mean distance (Std. dev)	Observed cases	Expected cases	Relative risk	P value significance (Poisson)	Number of areas Aggregated
<.8	0.5 (0.1)	23	4.99	4.6	0.0000	14
0.9<sd<2	1.0 (0.0)	19	5.75	3.3	0.0001	10
2.1<sd<5	4 (0.0)	18	6.23	2.9	0.0001	12
5.1<sd<11	8.24 (0.66)	31	13	2.4	0.0000	17
11.1<sd<21	16.4 (2.8)	17	5.31	3.2	0.0000	14
21.1<sd<41	34.7 (5.8)	19	7.85	2.4	0.0005	17
41.1<sd<61	51.8 (5.8)	8	5.6	1.4	0.203	19
51<sd<71	61.4 (4.8)	3	3.41	0.9	0.660	14



Canada's Great Bear Raincoast at Risk

by Chris Genovali

Chris Genovali is on the staff of the Raincoast Conservation Society.

The Great Bear Rainforest and the Stoltmann Wilderness on British Columbia's mainland coast encompass more than 3.4 million hectares of coastal rainforest wilderness, yet just 7 per cent of this land base comprises the salmon-rich river valley bottoms that are the biological core of the region. Still, these wilderness areas contain the greatest area of ancient temperate rainforest left on the planet. An estimated 56 per cent of the world's original temperate rainforests has been logged, with the remaining tracts primarily located in Chile, south-east Alaska and British Columbia. The US Pacific Northwest has already lost 90 per cent of its original temperate rainforests and with them nearly all of its original population of grizzlies, wolves and wild salmon.

The remote and rugged rainforest wilderness of the BC mainland coast is largely unknown to the general public. Its

outer coast is dominated by scrub forests and muskeg-like lowlands. The landscape becomes more dramatic toward the interior, with a rugged alpine backdrop, huge granite buttresses, deep water fjords, stunningly beautiful inlets and sedge-filled estuaries leading to steep-sloped narrow river valleys carpeted with western hemlock, Sitka spruce, Amabilis fir and western red cedar. The river valleys provide habitat for wild salmon, coastal grizzly

Since 1990, 32 rainforest valleys have been lost to clearcutting and road building.

bears, white spirit bears, black bears, bald eagles, wolves and a host of other wildlife.

The timber industry, principally, covets the river valleys for their productive lowland forests, and since 1990, 32 intact rainforest valleys on the mainland coast have been lost to clearcutting and road building. Since September 1997, 13 intact valleys

Above: More than three wild river valleys per year have been lost to industrial logging and seventeen more are scheduled to be clearcut in the next few years.

have had logging roads built through them. More than three wild river valleys per year have been lost to industrial logging and seventeen more are scheduled to be clearcut in the next few years – this alarming rate of forest destruction is being driven in great part by the profligate consumption of BC softwoods by the US, Japan, the UK and Western Europe. Western Forest Products is planning to clearcut eight intact river valleys in 1998 alone.

Wild salmon are critical to mainland coast ecosystems. Grizzly bears depend on healthy salmon runs for their survival and wild salmon are an important food source for a host of other wild animals as well. Recent research indicates that even the ancient temperate rainforests on the coast are dependent on salmon. Bears drag the carcasses of spawned-out salmon into the forest, facilitating a major nitrogen transfer

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into the forest soil.

The current forest policies of Premier Glen Clark's New Democratic Party (NDP) government cannot but assure the destruction of critical salmon habitat. In view of Premier Clark's so-called "salmon war", it is ironic that salmon-producing systems like the Aaltanhash River, Green Inlet, Pooley Island and others are being targeted for clearcut logging. According to an American Fisheries Society scientific report released in the autumn of 1996, 142 salmon stocks have become extinct in BC and the Yukon, and 624 stocks are at high risk due primarily to habitat destruction. There are seven species of salmon, but each salmon-producing river valley in the Great Bear Rainforest contains its own genetically unique races of salmon. The ongoing destruction of salmon habitat by clearcutting and road building, however, has been blatantly ignored by the provincial government because it is an issue that clearly exposes BC's dirty secret war on its

In other words, the Clark government has essentially empowered a rogue timber industry to regulate itself.

ancient temperate rainforests.

A particularly egregious example of the provincial government's lack of commitment to protecting salmon habitat is occurring in the Johnston Creek watershed, the largest source of coho salmon left in Rivers Inlet. The Johnston is being subjected to road building and clearcut logging by International Forest Products (Interfor). Interfor plans to build 16 kilometres of logging roads up the river valley alongside sensitive coho-rearing areas in order to clearcut the heart out of the Johnston. The province has issued Interfor approvals for the Johnston without adequate terrain stability studies and other assessments critical to ensuring the protection of salmon habitat.

Coho salmon numbers in BC have declined to such an extent that they are on the brink of extinction. They are especially vulnerable to the impacts of industrial forestry as coho fry spend a year or more in freshwater streams. Clearcutting harms and kills coho by removing forest cover near streams, eliminating shade and raising water temperatures to levels that can kill both young and mature fish. Like road building it also kills them by dramatically increasing the amount of sediment which enters streams, which can end up burying developing eggs in silt.

Ninety-seven per cent of the logging carried out in British Columbia's coastal rainforests is by clearcutting. The Forest Practices code, the centrepiece of the gov-



ernment's public relations campaign, perpetuates clearcut logging and plantation forestry, maintains unsustainable cut levels and fails miserably to protect biodiversity. To make matters worse, in March of this year the BC government announced an extensive rollback of the already weak regulations in the Code governing timber harvesting. In other words, the Clark government has essentially empowered a rogue timber industry to regulate itself.

The most oft-repeated fallacy from government and industry is the sadly outdated

Management Plan (LRMP), another of its so-called "consensus-based" land-use processes along the coast. The government, the timber industry, the IWA, the Forest Alliance (the well-heeled industry front group), and SHARE (BC's version of the Wise Use Movement) are all mouthing the same "if only the environmentalists would just come to the table" line. But every environmental organization in BC working on terrestrial forest issues is boycotting the process, as the government's arbitrary 12 per cent provincial cap on park

Clark and his cadre of NDP spin doctors knew that it would be extremely difficult, if not impossible, to discredit Greenpeace's Broken Promises and so what followed was one of the most intense smear campaigns ever witnessed in North America.

notion that clearcutting in the temperate rainforest mimics natural disturbances. Dr Elliot Norse, one of the world's pre-eminent forest ecologists and experts on temperate rainforest ecosystems, delivered the following statement to the Standing Committee on Natural Resources in April 1994: "Clearcutting differs from fires and other natural disturbances not only because it is more severe and more extensive, but also because (it) occurs with such high frequency. (This makes it) inimical to natural succession processes that lead to ecosystem recovery (and) devastating to biological diversity."

In the meantime, the BC government has implemented the Land and Resource

creation precludes adequate protection of coastal rainforest ecosystems. The Rain-coast Conservation Society is calling for a removal of the 12 per cent cap and a moratorium on logging in all the remaining intact river valleys in the Great Bear Rainforest as a prerequisite for sitting at the negotiating table.

In 1992, the BC government adopted a policy of capping park creation at 12 per cent of the province's land base. The 12 per cent policy is not law. It is strictly an arbitrary policy decision. The government plucked this 12 per cent figure from The Brundtland Report, which recommended a tripling of protected areas worldwide. The figure originated from a guess by Jeffrey



McNeeley of the World Conservation Union as to what level of global ecosystem protection might be politically achievable. The 12 per cent figure was not based on science and no credible scientist has ever claimed that to preserve 12 per cent of a forest is adequate in order to protect biodiversity – particularly in BC with its exceptionally diverse ecosystems. Consider that coastal grizzly bears need large clusters of intact watersheds, as their home range will extend over several different river valleys.

Unfortunately, the important issues at stake along Canada's Raincoast, such as the ongoing destruction of grizzly-salmon ecosystems, have often been blurred by the government's PR campaign. It's been the strategy of the Clark government and the BC timber industry to divert the public's attention from the devastation occurring in BC's coastal forests by creating an "ecobogeyman". Greenpeace has been a convenient target because of its high profile and international presence.

It was in response to the 1997 Greenpeace report *Broken Promises* that Premier Clark labelled environmentalists as "enemies of BC". *Broken Promises* detailed the widespread destruction being caused by the Clark government's shortsighted forest policies. The report also laid bare the egregious mismanagement of BC's forests by a ruling party that has consistently tried to wrap itself in a cloak of green via a massive multi-million dollar PR campaign, both at home and abroad.

The government's own internal analysis (later revealed through Freedom of Information requests submitted by the Sierra

Legal Defense Fund) corroborated the Greenpeace report. Clark and his cadre of NDP spin-doctors knew that it would be extremely difficult, if not impossible, to discredit *Broken Promises*. The preferred response was to shoot the messenger. What followed was one of the most intense smear campaigns ever witnessed in North

The spectacle of the two major parties in the province competing for headlines in the media by escalating their respective Greenpeace bashing was a nadir in BC politics.

America. The attack on Greenpeace and other BC conservation groups was straight out of the McCarthy era.

NDP forests minister David Zirnelt went so far as to accuse Greenpeace publicly of being funded by the US timber industry. Liberal Party opposition leader Gordon Campbell echoed Zirnelt's outrageous and unsubstantiated claim, as if it were his own. The spectacle of the two major parties in the province competing for headlines in the media by trying to outdo each other's Greenpeace bashing was a nadir in BC politics.

In true McCarthyite fashion, Clark and his timber industry allies launched into an all-out assault on BC environmentalists, stigmatizing them as "eco-extremists" and "economic terrorists". The premier also played the xenophobia card, creating the

Left: Ninety seven percent of the logging carried out in British Columbia's coastal rainforests is by clearcutting.

Above: The US Pacific Northwest has already lost ninety per cent of its original temperate rainforest and with it nearly all of its original population of grizzlies, wolves and wild salmon.

spectre of an "international conspiracy" of environmentalists "funded from abroad" who were bent on "destroying BC". Fostering a lynch mob mentality, Clark exhorted rural communities and forest sector workers to "fight the enemy."

As a result of Premier Clark's politics of hate and fear-mongering, environmentalists have been subjected to abuse, physical assaults and even death threats by timber industry extremists. The Western Canada Wilderness Committee (WCWC) even had a bullet sent to its Vancouver headquarters in the mail. WCWC's research camp in the Stoltmann Wilderness was dismantled by loggers and "wanted posters" displaying colour photographs of WCWC staff were put up around adjacent towns by pro-logging vigilantes. In an absurd incident reminiscent of Alabama in the 1960s, a WCWC campaign director was denied service at a local convenience store because he was identified as an environmentalist.

The public is gradually beginning to see through the onslaught of government and industry PR. The campaign to protect the Great Bear Rainforest is in its nascent stage; in any case, the truth about what is happening to BC's coastal forests can't be hidden forever.○

The Millennial Moment of Truth

An Interview with Kalle Lasn: Founder and Director of Adbusters

by David Edwards

"Circus dogs jump when the trainer cracks his whip, but the really well-trained dog is the one that turns his somersault when there is no whip." – George Orwell¹

Weapons of Mass Distraction

If you go down to your local newsagents today, or even to a major store like WH Smiths, you might like to amuse yourself with a little game called: 'Hunt the Radical Title'. Consider Smiths: spread out before us are many hundreds of multi-coloured magazines and periodicals covering subjects of (almost) every kind. The variety is dazzling and yet they all have several features in common: they are all the product of profit-seeking media corporations; they are all filled with (that is, supported by) glossy corporate advertising; and they all have next to nothing to say about the crucial political, environmental and human rights issues of our time.

What we are here faced with, then, is an almost infinite choice and yet, at the same time, no choice at all: we are free to choose from thousands of corporate products, from thousands of business-friendly perspectives. These 'choices' are what we call 'democracy'. The fact that they all amount to the same choice – that is, to no choice – is the reality of what we call 'democracy'. But discussion of these issues is limited to the largely academic question of whether we should be free to choose from a few big corporate choices – Time Warner, Disney, Fox, etc. – or from lots of smaller ones.

So what does a 'business-friendly' perspective mean in practice? It means that ideas and values which promote profits and reduce costs become 'normal'. As Sharon Beder writes of the media:

"Balance means ensuring that statements by those challenging the establishment are balanced with statements by those whom they are criticizing, though not necessarily the other way round."²

'Business-friendly' means a view of the world that assumes unrestrained consumption and automated, alienated production to be 'normal', 'just the way the world is'. It means casual acceptance, or superficial criticism, of the status quo, rather than critical evaluation of it.

It means cults of leadership alongside the

demonization of obstacles to corporate profit. Thus, when Saddam Hussein met the Sheikh of Qatar earlier this year, James Mates of ITN remarked that Saddam was "playing his favourite role of defender of the Arab people".³ ITN has yet to be heard describing Clinton as "playing his favourite role of defender of the free world". Instead, during the Gulf War, David Dimbleby asked one of his guests:

"Isn't it in fact true that America, by dint of the very accuracy of the weapons we've seen, is the only potential world policeman?"⁴

Status-quo-supportive bias is everywhere and, like the air we breathe, goes unnoticed.

Beyond these necessary truths there are only sinister silences – sinister because it is in these silences that many of the horrors and injustices of our world are born. In Smiths we can imagine a whole empty wall that should be full of magazines asking business-unfriendly questions. Nothing clever or 'intellectual' here, nothing complex, just questions that any ordinary person might ask:

One of the great problems with our modern situation is that it resembles a cheese-induced dream, a 1950s science fiction B-movie: we run past endless shelves of glossy magazines but they are always, in essence, the same magazine.

When did we gain our much-vaunted press freedom? Who did it? How did they do it? What are the threats to press freedom now? Does the corporate nature of our advertising-dependent free press compromise free reporting? Why is it that countries seeking independence from Western corporate domination are automatically declared 'terrorist states' against which we need to defend ourselves? Why is resource-rich South America tortured by poverty and dictatorship when it backs onto the United States, the richest, most powerful 'democratic' nation the world has ever seen? Why has the United States – so keen to defend the 'infinite choice' of Smiths-style 'democracy' around the world – not been better

These 'choices' are what we call 'democracy'. The fact that they all amount to the same choice – that is, to no choice – is the reality of what we call 'democracy'.

able to defend democracy in its own 'backyard'?

How compatible would true democracy – by which the poor would be given their share of local natural resources – be with the massive Western profits hauled out of impoverished countries like Colombia, Mexico, Russia, Nigeria, Algeria, Indonesia, *et al*? Why are the historical democratic credentials of our profit-hungry corporate society never held up for critical examination by our profit-hungry corporate press?

One of the great problems with our modern situation is that it resembles a cheese-induced dream, a 1950s science fiction B-movie: we run past endless shelves of glossy magazines but they are always, in essence, the same magazine. We can wonder to ourselves whether we live in a truly free society, but we cannot discuss it because no-one ever discusses it, and so no-one understands what on earth we might be talking about, and so no-one ever discusses it... and so on, nightmare-like. We might run into the streets warning of the invasion of the "pod people", but not if all of us have already, in a sense, been turned into "pod people" by a lifetime's exposure to corporate 'fun' and corporate 'common sense'.

Adbusters specializes in "subvertisements" – short, sharp still and video "mind bombs" – designed to twist advertising clichés around, judo-like, to shock consumers into critical thought.

It is interesting to see that there are now vast forces beginning to shake us from our slumber: global warming, ozone depletion, species depletion, the global corporate demolition of democracy, the globalization of poverty and authoritarian government – all are beginning to reach deep into our dream to shake us, to call to us in our corporate sleep.

Into this fray – all but alone, tiny, but empowered by the truth – comes: *Adbusters!*

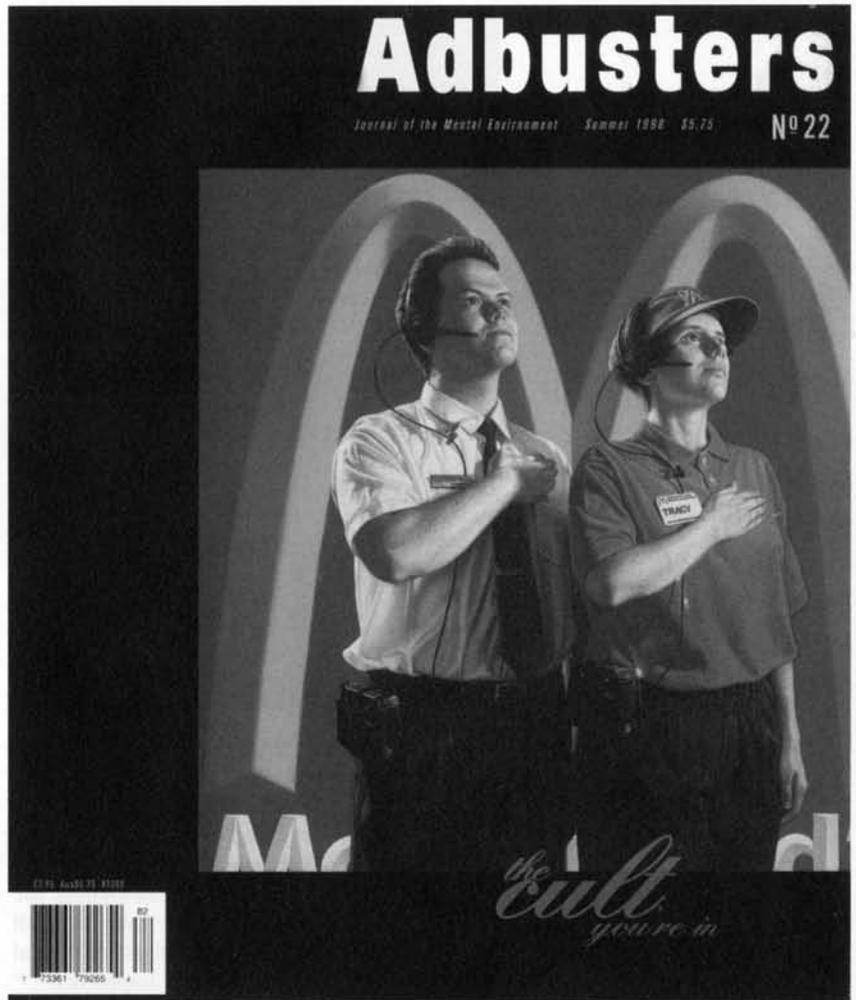
In the Dark – Fighting for Airtime

"The architects of power in the United States must create a force that can be felt but not seen. Power remains strong when it remains in the dark; exposed to the sunlight it begins to evaporate."⁵

I spoke to Kalle Lasn – founder and director of *Adbusters* – on an overly-warm afternoon in August from a Spartan converted barn in Devon. In Canada it was still morning and Lasn was still drinking his breakfast coffee.

Like me, Lasn began life in the corporate world from which he was to defect with such finality. He worked in advertising, of all things, and I asked him if there had been a time when he had tried to be a good conformist, to fit in and make it work:

KL: "I worked in the advertising business when I was in my twenties in Tokyo, Japan, so I got a



bit of a taste of the ethical neutrality of that industry when I was very young. Initially I was pleased to be part of the advertising industry but I gradually realized that I couldn't stand it, that it was somehow rotten to the core: I couldn't stand the people."

Adbusters specializes in "subvertisements" – short, sharp still and video "mind bombs" – designed to twist advertising clichés around, judo-like, to shock consumers into critical thought. The familiarity of their apparently standard advertising imagery means a first glance grants them entry into a viewer's awareness. This is crucial.

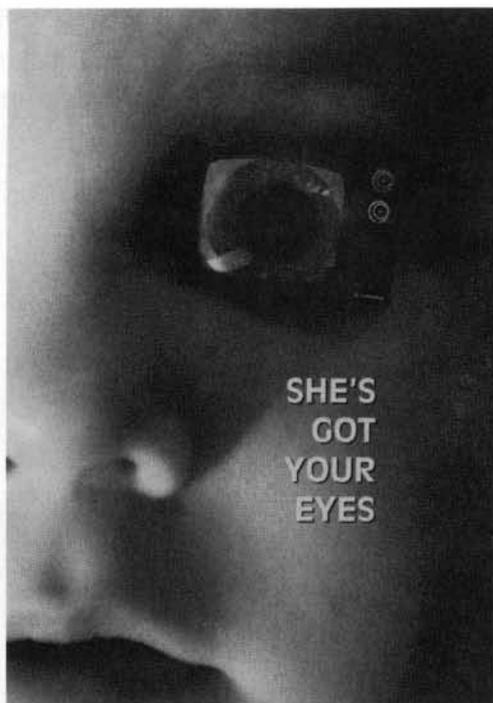
In his book *Vital Lies, Simple Truths – The Psychology of Self-Deception*, psychologist Daniel Goleman reveals how our minds automatically reject messages threatening to our version of reality before they have a chance to reach consciousness. In other words, the mind has the capacity to be aware, and yet unconscious, of what it does not want to deal with. Goleman concludes:

"In order to avoid looking, some element of the mind must [know]... what to avoid. The mind somehow grasps what is going on and rushes a protective filter into place, thus steering awareness away from what threatens."⁶

Notice, then, the sophistication of the *Adbusters* ads illustrated throughout this article compared, say, with the standard, leftist sloganeering which crudely confronts the average

Into this fray – all but alone, tiny, but empowered by the truth – comes: Adbusters!

"It was a slick job but even though the TV stations were selling airtime by the millions of dollars to the forest industry, they refused to sell us a single thirty-second spot!"



viewer with statements like "Hands off the Gulf!" or "Ban the Bomb!"

Where these statements are immediately screened out and rejected from most people's consciousness, Adbusters' slip stealthily through. Having admitted them to awareness, the casual viewer then proceeds to take a stroll through what, in reality, is an Adbusters mental minefield: 'What's this about? Impotence...?' Silence!

That was a mind bomb going off!

I asked Lasn what first got him tinkering with this high-explosive mental ordnance:

KL: "When I emigrated to Canada in 1970, I got into experimental film making and we made some short films and were dissatisfied because we were only showing them to small audiences at our commune. So we had this idea of creating 30- and 60-second TV messages and buying airtime for them. I remember as early as 1973 walking into the local TV station here in Vancouver with some bucks in my pocket and wanting to buy some time."

DE: "How was your shopping spree received?"

KL: "They laughed me out of the building... They just giggled and laughed and said 'Hey, this isn't a commercial, we don't play this kind of thing.'"

So much for freedom of the airwaves. Lasn was selling an abstract idea, much as corporations sell abstract lifestyles and subliminal messages rather than just products. The difference was that Lasn's idea was not business-friendly and so was somehow 'ridiculous', 'absurd'.

"Forests Forever"

In 1989, sensing a change in the popular mood – a greater awareness of the way in which the media control society – Lasn tried again. This time he was trying to tell the other side of the story from the British Columbian forest industry. It had launched a \$6 million campaign with the

amusing slogan "Forests Forever", designed to reassure the public of its benevolent intentions. Lasn's 30-second offering was no hurried, amateurish affair:

KL: "It was a slick job – carefully researched and produced over a period of two or three months by some of the best film-makers in Vancouver. And even though the TV stations were selling airtime by the millions of dollars to the forest industry, they refused to sell us a single thirty-second spot!"

At first, Lasn and his team approached TV stations in Vancouver but later discovered that the lack of democracy on the airwaves "was true right across Canada, right across the United States and possibly throughout every First World country".

It was outrage at the total rejection of this 1989 slot that started the range of Adbusters' non-profit activity: Adbusters' magazine, the website on the net and a small advocacy advertising agency called 'Power Shift' that produces the TV spots.

Adbusters have produced dozens of TV spots on issues such as over-consumption, 'Buy Nothing Day', 'TV addiction and TV Turn Off Week'. Other ads mercilessly ridicule the car, fashion and food industries. I asked Lasn how long it took him to get a spot aired:

KL: "It took years – our spots were systematically, routinely refused."

DE: "What was the excuse of the individuals rejecting them?"

KL: "In Canada they said 'Oh, we have Article Three of our advertising standards guidebook which says we can't air controversial messages – advocacy messages are out of bounds'."

DE: "The point being, of course, that in an age of global warming and species depletion, any message, particularly any corporate message, is controversial. Did you get the same reaction in the United States?"

KL: "The reaction there was much more in your face. Station managers said 'Why should I run ads that hurt my business? We decide what we run or not, we're trying to run a business. Why don't you just go away?' These station managers were acting as if they owned the airwaves, even though, legally, these are public airwaves owned by the people and leased to stations. Broadcasters are supposed to act in the public interest, not merely in their own commercial interest."

DE: "What's the situation now?"

KL: "The big three stations in the United States: the ABC network, CBS and NBC, over the last eight years, have systematically, routinely refused to air any one of the twenty spots that we've thrown at them. They've refused every single one of them!"

It's easy to understand the nervousness of station managers. In 1993, Adbusters ran an anti-car subvertisement during the commercial break of a Canadian 'Top Gear'-style car programme. Other advertisers – understandably unhappy at running their car ads alongside these anti-car spots – pulled their ads and the programme collapsed.

Lasn was born in Estonia. What is shocking to him are the similarities between the 'Free World' and the totalitarian world he left behind.

DE: "So what's the way forward for Adbusters?"

KL: "We know that the legal battle is the tip of the spear of our culture-jamming movement. If we can win the legal right to walk into stations and buy airtime and go head-to-head with all these industries, then we know we can repeat what happened twenty years ago when the anti-tobacco lobby zapped the tobacco cartel off the air, even though they were out-numbered and out-gunned. Our whole movement, in a sense, is an attempt to repeat that tobacco victory in a number of other industries."

DE: "Is this a battle you can win?"

KL: "Yes, it is. We will initiate more legal actions against the big three networks in New York. We've got wonderful documentation over the last eight years of what they've done, including recordings of conversations I've had with stations managers and vice-presidents of NBC and so on. We're also planning to take it to the World Court under Article 19 of the UN Charter of Rights which says that the people of the world should have the right of access to their own airwaves."

Surreality and Beyond - Che Guevara Cola

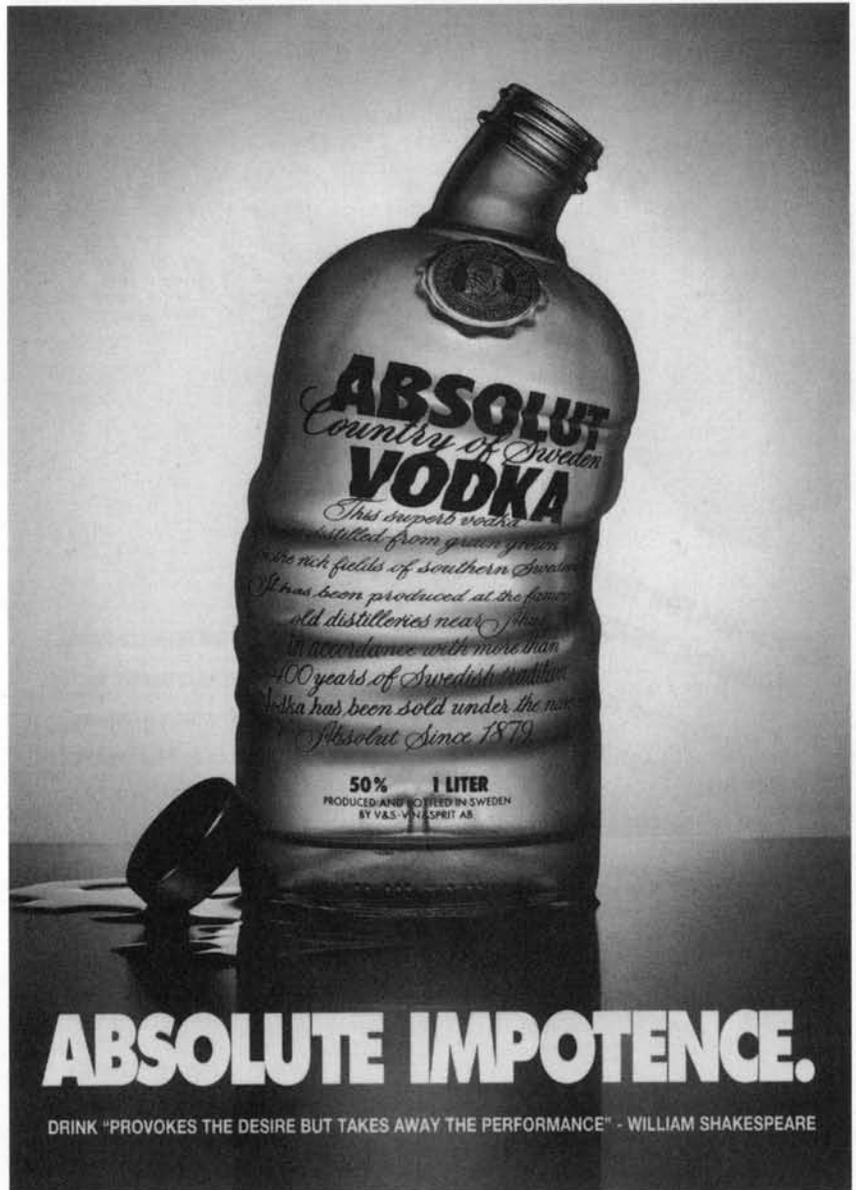
Lasn was born in Estonia. What is shocking to him are the similarities between the 'Free World' and the totalitarian world he left behind:

KL: "I grew up in a country where for 50 years you weren't allowed to speak out against the government and then suddenly, 50 years later, I'm in North America and I'm suddenly realizing that here in this country you can't speak back against the sponsors! That was a sort of lightning-rod experience in my life. I realized that all this talk of, you know, 'The land of the free and the home of the brave', and freedom and democracy, is all bullshit! The most powerful social communications medium of our time is television and people just don't have access to it."

DE: "We always associate thought control with totalitarian societies, but there is a more subtle kind. How do you think mind control in a totalitarian system differs from democratic-style thought control?"

KL: "Totalitarian thought control is very blatant. It's Orwellian. It's the powerful basically saying 'Look, you do as I say or I'll hit you over the head or put you in a mental hospital'. But here in the First World countries it is Huxleyan, much more subtle. It's a system that feeds us the tranquilizing Soma sleep drug that we willingly take: nobody forces us to watch TV every night, but we do it because we're cult members. We've been slowly, systematically indoctrinated since the day we were born. We develop a sense of belonging. For me American consumer 'cool' is the Soma of our times; we all desperately need this Soma and we take it every day or our world collapses."

DE: "Do you ever reflect on the irony that so many young people today are corporate 'rebels'? I mean the way young people show their rebelliousness by wearing corporate logos: the Nike 'Swoosh' symbol, for example?"



KL: "There's a story in the latest Adbusters' magazine about Che Guevara cola, which is selling like hot cakes! It's a marketing triumph. Young people are much more media-savvy than in the past - much more savvy than you or I - but they have been blinded somehow. It's like breathing dirty air: after a while you just get used to it. They love talking about that Che Guevara cola, they understand how it works, how they're being manipulated, but they still drink it, they still think it's really cool! Even though they know Nike trainers are made by sweated labour in Indonesia, they still think the Nike 'Swoosh' symbol is incredibly cool!"

In part, Lasn blames this on the fact that young people no longer grow up in a natural environment, as he himself did. They grow up in an electronic environment, they think the natural environment is passé - they have no other reference.

DE: "Edward Herman and Noam Chomsky's propaganda model proposes that advertisers, corporate owners and state influences working on a profit-seeking media dramatically limit media freedom. Is there anything you disagree with in

"The big three stations in the United States: the ABC network, CBS and NBC, over the last eight years, have systematically, routinely refused to air any one of the twenty spots that we've thrown at them. They've refused every single one of them!"

IS YOUR MAN ON THE WANE?
DON'T WORRY, YOU'VE GOT

Man in a Can!

WATCH HIM FOR THESE WARNING SIGNS!

- Sperm count low?
- No time for sex?
- Job stress making him impotent?
- Balls falling off?

All over the Western World, male fertility is rapidly declining. So what's a healthy woman to do? Go modern, of course! MAN IN A CAN™ offers you the perfect genetic material for the children of your dreams!

DOCTOR! SCIENTIST! ATHLETE!

Order MAN IN A CAN™ today and get the E-Z APPLICATOR FREE!

“My feeling is that for us to mount an effective social activist movement of the nineties and beyond we have to get beyond the left.”

that model?”

KL: “No, I basically agree with it, although it was nothing new. Chomsky basically took existing ideas and wrote them up rather well. But I don't like Chomsky. I think he's too left, he's inaccessible, he's too lefty.”

DE: “What do you mean 'too lefty'?”

KL: “I mean that he's too much stuck to the old slogans, to the old era when the Soviet Union still had something idealistic about it. My feeling is that for us to mount an effective social activist movement of the nineties and beyond we have to get beyond the left – and I used to be a lefty for many years by the way, and still am in many respects. The tactics of the left, the strategy, is bankrupt; there's no fire in the belly any more.”

I agreed and asked him if he was thinking of the whole emphasis on 'struggle' and protesting on the streets:

KL: “Yes, words like 'class' and 'struggle', the words they use, this running round the streets shouting slogans and holding placards.”

DE: “Is there a better way?”

KL: “I think that culture jamming is a better way. We're now in the post-modern era and we have

to deal with malaise and cynicism and culture, and we have to use the most powerful mass media tools of our time to communicate: we have to use television. It's meme warfare. Richard Dawkins coined the phrase and we use it to mean a war of ideas between the really big ideas of our time – memes – that we need either to combat or propagate. We need to break people's media and consumer trances, and wake them up out of the cult they're in.”

DE: “What hope is there for the future? How encouraged do you feel?”

KL: “I have this feeling that we are reaching a millennial moment of truth and I believe that a very small number of passionate culture-jammers – as few as 500 or even 100 – can pull off a global mind shift in the next few years. I think it can happen in exactly the same way that the Soviet empire suddenly fell. It's something that can be catalysed. The big dynamic that hasn't shown itself yet is that of people denying that something really momentous is about to happen: the fact that the global economy is unsustainable, that it's a kind of doomsday machine and that deep down we all know that: the climate is changing, and so on. So deep down just about everyone on the planet who knows what's going on can feel it, but we're denying it. It's waiting there in the background and as soon as it comes to the forefront, then that will be the catalytic moment when dramatic change will be possible.”

DE: “What might herald that moment?”

KL: “It could happen if the Dow Jones index falls 1,000 points instead of 500 as it did a couple of days ago. Or if it suddenly becomes clear that the G8 leaders are no longer in control of global warming. Or if some charismatic leader at Chicago University suddenly confronts their professor in a profound way about their failure to understand the economic paradigm, and it's broadcast and shown around the world, and the world can see that these professors don't even understand the fundamentals. These kind of culture-jamming moments I think can suddenly lead to incredibly fast change. I think there's going to be a period of turmoil when everything is up for grabs and if we create enough alternative sustainable models then we can begin from there.”

David Edwards is a researcher/writer for International Society for Ecology and Culture. His latest book *The Compassionate Revolution* is published by Green Books.

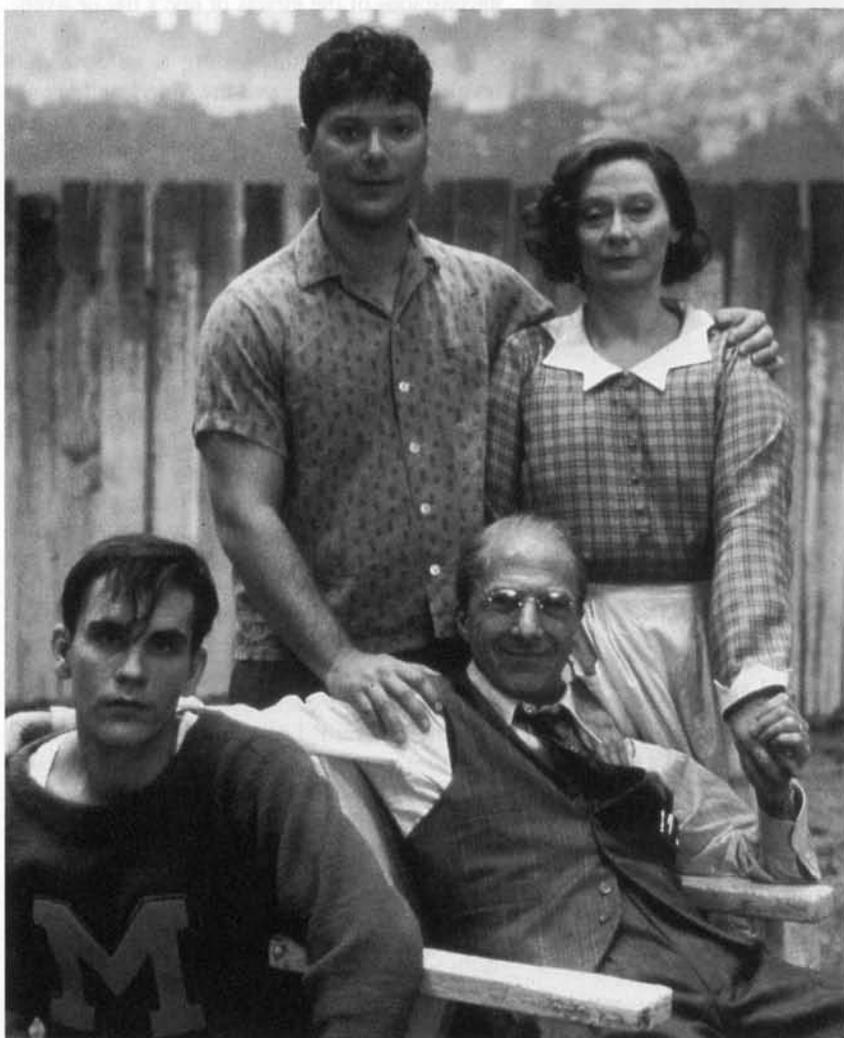
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Stranger at Home

By Thomas H. Pruiksma

What is the environmental crisis? There are, of course, many environmental crises, different in different places. Farmers in England are forced to use organophosphates in sheep dip. Turkish policies have dramatically altered ways of using the land in that country. In India there are countless villagers for whom the environmental crisis means wells going dry because of forests cut down and women who must walk five miles for wood to cook a meal. Thailand's development programmes have dammed rivers, changed farming practices, and brought new, and American, values of consumerism and materialism. As Mexico develops, indigenous communities struggle to maintain their identities. Everywhere the demands of the global economy are changing communities, rivers, air and land. This essay is, however, not about the crises of other people, though it is concerned with them. It is about what it means to be an American in an age of ecological crisis – how we relate with each other, how we relate with the land, and how these relations are related. My reflections take the form of a meditation on Arthur Miller's play *Death of a Salesman*.



MOVIESTORE COLLECTION

WILLY LOMAN IS A SALESMAN. As the play begins, he is tired and work isn't going well. His grown sons, Biff and Happy, are back for a visit and the house, as his wife Linda remarks, smells of shaving-cream. "Figure it out," Willy says to her. "Work a lifetime to pay off a house. You finally own it, and there's nobody to live in it."

"Well, dear, life is a casting off," says Linda. "It's always that way." "No, no, some people – some people accomplish something."

In Willy's eyes, however, Biff hasn't yet accomplished anything. "How can he find himself on a farm?" Willy asks Linda. "Is that a life? A farmhand? . . . it's been more than ten years now and he has yet to make thirty-five dollars a week!"¹ Upstairs, Biff tells his brother of his own uncertainty about the future. "I don't know what I'm supposed to want," he says to Happy. "I spent six or seven years after high school trying to work myself up. Shipping clerk, salesman, business of one kind or another. And it's a

measly manner of existence. To get on that subway on the hot mornings in summer. To devote your whole life to keeping stock, or making phone calls, or selling or buying. To suffer fifty weeks of the year for the sake of a two-week vacation, when all you really desire is to be outdoors, with your shirt off. And always to have to get ahead of the next fella. And still – that's how you build a future."² Yet in the midst of his doubts, Biff finds hope in the idea that perhaps he could buy a ranch. "With a ranch I could do the work I like and still be something."³

Willy's belief that working on a farm is not a 'life' echoes an attitude that is still found throughout our country. In his book *The Unsettling of America*, Wendell Berry speaks of the tremendous changes brought by industrial agriculture, both to farmers and farming communities, and to how we think about our relationship with the land. Our history, he argues, is one in which attempts at creating lasting communities rooted in the soil have again and again been thwarted, with the people dismantling these

Death of a Salesman, with Dustin Hoffman and John Malkovich



Wendell Berry – The great American poet, philosopher, farmer and author of *The Unsettling of America*

SCHUMACHER COLLEGE

beginnings of local cultures declaring them “outdated, provincial, and contemptible.”¹³ Often the victims themselves come to believe this. “The only escape from this destiny of victimization,” Berry writes, “has been to ‘succeed’ – that is, to ‘make it’ into the class of exploiters, and then to remain so specialized and so ‘mobile’ as to be unconscious of the effects of one’s life or livelihood.”¹⁶

Fundamental to this history is an economic revolution that subjugated the American Indians, and then the small farms and farm communities, the local tradesmen and craftsmen, and the households of citizens. It has left most of us without any independent access to food, water, shelter or clothing and at the same time has increased our appetites and our sense of need. The Indians, and later small farms and farm communities, became victims of exploitation, Berry continues, “not by loss in battle, but by accepting a dependence on traders that made necessities of industrial goods. This is not merely history. It is a parable.”¹⁷

This revolutionary economy predicated on using and using up constantly more goods, profoundly shapes the lives of Willy Loman and his family. Most of Willy’s earnings go for fixing their refrigerator, paying off the washing machine, vacuum cleaner, and the roof, and covering the repair of the car. “Once in my life,” Willy exclaims, “I would like to own something outright before it’s broken! I’m always in a race with the junkyard! I just finished paying for the car and it’s on its last legs. The refrigerator consumes belts like a goddam maniac. They time these things. They time them so when you finally paid for them, they’re used up.”¹⁸ And planned obsolescence is indeed embedded in our economy. It’s profitable.

In the first scene, Linda attempts to cheer Willy up by telling him what she bought. “Willy, dear, I got a new kind of American-type cheese today. It’s whipped.”⁹ Willy, however, likes Swiss and doesn’t want a change. “Why am I always being contradicted?” he asks angrily. “I thought it would be a surprise,” says Linda, laughing to cover her disappointment.¹⁰ But, in attempting to please her husband, she effectively reduces herself to little more than a consumer.

Social relations have become little more than economic transactions. “Our enormously productive economy,” writes retailing analyst Victor Lebow, “demands that we make consumption our way of life, that we convert buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption. . . . We need things consumed, burned up, replaced, and discarded at an ever-increasing rate.”¹¹ Which is to say that ever-increasing material prosperity must become a God and society and culture be shaped in its image.¹² In 1953, the chairman of President Eisenhower’s Council of Economic Advisers put forth in official form the economic gospel: “The American economy’s ‘ultimate purpose’”, he proclaimed, “was ‘to produce more consumer goods.’”¹³ As Alan Durning writes, “[subsequent generations have

faithfully pursued that aim. On average, people in the United States today own twice as many automobiles, drive two-and-a-half times as far, use 21 times as much plastic, and cover 25 times as much distance by air as their parents did in 1950.”¹⁴ But are their lives any more meaningful now than they were four decades ago?

As *Death of a Salesman* progresses it becomes clear that Willy’s company no longer

Willy himself ends up sacrificing himself for his dream, rather than admit its emptiness.

wants him. He has become useless to them, waste – and he knows it: “You can’t eat the orange and throw the peel away – a man is not a piece of fruit!”¹⁵ When he is fired, he is not just without a job, but more devastatingly without a place in the dream to which his life has been devoted. Yet he can’t give up the dream, despite the doubts he sometimes feels.¹⁶ Bernard, Biff’s schoolmate whom Willy once ridiculed but who is now a successful lawyer, says to him, “You know, ‘If at first you don’t succeed . . .’”

WILLY: Yes, I believe in that.

BERNARD: But sometimes, Willy, it’s better for a man just to walk away.

WILLY: Walk away?

BERNARD: That’s right.

WILLY: But if you can’t walk away?

BERNARD, I guess that’s when it’s tough.¹⁷

And Willy can’t walk away. Instead he kills himself for his life insurance policy. Only then will he have added up to something, and for Willy, “a man has got to add up to something.”¹⁸ He kills himself in hopes that Biff might, with the money, add up. And one must, in Willy’s dream, add up in dollars, for there is no other measure.

It is Willy’s commitment to his dream and the recognition of his failure in achieving it that leads him to suicide. His vision of the good life, a distant vision found throughout his society – and in ours – brings him down.

And yet that same vision has been injected throughout the world. It is an ironic coincidence that *Death of a Salesman* opened on February 10, 1949, for only weeks earlier, with President Truman’s declaration of the Southern hemisphere as “underdeveloped areas”, the age of underdevelopment and therefore dissatisfaction began. “Since then,” writes Gustavo Esteva, “development has connoted at least one thing: to escape from the undignified condition called underdevelopment.”¹⁹ Development conceives of the majority of the world’s people in terms of what they are not. To escape from this vague and undesirable condition “they need to be enslaved to others’ experiences and unattainable dreams.”²⁰ When development becomes the dream of a people, they no longer want to dream their own dream. Willy’s dream and the dream of development share an ideal of the good life. Both recognize success in purely economic terms. Both see themselves as the only acceptable

“The Japanese speak of the ‘new three sacred treasures’: colour television, air conditioning, and the automobile. One fourth of Poles deem ‘Dynasty’, which portrays the lifestyle of the richest Americans, their favourite television programme, and villagers in the heart of Africa follow ‘Dallas’, the television series about American oil tycoons.”

dream. At one point Biff tells his brother, "we don't belong in this nuthouse of a city! We should be mixing cement on some open plain, or carpenters. A carpenter is allowed to whistle!" Then Willy walks in: "Even your grandfather was better than a carpenter."²¹ Willy cannot accept Biff's dreams because they are not *the* dream. "You don't want to be anything, is that what's behind it?" Willy asks Biff when Biff tries to tell him for the last time that he cannot go into selling.²² Willy himself ends up sacrificing himself for his dream, rather than admit its emptiness. Imposing a single dream on a naturally very diverse world can only be disastrous. "Rediscovering the values in diverse communities", writes C. Douglas Lummis, "does not mean discovering a value in being poor, but discovering that many of the things that have been called 'poor' were actually different forms of prosperity. 'Prosper' (Latin *pro sperere*) originally meant 'according to hope'. How and when a people prospers depend on what it hopes, and prosperity becomes a strictly economic term only when we abandon or destroy all hopes but the economic one."²³ In different places around the world I witnessed how that false economic dream takes hold of people. In Turkey I met people in love with America and its products. In India I talked with aspiring hotel managers. In Thailand I heard people speak quietly of how economics was becoming the new religion. Alan Durning writes, "The Japanese speak of the 'new three sacred treasures': colour television, air conditioning, and the automobile. One fourth of Poles deem 'Dynasty', which portrays the lifestyle of the richest Americans, their favourite television programme, and villagers in the heart of Africa follow 'Dallas,' the television series about American oil tycoons. In Taiwan, a billboard demands, 'Why aren't you a millionaire yet?' A Business Week correspondent beams: 'The American dream is alive and well . . . in Mexico.'²⁴

The trouble is that the image of the good life the consumer society upholds is one predicated on having what others do not. One's status depends on who has more and who has less. It's a treadmill. This is why Lummis argues that it is "fraud to hold up the image of the world's rich as a condition available to all."²⁵ To do so one must pretend "to offer to all, a form of affluence that presupposes the relative poverty of some."²⁶ And even if it were possible for all in the world to live like Americans, we would need between three and five planets worth of resources to do so, depending on who is doing the estimating.²⁷ The consequence of this dubious achievement would be ecological catastrophe.

The dream however is dissolving. Gustavo Esteva has spoken of how Mexico's Zapatistas said Basta! Enough! Together they said, "We cannot accept this." With this collective "No" came a change in perceptions which, as with all changes in perceptions, brought a change in power.²⁸ I spoke with a young woman in Turkey about the terrible things people were doing in the Turkish government and elsewhere. "We need



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people to say, 'this is false,'" she said carefully. "Though there are people who want to say it, they are afraid. But we need people to say, 'this is false.'" In *Death of a Salesman*, it is Biff who has the courage to say, "this is false." He knew Willy's dream was wrong, for his father and for himself. In the powerful scene that culminates in both Willy's realization of Biff's love and his decision to kill himself, Biff tells Willy how, after trying for the last time to follow the path of the salesman, he stopped. "I stopped in the middle of that building and I saw – the sky. I saw the things I love in this world. The work and the food and the time to sit and smoke. . . . Why am I trying to become what I don't want to be? What am I doing in an office, making a contemptuous, begging fool of myself, when all I want is out there, waiting for me the minute I say I know who I am!"²⁹ For Biff, saying "No" to his father's dream allowed him to say "Yes" to something else, something that Willy might have said "Yes" to as well. But Willy could never accept Biff's

The good life – Apple juice-making in rural mendocino country, California

But Willy's expectations are never met and happiness is always one step further away, which is to say, never present.

dreams of carpentry or farming. At Willy's funeral, Biff remembers how Willy made the stoop, worked on the cellar, put up the new porch, and built an extra bathroom. "You know something," he says to their neighbour Charley, "there's more of him in that front stoop than in all the sales he ever made."³⁰ In the opening scene, after telling Linda of the thick trees and warm sun of New England, Willy grows angry that his house is boxed-in by apartments. "Bricks and windows, windows and bricks," he mutters. "The street is lined with cars. There's not a breath of fresh air in the neighbourhood. The grass don't grow anymore, you can't raise a carrot in the back yard. They should've had a law against apartment houses. Remember those two beautiful elm trees out there? When I and Biff hung the swing between them? . . . They should've arrested the builders for cutting those down. They massacred the neighbourhood. Lost: More and more I think of those days, Linda. This time of year it was lilac and wisteria. And then the peonies would come out, and the daffodils. What a fragrance in this room!"³¹

On the morning after Biff says he's going to try to start a business:

WILLY: Gee, on the way home tonight I'd like to buy some seeds.

LINDA, *laughing*: That'd be wonderful. But not enough sun gets back there. Nothing'll grow anymore.

WILLY: You wait, kid, before it's all over we're gonna get a little place out in the country, and I'll raise some vegetables, a couple of chickens . . .³²

And after Willy is abandoned by his sons in a restaurant bathroom near the end of the play, he asks the waiter if there is a seed store in the neighbourhood. "Oh, I'd better hurry. I've got to get some seeds," Willy says as he leaves. "I've got to get some seeds, right away. Nothing's planted. I don't have a thing in the ground."³³

Willy's urge to plant, and his desire to see the sun from the house he helped build are overshadowed by his dream, the vision that captures all his attention. Yet listening carefully to his dream it is clear that he sought and needed something else, without recognizing it or finding it in his job: ". . . I met a salesman in the Parker House. His name was Dave Singleman. He was eighty-four years old, and he'd drummed merchandise in thirty-one states. And old Dave, he'd go up to his room, y'understand, put on his green velvet slippers – I'll never forget – and pick up his phone and call the buyers, and without ever leaving his room, at the age of eighty-four, he made his living. And when I saw that, I realized that selling was the greatest career a man could want. 'Cause what could be more satisfying than to be able to go, at the age of eighty-four, into twenty or thirty different cities and pick up a phone, and be remembered and loved by so many different people? Do you know? when he died – and by the way he died the death of a salesman, in his green velvet slippers in the smoker of the New York, New Haven and Hartford, going into Boston – when he died, hundreds of salesmen and buyers were at his

funeral."³⁴

Willy didn't seek business. He wanted to be known and remembered. He sought friends and he sought love. Linda knew this, knew how much Willy needed his sons' love. In one of the most famous speeches in the play, she tells Biff: "I don't say he's a great man. Willy Loman never made a lot of money. His name was never in the paper. He's not the finest character that ever lived. But he's a human being, and a terrible thing is happening to him. So attention must be paid. He's not to be allowed to fall into his grave like an old dog. Attention, attention must finally be paid to such a person."³⁵ And yet when Biff finally shows Willy that he loves him, Willy takes this testament of love as proof that his dream was indeed right and his private doubts unfounded. "That he is unable to take this victory thoroughly to heart," writes Arthur Miller, "that it closes the circle for him and propels him to his death, is the wage of his sin, which was to have committed himself so completely to the counterfeits of dignity and the false coinage embodied in his idea of success that he can prove his existence only by bestowing power on his posterity, a 'power' deriving from the sale of his last asset, himself, for the price of his insurance policy."³⁶

Willy sought love and friendship, and he sought the soil, but part of the tragedy of the play, and its power, is that he cannot reconcile these with his dream. The tragedy, however, goes beyond his own failure, for though this vision was one he chose, it was not his own. It was an ideal given to him, embedded in a long and particular history. And that which he sought but could not find in his job is more and more difficult to find in America. Ours is a society of individuals who tend to be removed from the past and unable to make lasting ties with either the land or each other. Miller writes that *Death of a Salesman* grew from simple images, of houses once filled with children but now silent and occupied by strangers. "It grew from images of futility – the cavernous Sunday afternoons polishing the car. Where is that car now? And the chamois cloths carefully washed and put up to dry, where are the chamois cloths? And the endless, convoluted discussions, wonderments, arguments, belittlements, encouragements, fiery resolutions, abdications, returns, partings, voyages out and voyages back, the tremendous opportunities and small squeaking denouements – all in the kitchen now occupied by strangers who cannot hear what the walls are saying . . ."³⁷ "Above all, perhaps, the image of a need greater than hunger or sex or thirst, a need to leave a thumbprint somewhere on the world. A need for immortality, and by admitting it, the knowing that one has carefully inscribed one's name on a cake of ice on a hot July day."³⁸ These are images of community lost. Cars and cloths vanish, and ultimately do not matter. When Willy and his family are gone, no one will carry on their stories. In a place without community, those in government do not know you. You are not remembered or needed. You leave no



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"It is possible," writes Berry, "as I have learned again and again, to be in one's place, in such company, wild or domestic, and with such pleasure, that one cannot think of another place that one would prefer to be-or of another place at all.

thumbprint. For Willy, there was little community to seek love and friendship within, even as it is community that he and America so desperately need. In community you can ask for personalized treatment, what only the very rich in modern society can ask for. In community, you are loved and remembered and needed. Your stories pass on. And most important, in community you are someone, never a stranger, and never a stranger to your own family. You are known. No one comes to Willy's funeral, nobody except Biff, Happy, Bernard, Charley, and Linda, the only semblance of a community he has.

I have in the past year seen places that were strikingly different from where I grew up, places wild and strange and wonderful. But none was as strange as my own country now seems as I return. It is far stranger at home than abroad. It is here that a dream is still rooted, a vision of the good life that is not good. It is the vision of which Willy Loman's dream was a part and which still guides people in other cultures that aspire to development. And it is a vision central to an economy that is helping devour the Earth, warm the climate, deplete the ozone and perpetuate so many other horrors. To see this is to see the need to undertake the work of intelligent change, work that we each must ultimately take up on our own. "The use of the world", writes Wendell Berry, "is finally a personal matter, and the world can be preserved in health only by the forbearance and care of a multitude of persons. That is, the possibility of the world's health will have to be defined in the character of persons as clearly and as urgently as the possibility of personal 'success' is now so defined."³⁹ This will be no easy task, for doing so requires questioning what many of us believe without believing we believe it. It requires breaking the law of success, not, however, by failure, but by redefining what we live for. David Orr writes that "there is a myth that the purpose of education is to give students the means for upward mobility and success. . . . The plain fact is that the planet does not

need more successful people. But it does desperately need more peacemakers, healers, restorers, storytellers, and lovers of every kind. It needs people who live well in their places. It needs people of moral courage willing to join the fight to make the world habitable and humane. And these qualities have little to do with success as our culture has defined it."⁴⁰ What I think we are witnessing is the corruption of the good life. When the good life becomes a matter of competition, it transmogrifies into "the better life" and what results is a society of dissatisfaction. The task of always seeking the better life "always to have to get ahead of the next fella" says Biff — means constantly being frustrated with where one is. Those who are always wanting more or yearning for other places or for the future or the past are always dissatisfied with where they are now and are therefore never here. "If I'd gone with him [Ben] to Alaska that time," says Willy, "everything would've been totally different."⁴¹ "Dad is never so happy as when he's looking forward to something!"⁴² Happy says to Biff. Willy's suicide is the ultimate statement of his faith in a better future; he believes that for his son to get the money and see the crowds at his funeral in the future will be better than not adding up now. But Willy's expectations are never met and happiness is always one step further way, which is to say, never present.

Of course one cannot live without an image of the future. As Berry puts it, "hope and vision can live nowhere else."⁴³ But one's hope and vision shape one's action in the present, and to truly work for a good future means to live well in the present, the only place anyone can live. And in this may lie peace. "It is possible," writes Berry, "as I have learned again and again, to be in one's place, in such company, wild or domestic, and with such pleasure, that one cannot think of another place that one would prefer to be — or of another place at all. One does not miss or regret the past, or fear or long for the future. Being there is simply all, and is enough. Such times

The ecological crisis is many things, different in different places. For me, it is about seeing how our American and now global economy is devouring the earth and how all of us who participate in it participate in this destruction.

give one the chief standard and the chief reason for one's work."⁴⁴ Or, in the words of Annie Dillard: "experiencing the present purely is being emptied and hollow; you catch grace as a man fills his cup under a waterfall."⁴⁵

In the modern world, says Esteva, when people see its horrors, they turn away because they can't see any other way. All they see is a dead end. Willy saw no other way, so complete was his commitment to his dream. But it is wrong to believe there are not other ways. For Willy, the way he did not see lay in community, that is, in the way of love. And this is also a way for us.

Cathrine Sneed, a jail counsellor who began gardening with prisoners in San Francisco, is one activist who has successfully reinvented the dream. The idea for her project came when she was sick, and had been given only months to live. She read John Steinbeck's *The Grapes of Wrath*, and realized the importance of connecting with land. Her plan was to start a garden with the inmates she worked with. She soon recovered. "Talk is cheap," she told us. "What's important is family, not talk." That's what has grown out of the garden project, hope for people who had no hope and community for those without community. She told us about how one of the inmates marvelled at the change, at how the plants grew, at the little green things. Another was transformed when he saw he could do something good, that he could grow food for people who needed food. Hundreds have been changed working together in the soil. "Some afternoons I work late in the garden," she said. "And God is there with me. The prisoners no longer laugh at me when I say that."⁴⁶

Death of a Salesman is a play about what we live for and how we face our smallness. "You've got to get it into your head now," Linda tells Biff, "that one day you'll knock on this door and there'll be strange people here"⁴⁷ – and the ice in July melts.

At the end of the play, it is Biff who has seen what goes on: "He had the wrong dreams. All, all, wrong. . . . He never knew who he was."⁴⁸

Biff has learned. "I know who I am, kid," he tells Happy.⁴⁹ But Happy still clings to his father's dream: "It's the only dream you can have."⁵⁰ And Linda, at Willy's grave, cannot understand. "Why did you do it? I search and search and I search, and I can't understand it, Willy. I made the last payment on the house today. Today, dear. And there'll be nobody home."⁵¹ This is the sadness, that for all the dreaming and work, toiling away, there is nobody home for this family – strangers everywhere. In spite of Linda's last lines, which so powerfully ring in this America: "We're free and clear. We're free. We're free. . . . We're free. . . ."⁵² the sadness is that Linda and Willy are not free, not even in the wake of Willy's escape and death. Neither is Happy, who now takes on Willy's dream.

The ecological crisis is many things, different in different places. For me, it is a call to respond well to reality, to encounter it honestly, to see both the horror and the hope, and to have the courage to act. It is about seeing how our American and now global economy is devouring the Earth and how all of us who participate in it participate in this destruction. But at the same time it is about our lives as individuals in broken communities who find ourselves in a situation not of our own design. The small story, of a small man like Willy, is as important as the great and terrifying picture of the troubles our planet faces. For me, now, the personal question of our small lives in such strange times takes precedence, for it is here I can do something. Much of the environmental crisis is far beyond my control, but I can, in my own life and place, do something good. I can honour my relationships to family and friends, disentangle myself from the global economy, seek to respect the soil, and live well in community. It is in small deeds like these that the large deed can come about, and it is in small deeds like these that I find hope.○

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Notes

1. Arthur Miller, *Death of a Salesman* (New York: Penguin, 1949), p. 15.
2. *Ibid.* p. 16.
3. *Ibid.* p. 22.
4. *Ibid.* p. 26.
5. Wendell Berry, *The Unsettling of America*, third edition (San Francisco: Sierra Club Books, 1977), p. 4.
6. *Ibid.* p. 5.
7. *Ibid.* p. 6.
8. *Op.cit.* 1, p. 73.
9. *Op.cit.* 1, p. 17.
10. *Op.cit.* 1, p. 17.
11. Quoted in Alan Thein Durning, *How Much is Enough? The Consumer Society and the Future of the Earth* (New York: W.W. Norton, 1992), pp. 21-22.
12. For a study of how the logic of the market reshapes cultural institutions and gives us only the illusion of freedom see Andrew Bard Schmookler, *The Illusion of Choice: How the Market Economy Shapes our Destiny* (Albany: State University of New York, 1993).
13. Quoted in Durning, *Ibid.* p. 30.
14. *Ibid.* p. 30.
15. *Op.cit.* 1, p. 82.
16. For example, after Willy tells his brother how he's raising his sons, "rugged, well liked, all-around" (49), he admits, quietly, "sometimes I'm afraid I'm not teaching them the right kind of – Ben, how should I teach them?" (52).
17. *Op.cit.* 1, p. 95.
18. *Op.cit.* 1, p. 125.
19. Gustavo Esteva, "Development," *The Development Dictionary*, edited by Wolfgang Sachs (London: Zed, 1992), p. 7.
20. *Ibid.* p. 10.
21. *Op.cit.* 1, p. 61.
22. *Op.cit.* 1, p. 112.
23. C. Douglas Lummis, "Equality," *The Development Dictionary*, p. 49.
24. *Op.cit.* 11, p. 22.
25. *Ibid.* p. 47.
26. *Ibid.* p. 47.
27. This is an often-cited statistic. See for example Mathis Wackernagel and William E. Rees, *Our Ecological Footprint: reducing human impact on the earth* (Gabriola Island: New Society, 1996), pp. 13-16.
28. cf. Gustavo Esteva, "Basta! Mexican Indians say 'Enough!'" *The Ecologist*, Vol. 24, No. 3, pp.83-85.
29. *Op.cit.* 1, p. 132.
30. *Op.cit.* 1, p. 138.
31. *Op.cit.* 1, p. 17.
32. *Op.cit.* 1, p. 72.
33. *Op.cit.* 1, p. 122.
34. *Op.cit.* 1, p. 81.
35. *Op.cit.* 1, p. 56.
36. Arthur Miller, "Introduction to *Collected Plays*," *Death of a Salesman: Text and Criticism*, edited by Gerald Weales (New York: Penguin, 1967), p. 167.
37. *Ibid.* p. 162.
38. *Ibid.* p. 163.
39. *Op.cit.* 5, p. 26.
40. David W. Orr, *Earth in Mind: On Education, Environment, and the Human Prospect* (Washington, D.C.: Island Press, 1994), pp 11-12.
41. *Op.cit.* 1, p. 45.
42. *Op.cit.* 1, p. 105.
43. *Op.cit.* 5, p. 58.
44. Wendell Berry, "Economy and Pleasure," *What are People For?* (San Francisco: North Point, 1990), p. 143.
45. Annie Dillard, *Pilgrim at Tinker Creek* (New York: Harper & Row, 1974), pp. 80-81.
46. From her Schumacher Lecture, Saturday, October 19, 1996, Bristol, England.
47. *Op.cit.* 1, p. 55
48. *Op.cit.* 1, p. 138.
49. *Op.cit.* 1, p. 138.
50. *Op.cit.* 1, p. 139.
51. *Op.cit.* 1, p. 139.
52. *Op.cit.* 1, p. 139.

Stronger than Steel:

Indian People's Movement against the Gopalpur Steel Plant

Stronger than Steel is both a metaphor and a real story. It symbolizes the strength of sustainable, diversity-based economics as compared with an economic model which is increasingly dominating all regions of the Earth. It is a story of indiscriminate economic development at any cost versus the will of a people who will not be 'developed'.

by **Vandana Shiva and Afsar H. Jafri.**

Edited and condensed by **Paul Kingsnorth**

IN INDIA'S 50 YEARS of independence, millions of people have been forcefully displaced from their lands and their homes for 'development' projects – projects that were considered necessary for the national interest, since they produced goods and services for the people of India. Local sacrifice was justified in the national interest. Today, people are still being displaced all over India, but now the justification for it has changed. People and communities are today displaced not in the name of 'development', but in the name of

It is often argued that globalization creates growth and employment, and that growth will remove poverty. What is overlooked is that globalization creates this 'growth' by destruction both of the environment and of sustainable local ways of living.

'globalization'. There is a crucial difference. While development demanded that local communities give up their land and homes for the greater public good, and for the national sovereignty of India, globalization demands that people sacrifice their livelihoods, and sometimes even their lives, for corporate profits. In Gopalpur, in the Indian State of Orissa, a 100% export-oriented steel plant is soon to be built. Over 25,000 people are to be displaced. The local economy will be destroyed, and

the area's valuable biodiversity and wildlife will be badly affected. The project is a classic product of the globalization era: the steel plant is being built at a time when such plants are closing down all over the industrialized world. The steel it produces will not be for the benefit of the people of India, but will be exported cheaply to the global market. The people of Gopalpur are to be forced to give up their livelihoods, their land and their traditions for the benefit of global free trade. The steel company stands to make significant profits from the project. There is just one hitch: the people of Gopalpur are refusing to move.

Global Environmental Apartheid: the Truth Behind the Economics

One of the characteristics of globalization is the relocation of capital-intensive and polluting industries to Third World countries. It is often argued that globalization and liberalization create growth and employment, and that growth will remove poverty. What is overlooked is that globalization creates this 'growth' by destruction both of the environment and of sustainable local ways of living. For millions of people, globalization has actually created poverty and unemployment instead of removing it. Such a fate, if the government of Orissa has its way, now awaits the people of Gopalpur.

Why is this steel plant to be built at all? At a time when global steel production capacity exceeds demand by 20 per cent, and when steel manufacturing is becoming unviable in many other parts of the world, a ten-million-ton integrated steel plant is to be foisted on the state of Orissa. The reason has little to do with 'free trade'. At a

time when the mantra of 'globalization' is that governments should play a reduced role in economic affairs, the government of Orissa is playing a major role in propping up the steel project by appropriating resources from its people against their will and handing them over as a subsidy to global commerce. The destruction of ecosystems and livelihoods is a major environmental and social subsidy to global trade, and those who control it. There is nothing 'free' or 'fair' about it.

The case of the Gopalpur steel plant

The real costs of steel production will include the destruction of land and livelihoods, the violation of human rights and the reduction of biodiversity. None of this will be reflected in the company accounts.

illuminates the subsidies on which global 'free trade' is based; subsidies that create an artificial competitiveness because the real costs of production are not internalized into the export price of the goods. In this case, the real costs of steel production will include the destruction of land and livelihoods, the violation of human rights and the reduction of biodiversity. None of this will be reflected in the company accounts. The internalization of such costs into corporate production is an environmental, human rights and democratic imperative. It is also an ethical imperative, because it reflects the truth about a global economic system which respects neither nature nor people, but only profits and short-term competitiveness.

The Gopalpur Steel Project: an Overview

Since 1995, the threat of globalization has been haunting the simple and peace-loving people of 25 villages in the Chatrapur-Berhampur tehsils, and 12 further villages at Pipalpanka Forest Reserve, in the Indian State of Orissa. The former villages occupy the site of the proposed steelworks, the latter is where the company plans to build

a dam across the Rushikulya river, to supply water for the plant.

The Tata Iron and Steel Company Ltd (Tisco) is a long-established Indian steel company. Its first steelworks in India was established 80 years ago in Bihar. In August 1995, Tisco signed an agreement with the Orissa State Government for the construction of a Rs. 20,000 integrated steel plant. But the Gopalpur steel project consists of more than just the steelworks itself. It will also involve the construction of an oxygen plant, coke-ovens, a port, a power plant and an opencast iron ore mine in the area where the villages and their natural surroundings now stand. All these projects will be overseen by joint ventures of which Tisco will be only one of the partners. Tisco has appointed the Nippon Steel Corporation of Japan as a consultant for the project, and a number of other companies from Germany, South Korea and Japan are in a race to acquire equity stakes. Five foreign companies have shown interest in the coke-oven project, and a number of others are looking into the possibilities of investing in various aspects of the plant's operations. The Gopalpur steel project will be a truly international venture.

Land-Grabbing: State Power as a Servant of Corporate Interests

The amount of land needed for Tisco's steel plant is huge. Tisco want to acquire 4,500 acres for the plant site, 1,000 acres for a township for its workforce and a mere 538 acres for a 'rehabilitation colony' to settle the thousands of people displaced by the scheme. In addition, the government of Orissa has promised Tisco extra land for construction of the dam needed to supply water to the plant, for laying roads and railway lines to transport goods and raw materials, and for power lines, pipelines, port corridors and approach roads to the mines. In total, the Gopalpur steel development will swallow up 7,058 acres of land. The elected government of Orissa is subverting democracy in its land-dealings with Tisco. The government is willing to render all assistance to facilitate Tisco in establishing the steel plant despite the fact that not only will there be colossal losses in terms of land, environment and livelihoods, but that the vast majority of its people are solidly opposed to the 'development' which is intended to 'improve' their lives. Yet the government is willing to ignore its people in order to serve the will of a vast company and its subsidiaries. If built on the planned site, it will displace 25,000 people from 25 villages (though the government and the company, using outdated figures and disingenuous mathematics, put the figure at only 11,000). It would also destroy the



Over the last year and a half, there have been a number of clashes with police who have tried several times, always unsuccessfully, to enter the villages on behalf of Tisco. But despite a number of serious injuries, the local people remain determined to protect their environment, which they and their families have protected and preserved for generations.

environment of a lush, green coastal site studded with the horticultural and agricultural farms and gardens that provide the livelihoods of a people very much in tune with nature.

Local Economy and Environment in Harmony: What Will Be Lost

The area on which the steel plant is to be built is a precious patch of agricultural and horticultural land. The unique feature of this area is the multi-cropping system. The lands surrounding the 25 villages scheduled for demolition are full of coconut groves, jackfruit trees, and plantations of banana, mango, pineapple, lemon, tamarind and many other fruits. However, the most precious source of income is a rare species that for generations has sustained the people of this part of Gopalpur both physically and culturally: the kewra plant.

Kewra is the basis of the local community's wealth. It is a perennial and lucrative source of income for local people, and it requires hardly any investment. Kewra is a bushy plant with thorny leaves that grows wild in the coastal belt of the Ganjam District of Gopalpur. It is mostly planted around the boundaries of fields and plantations for fencing purposes. The aromatic scent distilled and extracted from kewra, which is used to make perfume and essence, is a lucrative source of income for local people. There is tremendous demand for kewra essence from both the domestic and the international markets: it is used to flavour chewing tobacco, pan masala, sherbet, sweets, incense sticks and medi-

cine, and the distilled spirit is exported to west Asian countries for manufacturing perfume. Kewra's export potential to Western countries is also high, as it is used as an ingredient in packaged food items.

Ninety-five per cent of all the kewra flowers produced in India come from the Ganjam District. The plant is the backbone of the region's economy – the locals call it 'gold'. There are already 65 small kewra distillation plants in Ganjam, and during the flowering season, almost every villager in the region is involved in the kewra industry in some way, either working in the distillation plants, or employed as pickers or commission agents for their local distiller.

It is not only the kewra flower that has an economic or practical value for the people of Ganjam. The fibre extracted from the plant's roots is sold locally as rope. Kewra leaves are used to make nets, mattresses, hats, flower baskets, purses, folders and a number of other household items. Branches are used as pillars and supports for cattle huts, and locals use various parts of the plant as fuel.

Kewra is a story of economic success based on sustainable use of the region's natural resources. The rich income from kewra has helped the villagers to establish two high schools, which are currently flourishing on the proposed Tisco plant site. The income from kewra, and the sales of other local fruits, supports the daily running of the schools: an excellent example of the local 'biodiversity economy' which will be lost if and when the Tisco plant is built.

Nor should Kewra's ecological importance be overlooked. Kewra bushes check soil erosion from agricultural land and stabilize the sand dunes along the seashore. They also act as barriers to cyclones and heavy rain: hardly any kewra trees are uprooted by cyclones in Ganjam. Kewra has been a gift of nature for the inhabitants of the region and the local ecology. Kewra is not the only source of natural wealth that the people of Ganjam currently rely on. Coconut grows plentifully in this region, and the ripened nut is considered a symbol of prosperity. Each part of the coconut, like the kewra plant, has commercial value. In Ganjam, the most valuable part is the unripe nut, or dab, whose kernel is full of milk, consumed locally as a health drink. Ripened nuts, dried nuts and the fibrous coating of the nuts also have commercial value, either as food or for the extraction of coconut oil. The dry spines of the coconut leaves are used for making brooms, and the leaves are also used for thatching roofs and walls, and making mats and other products. The trunks of the trees are often used in house construction as rafters or roof beams, and the nut's husk is turned into rope, string and cushion mats.

The Local Biodiversity Economy

Apart from kewra and coconut, which provide the major sources of employment and sustenance in Ganjam District, even for those who are landless, many other plants and herbs with medicinal or commercial value grow in the area. Some fruits like tamarind, blackberry, palm fruit and jangal jilabi have economic value, and serve the community's needs freely. What is true of



Chandramma Mulli carrying kewra roots which will be used for making string. Kewra is the basis of the local communities wealth.

fruits is also true of the region's agricultural crops. It seems that mono-cropping has not touched this land. The people grow agricultural crops for their own use, and the surplus is sold at market. Seasonal vegetables grown in the area include kidney bean, millet, mustard, sesamum, groundnut, ahar, brinjal, spinach, gourd, okra, ginger, chilli, radish, and many others. The yield of vegetables in this region is notoriously good and the quality equally so: the brinjal from Kalipilli village is famous for its exquisite taste.

Ironically, when the people of Saroda sought permission from the Orissa government to construct a medium-height dam on the Rushikulya River for the purpose of irrigating the fields, permission was refused on the grounds that the soil was not suitable for dam construction. Yet when Tisco suggested a much bigger dam to be built at public expense for the benefit of its own export profits, the soil suddenly became ideal for dam construction.

Farmers in the area also own livestock, mainly bullocks, cows, sheep and goats. Arable farmers who own livestock – which are used for traditional ploughing amongst other things – get an additional income from lending their cows or bullocks to those who need extra manure for their fields or orchards. As with the horticultural economy, agriculture provides an income for thousands of people, and has been part of the area's way of life for centuries. Of the total 5,000 acres of land that will be swallowed by the steel plant, approximately half is used for agriculture, and the other half for horticulture and orchards.

Damming the Community

The government has also made available to Tisco a further 1,110 acres of land 120 km away from the steelworks site, in the Pipalpanka Forest Reserve. Here, Tisco wants to dam the Rushikulya River, the

Kewra is a story of economic success based on sustainable use of the region's natural resources.

lifeline of the Ganjam District. The reservoir and hydropower plant thus created will provide much of the energy for the steelworks. But the construction of the dam and reservoir, in the middle of a forest reserve, will destroy great swathes of trees and displace another 4,000 people, whose villages will be submerged.

Ironically, the people of Saroda, near Pipalpanka have long sought permission from the Orissa government to construct a

medium-height dam on the Rushikulya River for the purpose of irrigating the fields of the local people. The area was surveyed twice, and permission refused on both occasions on the grounds that the soil was not suitable for dam construction. Yet when Tisco suggested a much bigger dam, to be built at public expense, for the benefit of its own export profits, the soil suddenly became ideal for dam construction, and the government's Water Resources Development Department declared that the Pipalpanka Reserve is ideal for dam con-

struction.

The creation of the Pipalpanka Reservoir will destroy 958 acres of reserve forest and 152 acres of degraded forest. The forest reserve shelters unique flora, including a number of endangered species, and fauna including more than 20 tigers and 200 elephants. It will also displace more than 4,000 people living in and around the proposed dam site. People from these villages say they will get nothing from the dam's construction: no compensation, no jobs, no water, nothing. But they will lose vast areas of forest, which provides them with their economic lifeline. The government claims it will replant as many trees as are destroyed, and this may well be true: but the trees to be planted are fast-growing non-native eucalyptus, which will play havoc with local ecosystems.

Furthermore, the Rushikulya River provides water and irrigation for the whole Ganjam District. Yet, already, even before the dam is built, the area is suffering from an acute water shortage that even Tisco acknowledges. If Tisco's dam is constructed, it will stifle the river that is the primary source of water in Ganjam District, and add enormously to existing water-shortage problems, as well as affecting seasonal irrigation of people's crops and affecting ecosystems across a wide area.

Additional Development

The Gopalpur Steel plant will require about 4.4 million tonnes of iron ore per annum for its production in the first few years of its operation. If it eventually reaches its target production capacity of 10 million tonnes of steel a year, it will need 17.5 million tonnes of ore per annum. To

meet this need, Tisco has applied for a mining lease to extract ore over an area totalling 38 square kilometres of Orissa.

Ever since Tisco established its first mine in Orissa early this century, government and company have been co-operating to extract profits from the land. However, in recent years, the proportionate amount of revenue that the Orissa government earns from Tisco's mining activities has been declining, while Tisco's profits have been increasing.

So far, no environmental impact assessment has been carried out on the area where Tisco hopes to site its new mine. However, there is a Forest Reserve a few kilometres from the proposed mine site, and Tisco has already applied to central government for permission to clear the forest to make way for the mine. At present, the full extent of the environmental cost of the proposed mine cannot be known, but could be very great.

Importing the Pollution Burden

Tisco has always claimed that neither effort nor expenditure will be spared to protect and even enrich the environment that would be affected by the construction of the Gopalpur steel plant. Its confidence

Economic growth cannot help regenerate the very spheres that are destroyed in order for economic growth to take place.

Nature shrinks as capital grows. Natural growth can be turned into cash, but the process does not work in reverse.

is not justified. How can Tisco generate the same biologically rich environment by squeezing 25,000 people, currently living on 5,000 acres of land, into a mere 538 acres? It is clear that the natural environment in and around the resettlement site will be vastly inferior to that which the people currently inhabit. Moreover, the plant would cause large-scale pollution of the air, water and land, quite apart from the noise, traffic and social pollution which follows industrialization everywhere. Economic growth cannot help regenerate the very spheres that are destroyed in order for economic growth to take place. Nature shrinks as capital grows. Natural growth can be turned into cash, but the process does not work in reverse.

The existing levels of pollution in Ganjam District are very low, and the proposed steel plant will greatly add to them, in particular with pollution from waste materials and dust created by the production processes. Tisco claims that the Gopalpur plant will have state of the art pollution control facilities, which will meet and go beyond India's legal environmental standards, and will be comparable with the environmental standards of steel plants in developed countries. But there is no doubt



The local people have installed pillars at the possible entry points to their land. This pillar reads "Water, land and environment belong to us and no one else has any rights over them. No one can dare enter inside it without our permission."

that the pollution from the steel plant, whatever Tisco say, will be serious and long-lasting.

For example, it seems highly likely that the percolation of wastewater from the plant through the ground will contaminate the groundwater, which is collected

through boreholes and wells and used as drinking water by many surrounding villages. Furthermore, Tisco plans to simply dump all its wastewater into the Bay of Bengal, greatly affecting the marine



This man suffered serious injuries to his arm during a peaceful protest in Sindhigoan.

resources that provide sustenance for thousands. Marine life likely to be affected includes horseshoe crabs and the rare Olive Ridley turtle, for which Orissa is one of the world's three main nesting sites.

But the most serious pollution problem that the steel plant will cause will stem from toxic waste dumping. Tisco's Environmental Impact Assessment, and all other documents it has produced relating to the plant, are strangely silent on this matter. Yet Tisco has not even yet decided where and how to dispose of the dangerous toxic waste its steel production processes will produce – a factor which clearly demonstrates Tisco's casual attitude towards the environment.

The Rehabilitation Package: from Prosperity to Misery

Tisco has promised the people of Ganjam an unprecedented rehabilitation and resettlement package. The 25,000 people to be displaced from their 5,000 acres of land are to be accommodated in just 538 acres of land in two villages outside the area of the plant. The people currently living in these two villages are themselves to be displaced and removed elsewhere. Landowners will be given compensation of Rs.1 for every acre that Tisco takes, even though the market rate for such land is approximately Rs. 4.5 per acre. To placate the displaced, Tisco has also promised each family $\frac{1}{10}$ of an acre of land, free of charge, to build a new house on, Rs. 3,000 for setting up temporary accommodation and a monthly maintenance allowance of Rs. 500 for the first year after they are removed. Those who agree to move out of the District altogether will get an extra Rs. 30,000. Yet the accommodation and land provided for those displaced will clearly be inferior to that which they own at present. And despite Tisco's promise to provide employment training for those whose local economies have been destroyed by their arrival, the highly-automated nature of the plant means that few jobs will be available for local people, as even Tisco have tacitly admitted.

Despite Tisco's promises of money, benefits and derisory amounts of land, the construction of the Gopalpur steel plant will be an environmental, economic and cultural disaster for the people of Ganjam District. Tisco will not only be destroying their livelihoods, but destroying their future.

Stronger than Steel: Popular Resistance

For the inhabitants of Ganjam District, the words 'liberalization' and 'globalization' have become synonymous with 'destruction' and 'displacement'. Their response to the threatened destruction of their society,

economy and environment has been to put up a resistance which is stronger than steel to the forceful acquisition of their land.

On December 30th 1995, the then Indian Prime Minister, P. V. Narasimha Rao, laid the foundation stone of the Gopalpur Steel Plant, which his government had approved in record time. The local people who attended the ceremony waved black flags, despite the oppressive presence of police and security forces. The next day, local people demolished the foundation stone. This was just the beginning of a long campaign of protest and resistance to the steel plant which is still going on. In August 1995, locals formed a body named Gana Sangram Samiti (GSS), whose express purpose was, and is, to resist the entry of any government or steel plant officials onto local lands. Over the last 19 months they have successfully kept all officials away from their lands, despite clashes between police and villagers.

In August 1996 the Orissa government, frustrated by this campaign of resistance and the consequent delay to the steel plant's construction, began a 'reign of terror'. Six platoons of armed police – a total of about 6,000 armed men – were sent in to harass the villagers and break up the protests. During four days of protest the police beat the villagers with canes and

used tear-gas shells on women and children. Two women died as a result, and many other people were injured, some severely. Yet despite this, the people still managed to prevent the police from entering their villages.

In response to this oppression, the people threw up cordons around their villages, and erected 14 'People's Gates' at strategic points around the edge of the proposed plant site. Pillars erected by the gates bear

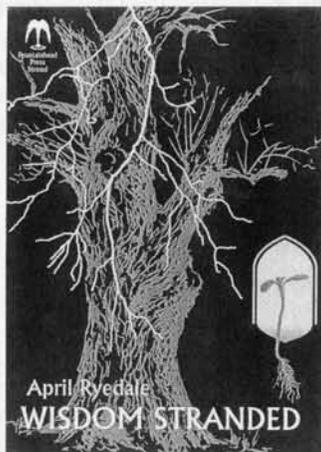
On December 30th 1995, the Indian Prime Minister laid the foundation stone of the Gopalpur Steel Plant. The next day, local people demolished it.

the slogan "Water, land and environment belong to us, and no one else has any rights over them. No one can dare enter without our permission." No one is allowed through the gates without the permission of the GSS or the particular village committee. The GSS asserts that the main issue is not one of environment versus development, but of extinction versus survival.

Over the last year and a half, there have been further clashes with police, who have

tried several times, always unsuccessfully, to enter the villages on behalf of Tisco. There has been more violence from the police, who have lathi-charged some villagers and opened fire on others, hospitalizing several people.

But local people have also been attempting to negotiate with the government on the issue. They have proposed three local alternative sites for the Tisco steelworks which would displace far fewer people and cause significantly less environmental damage. But the government, which seems to see its duty as the protection of Tisco rather than its own people, has refused to consider any of the villagers' alternative proposals. The Gopalpur steel project is an example of how power in cases like this has moved from the people and their government into the hands of a large corporation. The Orissa government, and especially its Chief Minister, seems to be acting on the dictates of Tisco, and colluding with them to snatch away the people's livelihoods for their own personal and business interests. But for the people of these 25 villages, compensation and resettlement mean nothing. The issue is their very existence in the place of their birth, and the protection of their environment, which they and their families have protected and preserved for generations.○



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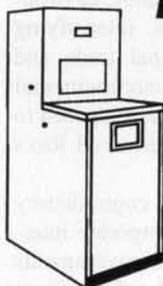
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Globalization and the Acceleration of Forest Destruction since Rio

When world leaders gathered at the 1992 Earth Summit in Rio de Janeiro, they declared to the world that the present economic model must change. Never before had so many heads of state gathered in one place to agree on such a unifying theme: charting a new economic course for the planet that would provide for the needs of all species while ensuring that future generations could do the same. This was the hope of Rio.

But while world attention was transfixed on prospects for resolving the looming social and ecological crisis, off camera its very aggravation was being planned. **By Victor Menotti**

FAR FROM THE MEDIA CIRCUS assembled in Rio, trade ministers met secretly in Geneva to finalize a lesser-known agreement that would expand world trade and thus have far greater impact on natural resource exploitation into the next century.

That agreement, known as the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), embodied a singular premise that underpins Rio's many government declarations, action agendas, and non-binding treaties: ecological sustainability through economic globalization. Indeed, Agenda 21, Section 1, emphatically declares that sustainable development would be achieved through trade liberalization. This was the strategic vision of Rio, whose tragic failure is now increasingly evident.

Since Rio:

- Timber from the vast woodlands of Siberia has started flowing to ports of the Pacific Rim.
- After depleting the forests of Sarawak and Saba, Malaysian logging companies have moved on to Amazonia.
- The rate of deforestation in Amazonia has increased by one third, and burning has tripled.
- The United States suspended all laws on National Forests in order to log some of their few remaining roadless areas.

During Rio, few questioned the inherent contradictions between the free-trade agenda and planetary ecological limits; in fact those who warned that the two were on an inevitable collision course, were largely ignored.¹ It was entirely predictable, environmentalists said, that, without any new safeguards, intensifying economic activities through expanded international trade and investment would only magnify the negative environmental effects of the very development model the world was supposed to be abandoning. From the outset, this paradox undermined Rio's hope.

But if Rio's conceptual framework was not contradictory enough, government actions on behalf of global corporate interests have subverted any remaining hope. Since Rio, governments have demonstrated enormous energy and political will to forge new free-trade agreements that increase corporate access to and control over natural resources and consumer markets, whilst letting treaties which might protect the planet languish. Rio's vision

that free trade would stabilize global climate, protect endangered species and slow deforestation has proven catastrophically wrong.

As evidence mounts of economic globalization's role in accelerating the ecological crisis, government and industry leaders are finding free trade's failures increasingly difficult to deny. At the United Nation's five-year review of Rio's progress, there was near consensus that not only had governments failed to achieve their modest targets but significant backsliding had occurred. Indeed, one of the chief advocates of Rio's global free-trade rhetoric, the World Business Council on Sustainable Development (WBCSD, formerly BCSD, which was founded by some of the world's largest corporations to influence the Rio process) has since admitted that its strategic vision is backfiring. In a recent "scenarios report" WBCSD explains that, "Globalization and liberalization of markets alone with the pressures of rapid urbanization have raised the degree of social inequity and unrest to a level that threatens basic survival of both human and environmental ecosystems."²

But if Rio's conceptual framework was not contradictory enough, government actions on behalf of global corporate interests has subverted any remaining hope.

Globalization has shifted control over planetary health from communities to corporations that operate in a global marketplace with no government oversight. Fierce competition forces firms to shift ecological costs onto society in order to satisfy the demands of global financial markets. The result is a new political structure where no one is in control or accountable for the accelerating destruction. Captured by corporate interests, governments have taken action in at least four key areas that have combined to create a global economy that systemically punishes ecologically-sustainable practices while rewarding environmentally-destructive ones. These include:

1) Forging Free-Trade Agreements: The North American Free Trade Agreement (NAFTA), the GATT (now administered by the powerful World Trade Organization [WTO]), the Asia-Pacific Economic Community (APEC), the European Union, and other initiatives to integrate markets have established sweeping new rules for trade and investment, consequently redefining the terms of economic competition everywhere. Where such agreements traditionally aimed at only reducing tariffs (import taxes), they now extend into new areas like buying land, dismantling supports for small



GARTH LENZ

producers, protecting foreign investors' property, and eliminating so-called non-tariff barriers, such as environmental laws. Free-trade pacts provide an enforceable international legal framework that transfers access and control over natural resources out of local hands and into those of the highest bidder in the global marketplace.

2) Rolling back National Regulations: To accommodate the new international framework created by trade agreements, national governments spent enormous energy changing domestic policies to attract more foreign investment, promote exports, and generally increase their competitiveness in the global marketplace. Some of the measures common to many countries include weakening environmental protections, reducing their legal enforcement, raising corporate subsidies and protections, and weakening citizens' rights.

3) Globalizing Financial Markets: While globalization of the logging industry has shifted control to large corporations operating in unregulated global markets, it is important to note that these firms, like all firms, are under increasing pressure to deliver profits for their shareholders. Because globalization provides unprecedented opportunities to increase one's return on capital, investors' expectations have been raised to levels that can only be achieved through wholesale exploitation of the natural world. In the business of logging, such high profits can only be maintained by ignoring protections for endangered species, cutting along steep slopes and riparian zones, or sacrificing worker safety.

4) Restructuring under the World Bank/International Monetary Fund (IMF): In a painful process beginning more than a decade ago, economies of the Third World have been systematically opened via Structural Adjustment Programs (SAPs) and other market-opening conditions of the World Bank and the IMF. Working together, and usually for the direct benefit of the Third World elites and Northern lenders, their lending policies have laid the regulatory groundwork for large multinationals to enter their econ-

Environmental damage, and particularly deforestation, was often a direct consequence of the export-oriented policies imposed by the World Bank and IMF.

omy, access resources, and export them back home with minimal restrictions. Environmental damage, and particularly deforestation, was often a direct consequence of the export-oriented policies imposed by the Bank and Fund.³

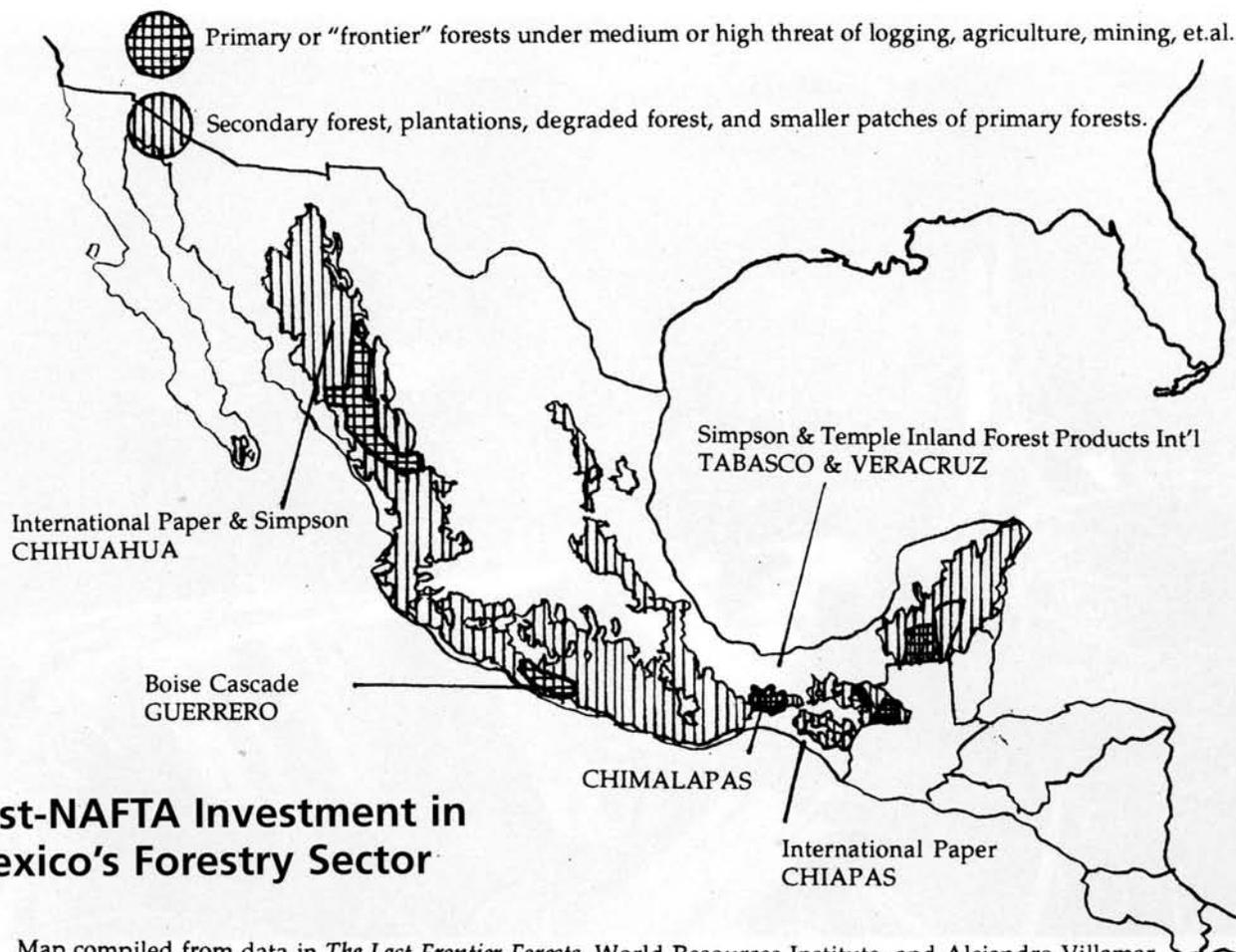
Globalization has rendered nations vulnerable to forces far beyond their control, as seen in the recent financial turmoil that has rocked the so-called emerging markets. The crisis has not only subjugated the economies of Mexico, Indonesia, Russia and Brazil to the crushing demands of foreign investors, but it has also deepened the vulnerability of forests as a desperate means for indebted nations to repay their foreign creditors. As a result, collapsing cur-

The global financial crisis has also deepened the vulnerability of forests as a desperate means for indebted nations to repay their foreign creditors.

rencies could reverberate throughout the Sierra Madre, Borneo, Siberia and Amazonia, as the world's last significant tracts of forests fall victim to finance capitalism.

The causal relationship between crashing currencies and falling forests became quite clear in the aftermath of the Mexican peso crash in 1994 (see section below on Mexico). Most recently, Brazil's President Fernando Henrique Cardoso, under enormous pressure to attract \$50 million in foreign investment in 1999, declared a ten-year moratorium on penalty fees for environmental crimes.

Moreover, as the financial contagion spreads globally, it directly influences forest industries in other countries, such as Canada,



Post-NAFTA Investment in Mexico's Forestry Sector

Map compiled from data in *The Last Frontier Forests*, World Resources Institute, and Alejandro Villamar, *Datos de la "Version Mexicana" de la Estrategia Global de la Industria Maderera-Papelera Internacional bajo el Tratado de Libre Comercio*, RMALC.

Chile and the United States. Gluts in the world timber markets compel governments to increase logging subsidies, or roll back more regulations, all in a bid to maintain competitiveness. While there may be an initial slowing of logging or delays in the expansion of new investment, crises situations tend to weaken the weak and strengthen the strong, creating the potential for even greater concentrations of wealth and power in the industry.

"Commercial logging", notes the Washington, D.C.-based World Resources Institute in its 1997 report, *The Last Frontier Forests*, "poses by far the greatest danger to frontier forests," referring to the planet's remaining large, intact natural forest ecosystems that have maintained their original biodiversity. The report explains that, "Logging in turn opens forests to hunting, fuelwood gathering, and clearing for agriculture."

This article focusses on the globalization of the logging industry. What follows are some examples of how the "globalization policy package" of privatization, deregulation, subsidization, and liberalization of trade and investment is affecting forests in different countries.

UNITED STATES

Without question the US logging industry has led the way in using government to scuttle what paltry international efforts there have been to forge an agreement to protect world forests. At the same time, by dominating the national policy-making bodies that virtually set negotiating instructions for the US Trade Representative (the Industry Sector Advisory Committees, or ISACs), the industry has ploughed ahead with expansionist trade policies to increase access to other nations' forest resources and consumer markets.

The most significant initiative affecting US forests since Rio

has been the 1995 Timber Salvage Rider, which served as a sort of "Global Competitiveness Restoration Act" for domestic logging companies that at once faced decreasing access to forest resources, increasing regulatory costs, and greater competition from cheaper imports.

Maintaining its position as the world's leading exporter of forest products required across-the-board cost reductions. The requirement to protect endangered species habitat, riparian zones, water and soil quality, among other things, made US timber producers "less competitive" in the globalized marketplace they had fought so hard to establish. Even non-exporting companies found competition stiffened by lower-cost imports, as world markets became increasingly integrated.

To sharpen its competitive edge therefore, the US logging industry needed unrestricted access to more trees at less cost. The Timber Salvage Rider delivered precisely these measures. Without a hearing or proper committee vote, the rider was attached to a larger piece of legislation that was widely hailed as the holy grail of the so-called Republican Revolution. Known as the Rescissions Act of 1995, it rescinded \$16 million from federal programmes, some aiding America's poor, hungry and elderly, while handing out millions of dollars in subsidies to the logging industry.

The Timber Salvage Rider, passed on April 7, aimed to expand logging an additional six billion board feet of wood over the next two years, nearly double the amount planned by the Forest Service.⁴ It suspended all laws applicable to logging on National Forests, including the Endangered Species Act, the Clean Air Act, the Clean Water Act, and the National Forest Management Act. As a result, some of the few remaining roadless areas in the country went up for bid at below market cost, effectively privatizing pub-

lic assets at a highly subsidized price. In California alone, nearly one billion board feet of timber went up for sale.⁵

By massively increasing logging in National Forests, taxpayers not only absorbed the cost of degraded salmon habitats and damaged watersheds but even paid for the building of logging roads into their country's last reservoirs of biological diversity. Had the US Senate ratified Rio's Convention on Biological Diversity, the Timber Salvage Rider would almost certainly have been in violation of the agreement's provisions for habitat protection.

Logging on private lands has also increased as property owners, under Federal order to protect endangered species, were given new ways to relieve themselves of the responsibilities by "soft deregulation" such as Habitat Conservation Plans. HCPs allow owners of private forests to log areas classified as important habitats for endangered species on condition that they set aside other areas with similar characteristics.⁶ Since the early nineties logging companies have sought, and in many cases obtained, approval for HCPs on 11.4 million acres of forest land in California, Oregon, Washington, Idaho and Montana.⁷

Increasing market access to overseas timber supplies is also undermining efforts to reduce wood fibre consumption in the United States. Paper mills that invested in technology upgrades to produce higher-recycled-content products are being undermined by cheap and plentiful imports of virgin pulp.⁸ Deregulated global markets can thus subvert sustainable practices from ever taking hold, let alone flourishing.

As one top lobbyist for US logging corporations explained, "The market for forest products is a global market, and the only way we can compete is to be able to maximize efficient use of the capital of our shareholders; to do this we need to achieve a barrier-free market."⁹ Thus they continue to expand into markets abroad under the auspices of international trade fora such as the WTO and more recently the Asia-Pacific Economic Community (APEC) whose member countries are home to 63 per cent of the world's last frontier forests.¹⁰ These forests are the target of a planned trade initiative that goes by the forgettable name of "Early Voluntary Sectoral Liberalization" (EVSL). As its name indicates, it is committed to expanding markets by eliminating both the tariffs and "non-tariff barriers" to trade.¹¹

The industry's chief lobbying arm, the American Forest and Paper Association, is pushing the US Trade Representative to take the EVSL initiative to the WTO, where they can pressure other member countries to sign as well. Efforts to forge a worldwide agreement may begin as early as 1999, when the so-called Millennium Round is launched at the WTO Ministerial, to be held in the US.

CANADA

Canada's western province of British Columbia possesses some of the most significant tracts of large, intact, temperate coastal rainforests in the world. However, since the early nineties and the development of global free-trade, they have been subjected to ever-increasing exploitative pressures. The 1989 Canada-United States Trade Agreement (CUSTA) brought Canadian forests under the discipline of binding international trade rules, creating a significant departure from the imperatives that guided past management practices.¹² Deregulation, privatization of public resources, government subsidies, and liberalized trade have together given rise to a huge export-driven wood products industry.

Local environmental groups have fought hard to bring the resulting ecological holocaust to an end. To begin with they were reasonably successful, and in 1995 managed to establish a Forest Practices Code. In 1997, five years after the Rio summit, they proposed legislation that would have brought Canada into line with its commitments under Rio's Biodiversity Convention for protecting endangered species. However, timber companies argued that any restrictions would raise costs and harm Canada's ability to com-

pete in global markets. A team of timber executives rewrote the Forest Practices Code to "streamline regulations and cut costs", while the Timber and Jobs Accord rolled back protection and increased logging subsidies.

In May 1998, the British Columbian Premier Glen Clark again increased subsidies by further reducing stumpage fees by 16 per cent (the price paid to provincial governments per tree cut on public land) to "restore competitiveness to our forest industry"¹³ Canada hopes the backlash from environmentalists and smaller American loggers does not force the US Trade Representation to take steps to counter Canada's "beggar thy neighbour" trade policy on forests.

MEXICO

Mexico ranks as one of the five countries with the greatest biodiversity in the world. However, since Rio it has made a particularly ambitious effort to expand its forestry sector. Since NAFTA, 15 US wood product companies set up operations in Mexico, and much of their investment is in regions possessing some of North America's largest remaining intact forests.¹⁴

Forest protection was given no consideration by those who

Mexico ranks as one of the five countries with the greatest biodiversity in the world. However, since Rio it has made a particularly ambitious effort to expand its forestry sector. Since NAFTA, fifteen US wood product companies have gone to Mexico, and much of their investment is in regions possessing some of North America's largest remaining intact forests.

drew up NAFTA. One of its predictable consequences, however, is the voracious demand for wood-fibre (packaging) created by the maquiladoras – the export-oriented factories that line the US-Mexican border. Further forest destruction is also occurring as a result of deregulation of border controls which have greatly increased drug trafficking and the production of cocaine in the Sierra Madre mountains of Chihuahua.

Mexico's entry into the global marketplace has brought rapid and profound structural changes, not only to trade and investment policies but also to underlying property laws, subsidies and strategic priorities for land use. The globalization policy agenda is attracting new foreign investment by offering 1) stronger legal protections for foreign investors at the expense of local communities and indigenous tribes, 2) increased subsidies to ensure international competitiveness, and 3) weakened environmental regulations, which were rarely enforced in the first place.

The massive economic transformation Mexico has undergone since Rio evolved through a process of at least three phases: a preparatory phase, the NAFTA negotiations, and fall-out from the peso crash. In the preparatory phase, one priority was the repeal of Article 27 of the Mexican Constitution, which gave people rights to communal land ownership. Mexico's land distribution system, one of the most progressive in Latin America, was the veritable fruit of the Mexican Revolution, obtained by one of its leaders, Emiliano Zapata. However, the welfare and democratic rights of Mexico's peasantry was of little concern to Mexico's leaders who, with the signing of NAFTA, sought above all to attract foreign investment, particularly in the rapidly industrializing agricultural sector. Repealing Article 27 was necessary to conform to the macro-changes NAFTA would impose.

Under NAFTA negotiations, other important barriers were eliminated or reduced. Perhaps chief among them was the elimi-

nation of restrictions on foreign ownership of property, previously limited to 49 per cent. At the same time import barriers on US grains were drastically reduced as were support programmes for assisting the rural population, such as ready access to low-interest credit and technical and marketing assistance. Needless to say, the effect of these new laws could only be to drive people off the land into the slums of the major cities or across the border into the United States.

At a ceremony marking the first anniversary of the massacre, Mexico's Popular Revolutionary Army emerged to denounce the economic policies that drove so many people to such poverty and despair. It saw no alternative, it stated, but to declare war against the government.

The peso crash of 1994 accelerated these trends, as well as the Zedillo government's desperate efforts to attract foreign capital. The International Paper Corporation used that leverage to reform Mexico's laws governing forest exploitation, winning generous federal subsidies and "new flexibility" for the Environment Secretariat to waive protections for biodiversity, soil, and water quality.¹⁵ The Forest Reform Law also created a new legal status for private industrial tree plantations, a critical protection for investors who recognized that 80 per cent of Mexico's forests are to be found in indigenous reserves or are part of communal land-holdings. Under these highly favourable conditions International Paper is planning a 100,000 hectares plantation of eucalyptus and pine plantation in

During Rio, few questioned the inherent contradictions between the free trade agenda and planetary ecological limits.



Chiapas – an area that is largely inhabited by indigenous Mayas. It fully expects to obtain highly generous subsidies.¹⁶

It is largely because most of the good land in Chiapas has already been taken away from its indigenous inhabitants and made into plantations and vast livestock enterprises that the Zapatista rebellion took place. Clearly the Mayas, who make up the bulk of the Zapatistas, want to regain their traditional lands. This is something that they cannot conceivably do within the context of NAFTA which favours vast export-oriented enterprises such as that being planned by International Paper. That company has already set up a highly subsidized joint venture with US-based Simpson Corporation in the state of Chihuahua, obtaining its initial wood supply from neighbouring communal land-holdings, or ejidos.¹⁷

Another US-based joint-venture, Temple Inland Forest Products and Simpson, is planning a 70,000-hectare plantation of eucalyptus and pine in the southern states of Tabasco and Veracruz.¹⁸ Chips from this plantation are destined to be transported to a paper-mill in Texas, where nearby maquiladoras need large amounts of wood fibre for packaging exports. These plantation proposals have been strongly denounced by local campesino organizations, as the livelihoods of their members would be seriously threatened by the projects, were they to be implemented.

Boise Cascade has been exporting tropical hardwoods out of the southern coastal state of Guerrero, where the process of land concentration is particularly advanced. Drawing initial logs from 24 different ejidos, the US-based corporation is planning to export back home 20 million board feet for the next five years.¹⁹ In June 1995 nineteen campesinos were massacred while en route to protest against expanded logging in the mountainous regions that was threatening their farm lands below. At a ceremony marking the first anniversary of the massacre, Mexico's Popular Revolutionary Army emerged to denounce the economic policies that drove so many people to such poverty and despair. It saw no alternative, it stated, but to declare war against the government.²⁰

Mexico's Chimalapas forest – the country's most important tropical forest – is also threatened by highways and other infrastructure projects required to accommodate long-distance trade. Plans are also afoot to forge an industrial waterway through the Chimalapas, which is to compete with the Panama Canal. Inter-modal cargo carriers would receive containers on the Atlantic coast and transport them via the Tehuantepec isthmus, Mexico's narrowest point between the two oceans, to ports on the Pacific coast. Some 12,000 Zoque Indians inhabit the area of over 18,000 square kilometres²¹ that would be affected by this project. Indigenous peoples are widely recognized as the best caretakers of the land, and the Zoques' dislocation by an industrial waterway will certainly result in the loss of Mexico's most important biological zone as well as the Zoques' own cultural integrity. Moreover, their displacement will force them onto other areas, most likely slashing and burning to eke out a living.

BRAZIL

Only a few years after hosting the Earth Summit, Brazil's shift into higher economic gear is accelerating the devastation of Amazonia, perhaps the Earth's most important reservoir of biological diversity. Adalberto Verrissimo, a leading researcher with the Institute for the Study of Man and the Environment

(IMAZON) in Belém, believes that, due to a number of recent developments, Amazonia is on the brink of an unprecedented level of destruction.

At the Earth Summit there was considerable optimism that governments would recognize that the best way to protect forests was to protect the rights of their original caretakers – their indigenous inhabitants. This optimism however was short-lived, for shortly after the summit ended and the international press had left, the Brazilian government announced that private interests could now legally challenge indigenous land titles, which cover vast forested areas throughout Amazonia. Corporations wasted no time in taking advantage of the new legislation. Peracchi, a logging company well known for its illegal logging of mahogany in indigenous lands lodged a claim for land forming part of two indigenous reserves in the State of Pará – that of the Apyterewa and the Baú Indians.²²

Shortly after coming to power in 1996, President Fernando Henrique Cardoso adopted a series of bold initiatives to integrate Brazil's domestic economy and hence the natural resources it depends on – including the entirety of Amazonia's natural wealth – into the global economy.

The basis of President Cardoso's strategic plan, known as *Brasil em Ação*, or Brazil Action, is the building of a massive trade infrastructure to expedite the exploitation of Brazil's natural resources. Government briefing documents declare quite openly that they are "redesigning the country".²³ Fourteen transport projects aim to increase Brazil's global competitiveness by reducing the shipping costs of timber, minerals, energy and agricultural products from the region. Highways, waterways, railroads and ports are planned throughout the basin to link some of the most remote areas to major ports via shipping routes for intermodal cargo carriers. Foreign investors are being aggressively courted to finance this totally irresponsible mega-project, to which the government will itself contribute 50 billion reais – a massive subsidy to the corporations that will benefit.

Indigenous people in particular have suffered and indeed are likely to suffer most from Brazil's current trade infrastructure scheme, as industrial waterways, in particular those designed to facilitate the export of soya (Brazil is now the second leading soya bean exporter after the US), will run adjacent to, and in some cases actually pass through, demarcated indigenous reserves.

Changes to the river ecosystem could also endanger local fish stocks, a main source of protein for the Xavante people residing in the Pimental Barbosa Indigenous Reserve.

The indigenous Xavante people are fighting the dredging, widening and straightening of the Rio das Mortes in the state of Mato Grosso, a key section of the Tocantins-Araguaia waterway. Once completed it will accommodate multi-ton grain barges making their way via the Amazon to European markets.²⁴ Changes to the river ecosystem could also endanger local fish stocks, a main source of protein for the Xavante people residing in the Pimental Barbosa Indigenous Reserve. Tragically, and indeed ironically, the project will thus sacrifice the vital food sources of indigenous people in order to enhance the profits of global corporations that claim to feed the world.

Indeed, one of the most important factors driving the destruction of the Brazilian Amazon is the expansion of industrial agriculture. A recent parliamentary investigation identified soya bean plantations as one of the four "belts of destruction" advancing north-eastward into the vast tropical rainforest.²⁵ Monsanto, the chemical-maker turned biotech behemoth, has teamed up with Brazil's National Institute of Agricultural Research (EMBRAPA) to create a selection of genetically-modified soya bean seeds tai-

lored to various growing regions.²⁶ Seeds may be modified in order to enable crops to tolerate the greater amounts of pesticides required for agriculture in the cerrado or central savannah of south-east Amazonia. Within a few years growers should know if large-scale production on the thin topsoils of its tropical forests is, in fact, viable.²⁷

Export agriculture also exerts great pressure on the Amazon because the best farmlands inevitably fall into the hands of a few giant producers, leaving small, family farmers roaming the countryside in search of land on which to grow their food. Tens of thousands of landless Brazilians have already grouped together to form a movement that is committed to taking over unoccupied farmland. To defuse this explosive situation, President Cardoso has set in motion an ambitious plan to settle thousands of people every year on such land. However, a recent parliamentary study found that nearly 90 per cent of them were being settled in Amazonia, which spells doom for its beleaguered forests.²⁸ The peasants of course usually get the blame for starting forest fires, though in reality it should rest with the global economic system itself which forces them off the land in areas where they are a hindrance to the development of vast export-oriented plantations that earn foreign exchange – such as the sugar plantations of the Recife area or the soya bean fields of the central cerrado, or the orange groves of the south, and into remote and usually very infertile areas which include most of Amazonia.

In the meantime Brazil's forestry sector is booming, largely as a result of the vigorous attempts made by Cardoso's government to attract foreign investment and promote exports. Since 1996 Brazil has successfully lured several Asian logging companies to purchase millions of acres of concessions.²⁹ These logging companies have acquired financial, technological and management skills while clear-cutting their own forests, which will be exhausted in a matter of years. They are now investing worldwide in order to be able to satisfy the timber requirements of their, until recently, insatiable markets, and Brazil is an obvious country to invest in. American logging companies are also moving into Brazil en masse. Champion International, for instance, recently sold its degraded land in New England and is now expanding operations in Brazil.³⁰ As the debate heats up in the US to end commercial logging on public lands, Brazil is moving quickly to privatize 39 of its national forests to make sure that it is to that country that the American logging companies will have to move.³¹ Not surprisingly Brazil, and indeed South America's last remaining untouched forests, are now under serious threat.

CHILE

Chile provides a textbook case of how export-oriented management under the brutish imperatives of global competition can exact a heavy toll on forest ecosystems and biological diversity. Nearly two decades before the Rio Summit, Chile embarked on a path of national economic development that opened itself up to international trade and investment, emphasizing the export of its natural resources to maximize economic growth.

According to the Chilean Central Bank's Natural Accounts Programme, if the government maintains its "business as usual" policies, logging would completely deplete the country's native forests by the year 2025.

Chile's comparative "advantage" based on its cheap labour, its externalized environmental costs, and the direct subsidies provided to its forestry corporation, has made possible its rapid economic growth. According to the Chilean Central Bank's Natural Accounts Programme, if the government maintains its "business as usual" policies, logging will completely deplete the country's



CHRISTOPHER SMITH/IMPACT VISUALS

native forests by the year 2025.³²

According to the World Resources Institute report, already referred to, "Chile and Argentina share the largest single block of remaining temperate frontier forest in the world".³³ It contains at least 50 species of timber trees (95 per cent of them endemic) and more than 700 vascular plant species (half of them endemic). Chile's native temperate rainforests – that constitute one third of the world's largest tract of relatively undisturbed temperate forest – is being rapidly logged for wood-chip exports, mainly to Asia, and replaced with plantations of fast-growing non-native species that yield maximum wood fibre on short rotations. Of course, with the current collapse of the Far East economies the demand and price for commodities like timber have dramatically fallen. Exports of timber to Japan for instance have almost entirely dried up. What the future holds is not yet altogether clear.

Because Chile had already spent considerable energy putting in place a neoliberal policy framework that had already exposed its industries to the imperatives of global competition, the adoption of WTO rules triggered off less of a transformation of its forestry sector than it did to Mexico's for instance. Nevertheless, since Rio, destructive activities continue to expand with the help of state subsidies.

Because one of the main aims of governmental policy in Chile is to become accepted as a member of NAFTA, more lip service than usual has been paid to the importance of environmental conservation, and environmental laws are under consideration. However, the very modest regulations proposed to protect forests would do little to reduce the destruction, particularly as the government, at the same time, continues to intensify its efforts to expand forest exploitation. One controversial project is a proposed investment by the US-based Trillium Corporation in a project to log hundreds of thousands of acres of rare native forests for chip exports.³⁴ Yet another pending Trillium investment to log 140,000 acres of lenga forests on the Argentine side of Tierra del Fuego (a

Free trade pacts provide an enforceable international legal framework that transfers access and control over natural resources out of local hands and into those of the highest bidder in the global marketplace.

complement to the Chilean Río Cóndor project) signals that some foreign logging companies might not even wait for Chile to become a member of NAFTA.

Under NAFTA, the destruction of Chile's forests would inevitably accelerate rather than slow down. By adopting NAFTA's provisions on investment (similar to those in the proposed Multilateral Agreement on Investment), any Chilean regulation passed to protect forests which has the effect of reducing the profits of a planned foreign investment could be challenged as an "expropriation of property" and judged illegal. Under such rules, the protection of forests in any country that is signatory to the agreement would be well nigh impossible.³⁵

INDONESIA

Anticipating the boom in demand for wood products in south-east Asia, Indonesia has been preparing to become a pulp and paper powerhouse in the region. New investment in mills and equipment show that Indonesia has been planning to make the most of its greater capacity to export forest products.³⁶

The financial meltdown in Asia – in itself an effect of the globalization of financial markets – will have major effects on how and by whom Indonesia's forests will be controlled. State or domestically-owned logging companies have certainly not managed forests sustainably. Nevertheless, bailout agreements with the IMF will put Indonesia's forest under more direct control of foreign corporations and globalized market forces. Forestry products rank third among Indonesia's foreign exchange earners, after textiles and gas and oil products. In 1997, forestry products yielded some 6.25 million US dollars of foreign exchange.³⁷ The agreement that

the Indonesian government has signed with the IMF aims to remove the restrictions on the foreign ownership of land in that country.³⁸

The export of cash crops such as palm oil, cocoa, rubber, coffee and pepper, are likely to increase next year, and this will further remove forest cover. Because these commodities are some of the country's best generators of foreign exchange, it seems that new government policies are to be formulated to address the monetary crisis by expanding agribusiness. Palm oil production is particularly destructive to native forests, and it is a matter of considerable concern to hear that the Ministry of Agriculture has announced a 1.5 million hectare expansion of palm oil plantations in 1998.³⁹ This would increase the extent of oil palm estates to about three and a half million hectares in that country. Once again, the IMF can be held partly responsible for the destruction this would cause, as on the basis of their recent agreement with Indonesia, that country is forced to eliminate all restrictions on the setting up of palm plantations.

Indonesia may also look to the Asia-Pacific Economic Community (APEC) forest initiative (EVSL) to stimulate more exports of wood products. Leaders of the 18 APEC nations agreed in November 1997 to lift trade barriers on wood products. The Indonesian Government would gain advantages from this initiative since it would enable it to insist that its 435 forest concessionaires, that control 30 million hectares of forests, shift their production into higher gear as wider market access must obviously mean more sales.⁴⁰ Needless to say, all this would greatly increase forest destruction in that country.

CONCLUSIONS

The 1990s were supposed to be the "turnaround" decade, when economic development would "change course" towards ecological sustainability. Instead, economic globalization, as was totally

predictable from the very nature of the phenomenon, has had exactly the opposite effect of still further reducing the sustainability of our economic activities, including those of the forestry industry.

Globalization has led to the development of increasingly big and powerful transnational corporations, many of which are bigger than the average nation state of today. Corporations, by their very nature, have no social or ecological concerns – only their immediate financial interests concern them. They are accountable to nobody except their shareholders, and because of their ever-increasing power they are today in a position in which they can, in effect, dictate economic policies to the governments of even the most powerful nation states such as the US itself.

Through the recent GATT Agreements and the World Trade Organization that they brought into being, corporations have built a sort of utopia for themselves by creating nearly all those conditions worldwide that best favour their immediate interests, which unfortunately are generally in conflict with those of human communities, local economies, and the natural world. So long as these uncontrollable corporations are given free rein to exploit the world's forest resources, the fate of the planet's remaining accessible forests is sealed.

If our political leaders had the slightest sense of responsibility and the necessary courage and integrity, they would change the direction in which our whole society is moving – away from economic globalization and towards economic localization – with small and medium companies taking over that are rooted in their respective societies and that cater for very much more restricted markets. Only in such an economy do our forests have any future whatsoever. ○

Victor Menotti is the Director of the Environment Program at the International Forum on Globalization in San Francisco.

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Reviews



Nazi Roots of the Europlot



THE TAINTED SOURCE,

John Laughland, Warner Books.
416pp, £8.99 (pb), ISBN 0-7515-2324-0.

The subject of 'Europe' meaning of course a United Europe, has been a major political preoccupation now for decades, yet few of us seem to be aware of the reasons which have prompted its emergence – why, after all, should we be discussing the concept of a United Europe to anything like this extent at all? I am not aware of a single constituency branch of any political party from the far left to the far right, of a single trade union branch, of a single social, religious, sporting or local reform group of any kind or colour that has made the remotest move in this direction at all.

The answer is, of course, that it comes from the world of giant business, banking and power broking; in short, not from the ordinary citizen body but from people whose gimlet eyes are on money or power or both. John Laughland proceeds in this remarkable book to spell it out in both historical and philosophical depth to a quite riveting degree, one which cannot fail to put the reader deeply in his debt.

He makes it clear, and his reference sources alone run to over sixty pages, that in the modern era the concept has its roots unambiguously in Nazi Germany. The same slogans, the same arguments, the same anti-democratic attitudes of mind, the same contempt for people and the same gruesome assumption that economic consideration must take precedence over any

other citizen concern all lead to the same conclusion: that its banner, a circle of gold stars on a blue background, is incomplete without a black Nazi swastika in its centre.

It may well be that the author's own basis of appraisal, one that stems from a conviction that "Only the law, democracy and sound money...." can save the day, is in need of some refinement. Even within the frontiers of existing nations, law making and law enforcement are increasingly subject to giant market forces rather than to moral consideration; the same holds true for the normal canons of democracy, and with a world now in the throes of monetary breakdown, some deeper criteria surely need to be applied for establishing sound money.

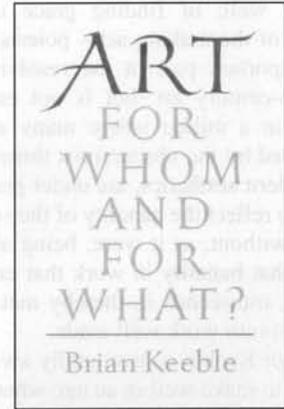
The author is not unaware of some of this and refers to the way in which European countries "Faced with declining competitiveness, low growth, mass unemployment, and sclerotic and often corrupt political structures" are seeking to reproduce their present systems at a supranational level rather than reforming themselves. But notice the conventional terms of his pleading; no disposition to discuss whether more 'growth' in some of its present forms is remotely desirable, whether he distinguishes at all between small-scale 'competition' as distinct from competition between global commercial and industrial dinosaurs, or whether in a sanely organized society there would ever be enough workers to do all that needs to be done, as distinct from 'creating jobs'.

All this is the other end of the problem of where we are and where we ought to be going. What he succeeds in making clear beyond any doubt is that the entire europlot is a frontal assault on our traditional philosophical concept of how democracy functions in a free society and indeed what a free society is. He has a powerfully lucid pen and deploys it in ways which make this work an indispensable addition to any worthwhile bookshelf.

Perhaps there is no better recommendation for it than from the arch-europlotter Edward Heath, who blusters "it is preposterous . . . a hideous distortion of both past and present". If the enemies of democracy see the book in such terms, it indicates with considerable force why its friends must have a copy at all costs.

John Papworth.

Art as a Reflection of Society



ART. FOR WHOM AND FOR WHAT?

Brian Keeble, Golgonooza Press, 1998
169pp (pb), £14.95,
ISBN: 0-903880-70-9

This set of essays traces threads that run through nature, art, work and spirituality and demonstrates how they make up the single fabric of our experience. That fabric is now seriously damaged; and the damage, whether it be to ecosystems or to souls, arises from common causes and pervades all life in all parts of the world. The breaks in the fabric and its threads characterize contemporary urban life and pose the problems of a materialist civilization.

Keeble's insistence on the connections between the spiritual states of humanity, its arts, its concepts of economics and work, its effects on the natural world, make this book important in the growing discourse of eco-philosophy. It belongs in a tradition that includes Ruskin, William Morris, Eric Gill and others who link economic, spiritual and aesthetic questions together in considering the human predicament.

Art is a vital factor in assessing such a predicament. It constitutes in itself an environment, an environment of symbols which, because it takes on the substance of the 'real' world by mimetic means, is full of signs about the state of that world. If the human race is mutilating itself and the planet, then by mimetic means, that mutilation will be translated into the various arts. They will be full of the signs of a disturbed social pathology.

The history of Modernism and Post-Modernism in the arts is a history of such

signs, some of them hideous, some of them transcendent of the historical disturbance they attempt to embody. Like the increasingly perturbed weather of the world, the arts are a warning system that all is not well. In warning us, they are themselves at times consumed, reduced to nothingness by the very nihilism in our time that they must, perforce, attempt to represent.

There is no comfortable way out of this for the artist, though Keeble's essays on the meaning of work and of the crafts point towards a centring of the self on the act of 'making' well; of finding grace in the integrity of the making act – poiesis. This is an important part in the resolving of twentieth-century art, but is not easy to practise in a milieu where many artists, intimidated by the obscurantist theories of post-modern aesthetics, are under pressure merely to reflect the banality of the society as it is, without, as it were, being able to include that banality in work that encompasses it, transcends it, thereby metamorphosing it into work well made.

Though Keeble is profoundly aware of the need to make well in an age where this is still fashionably despised, he does not discuss the more painful part of the conundrum faced by contemporary artists – that they cannot simply ignore the evils a contemporary civilization has heaped about them; that they must somehow subject these things to a symbolic transformation which purges them of their destructiveness. Implicit even in the work, say, of a composer like John Tavener (1944 –), who has returned to the liturgical roots of Eastern Christendom as a source of his music, is an awareness that he is composing in the century of nuclear fission, generic reductionism and devaluation both of the person and nature.

As to whom art may be for: that too is a vexed question. Because we live in such a disturbed world – historical moment in which economic and technical transition is endless, meaningless and frequently malevolent, any role, any audience art may once have had, is also in transition. We now have a mass culture with universalized mass entertainment. Such entertainment has neither the symbolic depth or physical quality characteristic of say, public art in the late-medieval cathedrals. 'Making' of a high order was witnessed and participated in by large parts of such a culture. The resulting art was often 'aesthetic' and functional, whether a vessel of fired clay or a major religious structure. It was also singular and in no way standardized. As machine production has taken over more and more of the world's 'making', the bond between beauty and practicality has become sundered: a process described by Keeble in his studies on craft. Machines end up stamping out the practi-

calities and artists are left merely with the task of dealing with the aesthetic: the abstract category of a de-racinated beauty. Their activity can easily degenerate into narcissism, the making of self-referring art, and the well-known disease of aestheticism, by which art becomes the mere demonstration of sterile aesthetic theories. From there to nihilism, to the asinine, and the banal is but a step: one taken frequently in the last decades of this century.

Keeble's exposition of the profound cultural damage done by machine production is excellent, carried out by means of a commentary on the thinking of Eric Gill:

"The processes of machine manufacture inescapably curtail man's intellectual responsibility for what he makes. The precise point at which the diminishment starts is in the real and effective difference between the tool and the machine. A tool..... allows its user to determine the way in which what he has conceived inwardly is imitated outwardly in manifest form....allows the intellectual responsibility for this imitative process to remain with or in the workman.....this imitative process is usurped by the machine since it is constructed to produce, or rather reproduce in a pre-determined way. The intellectual responsibility of the machine's design pre-empts that of its operator, who thereby becomes the sentient part of a mechanized function. A tool-user may know what he is making, a factory hand only what he is doing".

Through all this devolution of 'making' into the mechanical futility of production by machines a strong counter-current has been running. The persistence of craft-based making is one instance of this. Another is the discovery by the practitioners of the 'high' arts of the West that the indigenous roots of art are still alive and well. This is one of the positive features of Modernism, even of Post-Modernism. It is evident in the work of musicians as diverse as Olivier Messiaen, Bartok or the contemporary Chinese composer Zhou Long.

Keeble's essays are not explicitly epistemological: they look at the crisis that lies behind the ecological – a crisis of spirit. They assert implicitly that the consciousness of modernized humanity is dangerously fragmented in the machine civilization. This fragmentation can only lead to further attacks by us on the body of nature. The essays turn on an axis of knowledge known loosely as the perennial philosophy. *Philo-sophus*, the loving of wisdom, is intrinsic to such knowledge. It is a timeless tradition, to be found from earliest humanity to now, and survives the contingency of history. It is represented by a highly various grouping of artist mystics, thinkers who at times touch on its irreducible essence.

Perennial philosophy sees human destiny in spiritual terms, though this is not to imply an inevitable hostility amongst its exponents to the substance of nature. It can include the vision of a Walt Whitman asserting that a blade of grass is "no less than the journey work of the stars" and urges consciousness towards an apprehension of the unity of creation. But it also involves at times a potent anti-materialism that can, even in the thinking of its greatest visionaries such as William Blake, lead to a rage against nature – a belief that nature is nothing more than the mechanism of the material sciences that claim to know it as such. Keeble, as a traditional Christian, inherits some of this dilemma. His Christianity is subtle and deserves careful consideration; the essay on "Man and Nature as Polarities of the Sacred" being particularly important in eco-philosophical terms. It is partly a gloss on the Genesis text in which man is granted dominion over other life:

"This dominion was granted before the expulsion from paradise..... their dominion has only an efficacy in virtue of the dynamic union of spiritual vision and rational thought.....the understanding of all things through the contemplation of God."

Is this an attempt to reconcile Christian theology with the value and dignity of the natural world – an assertion that only a humanity in a state of grace, of supreme awareness, is worthy in any way of having dominion?

In an ideal spiritual polity, such a view of 'dominion' might have had happier ecological effects than it has had in the far-from-ideal-working-out of Christianity as an historical phenomenon. As students of history and ecology, we have to see how an idea has worked in the milieu of the profane, of society; though, as students of philosophy, poetics and theology, we may sympathize with Keeble's interpretations.

Christianity as history has been the working-out of the idea of a completely transcendent god, who, though the author of nature, is not indwelling. God is not a tree but the cause of all trees. Platonic philosophy has played its major part in this tradition, with Plato's basic metaphysics that a tree in the everyday world is a mere copy of the archetypal idea of a tree, and is, in a subtle way inferior. In both traditions, which have blended inextricably, idea precedes substance or phenomenon, and the latter is logically felt to be inferior to the former. That a creator may surpass him or herself in the act of creation and make something at least as worthy as themselves, has not inspired Christian or Platonic metaphysics; nor has the notion that idea and substance need each other, that theirs is a continuum and mutuality,

not a ruling of one by the other.

Keeble is trying to move Christianity back to a vindication of the natural vis-à-vis the divine, but his attempt is problematic, because we live in time, causality and history where crude, linear interpretations of scriptural texts are the norm. More subtle, poetic and metaphorical translations get lost in the struggle for power, for the sovereignty of certain institutions and in the careerism of far-from-saintly professional clerics.

Also problematic for ecology is the particular framework within which Christianity locates the human – above nature and below God:

"It is in turn only man's capacity to recapitulate what transcends him that grants him legitimate dominion over the world of nature, which is why only man can conceive of an earthly paradise, and why conversely, only man can create hell on earth."

This framework I find difficult to accept: a ladder of consciousness that places humanity on a rung between god and nature. It makes nature unconscious, morally inert, and humankind conscious, capable therefore of sin and moral transcendence. Built into this is the assumption that other creatures have no moral knowledge nor transcendent impulse.

But we simply do not know the nature of the knowing of other species, though some thinkers are coming round to the view that any life is a form of consciousness

"Living systems are cognitive systems, and living as a process is a process of cognition. This statement is valid for all organisms with and without a nervous system."

It may be that each species has a moral consciousness peculiar to itself and could hold its own with humanity in the eyes of a creator. There is also the case to be made for the proposition that the entire evolutionary drama is an exercise in transcendence – of a will-to-form and to a consciousness appropriate to each form. The impulse that led in the direction of flowering plants may have been no less transcendental than that which leads some human minds to conceive of a divine unity in creation.

Humans have a special place in nature, certainly, but not necessarily because we alone feel the transcendental impulse. It is we alone who can express it in semantic terms, and apparently, we alone who betray it through ceaseless cupidity, whether this special place is the outcome of our having opposable thumbs and a skill at tool-making, as much as it is the outcome of a transcendental consciousness that is claimed as being unique to us, comes down in the end to a matter of belief.

As one with ecological sympathies, I cannot, *prima facie* find any moral legitimacy in the idea of the dominance of one species over all others, even if that species has produced an Aquinas or a Lao Tzu. Nor can I make the case for legitimate dominion by one species over others in the name of its being able to conceive the idea of God or the unity of all things. Rather this would incline me to a co-operative relation with nature, even should it be proved eventually that I have more sentience, more awareness of a transcendental impulse than the tree that is my neighbour.

We are now, in the West, coming to a shaky awareness that cultures other than those formed around Platonist and Christian metaphysics are complexes of consciousness with their own validity, their own sense of what is sacred and valuable. We have begun to look at animist cultures as other than heretical or quaintly primitive. I believe we must look at other life forms too: they possibly represent forms of grace, forms of consciousness not less precious in the eye of a divinity than human forms of mentation.

The philosophical beginnings of this wider accepting do exist in the Christian tradition. They become explicit in Albert Schweitzer's 'reverence for life', the ethic that has been the basis of deep-ecological philosophy in the West. Like many Christian thinkers, Schweitzer could see that nature was anomalous: beautiful yet full of death and suffering. But instead of travelling from there to the bleaker conclusions of Darwinism – that nature is a meaningless material phenomenon – or even Blake's conclusion that it was an unspiritual substance worked on by evil mechanist explanation, Schweitzer moved in the direction of compassion, similar to that enjoined by Buddhism, and concluded that:

"Ethics are responsibility without limit for all that lives."

Keeble's interpretation of 'dominion' depends on the claim that humanity is deiform, made in the image of God, and in so accepting that, achieves the enlightenment that makes it a worthy steward of nature. It is a homo-centric view and eliminates the possibility that God's image may be reflected in all phenomena. Schweitzer, within the same tradition, moves towards an acceptance of belonging in the pang-filled state of nature, seeing it all as a continuum big enough to contain and transcend terror, death and pain:

"I am life which wills to live in the midst of life which wills to live. This is not an ingenious, dogmatic formula. Day by day, hour by hour I live and move in it. At every moment of reflection it stands fresh before me. There bursts forth from it again and again, as from roots that can never dry

up, a living world and life view which can deal with all the facts of Being. A mysticism of ethical union with being grows out of it."

Christianity, Platonism and Islam have in sum a vast history. In them are to be found clues to a worldview where idea and substance are eternally co-extensive, not superior and inferior. Nature as a ceaseless unfolding of phenomena, occupying infinity, might be co-extensive even with the God at which Thomas Aquinas hints when he writes:

"Again, things placed are in place, in as much as they fill place; and God fills every place, not indeed like a body, for a body is said to fill place in as much as it excludes the co-presence of another body; whereas by God being in a place, others are not excluded from it; by the very fact that he gives being to the things that fill every place. He himself fills every place."

Mono-lingual speakers of English, armed with the majestic prose of the King James bible, with the powers given them by technology and capitalism, have generally taken from scripture, not the subtle poetics of space that Aquinas meditated on. They were literalists. They took the word at its merest surface meaning. And, over 500 years, they carried to the rest of the world the destructive style of development that is now a cancer in the body of nature.

Keeble's far more subtle translation of Genesis and of 'dominion' is not of the kind that affects such entrepreneurs. In the brutal arena of history it was, and still is, the common meaning of the word 'dominion' that rules the action of global developers; even the many among them who are now so illiterate in regard to their theological and philosophical legacy that they would have had no contact with the King James bible. We cannot therefore be too careful in examining, even our most beautiful ideas and words before releasing them into the maze of distorting mirrors and cruel pragmatism that is history.

Denys Trussel.

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Doctored to Death



BETRAYAL OF TRUST

Vernon Coleman, *European Medical Journal*, PO Box 30, Barnstable, Devon, EX32 9YU, 1996, 150pp, £9.95 (pb), ISBN 0 9521492 3 0

Vernon Coleman, doctor of medicine, journalist and author of over 70 books, which have been translated into 21 languages and sold in more than 50 countries, has been described in the press as having "the sharpest mind in medical journalism and the calmest voice of reason". In his book *Betrayal of Trust* he exposes the utter uselessness of animal experiments in medical research.

Those who argue that we can only thank modern medicine that our life expectancy has risen in the last hundred years overlook the fact that up to the first few decades of the twentieth century infant mortality rates were extremely high. In Britain, for example, the death rates among babies under one year old have fallen since the beginning of this century by more than 85 per cent. When these massive child mortality figures are taken out of the equation the average life expectancy in the developed countries has most certainly not risen in the way that doctors and drug companies like us to believe. Not only that, but modern medicine had nothing to do with the decrease in child mortality statistics, as these were almost entirely a result of better living conditions, particularly sanitation. We cannot even thank the vaccination programmes for an increased life expectancy since epidemiological studies have shown that mortality rates for diseases as varied as tuberculosis, whooping cough and cholera all fell, also as a result of better living conditions, to a fraction of their former levels, long before vaccines were invented.

Whatever statistics are consulted or evidence examined, it looks as though, despite the enormous amounts of money spent in health-care, there is more illness today than ever before. For example, in Britain where free access to doctors and

hospitals is available to everyone, life expectancy for 40-year-olds is lower than almost anywhere in the developed world. What's more, even though Americans spend around 12-14 per cent of their gross national product on high-technology medicine, on average they are sicker and die younger than individuals in less 'doctored' countries. In addition, as soon as one infectious disease is conquered, another seems to replace it, as bacteria become increasingly resistant to antibiotic medication.

Although we consume greater and greater quantities of medicine, we do not live longer or healthier lives compared with past generations. It is also widely accepted that at least 40 per cent of all people who are given prescription medicines will suffer uncomfortable, hazardous or even potentially lethal side effects. For example, it has been estimated that well over one million people a year are admitted to British hospitals directly due to the side effects of their medication. In other words, iatrogenic (medicine-induced) diseases are unquestionably one of the major causes of ill health and mortality in modern society.

While the ultimate responsibility for most drug-related tragedies lies with the pharmaceutical industry, doctors are also to blame since they have become little more than a convenient link between the pharmaceutical industry and the consumer. There is already some direct evidence that we can be literally doctored to death. For example, when doctors in Israel went on strike for a month the death rate dropped by 50 per cent – the largest drop since the previous doctors' strike 20 years earlier. Much the same happens whenever doctors have gone on strike. In Bogota, Colombia, doctors went on strike for 52 days and there was a 35 per cent fall in mortality rates, while in Los Angeles a doctors' strike resulted in an 18 per cent reduction in mortality statistics, which returned to normal as soon as the strike was over.

To understand how doctors have become so dependent and closely linked to the pharmaceutical industry, Coleman gives some background to the modern medical profession. Before the existence of the modern medical establishment as we now know it, practising clinicians fell into three basic categories. First, there were university-trained physicians who had acquired qualifications on the basis of their book work. The second group were surgeons who were allowed to do practically anything with a knife. The third group were apothecaries who were experts in preparing medications and who eventually became the first general practitioners.

Whilst applying their trade, these early doctors also invented and prepared their own medicaments, disregarding those

which they found either harmful or ineffective. By continually searching and experimenting with new compounds, it could be said that the work of these early general practitioners was based on true scientific principles. But this situation began to change from 1844 onwards when William Brockeden patented his pill-making machine which gave doctors an opportunity to hand over their medicine preparations to the newly developing pill manufacturing industry. Though at the time doctors had a chance to retain control of the burgeoning drug industry, they chose not to get involved and instead handed the preparation of medicines entirely over to the pill manufacturers. The rest is history.

The modern pharmaceutical industry is now so powerful that it has managed to dominate the entire medical profession. It not only controls the curricula of most medical education, but also the majority of medical journals and academic research departments rely heavily, or exclusively, on its finances. More importantly, most medical research is organized, paid for, commissioned or subsidized by the industry. According to Coleman, "The drug industry has emasculated the medical profession, taking away its power, strength and self-respect. Drug companies have, quite simply, bought control of the medical establishment with their money. With the take-over of the development and production of drugs at the end of the nineteenth century, the most obviously scientific element of medical practice fell into the hands of the drug industry. When the apothecaries handed over pill-making to the chemical companies, their only link with science disappeared."

The fact that the medical profession is largely dominated by the pharmaceutical industry would not matter so much if the industry was honest, responsible and ethical, but it isn't. In Dr Coleman's opinion the drug industry is "the most ruthless, most blatantly dishonest and most manipulative industry anywhere in the world. It makes the arms industry look positively angelic by comparison."

It is not difficult to see why the industry behaves in such a manner, as the profits to be made out of selling drugs are phenomenal. The industry denies, of course, that it is driven exclusively by financial motives. But while its representatives and spokesmen like to argue that it spends huge amounts of money on research looking for new drugs, the truth is that much of the money allegedly spent on 'research' is, in reality, spent on marketing. Even the industry's own executives admit that its success depends far more on creative marketing than on innovative research, and therefore that the industry which was orig-

inally led by scientists is now led largely by marketing experts.

In order to place their products in a most favourable light, the drug industry is known to use all manner of manoeuvres. For example, although the elderly are known to take more drugs than any other group, companies usually exclude the elderly from their drug trials since they know that the older generation is far more likely to suffer from potentially severe side effects to medication compared with younger ones. The industry also ensures that it retains the right to censor any unflattering comments and/or to withhold publications of trials which have been shown to be detrimental concerning their products.

Another mechanism is to organize post-marketing research trials by paying doctors to test for new drugs immediately after a drug has been launched. These sponsored post-marketing surveillance trials have hardly any clinical significance as the reports are not allowed to be examined by independent scientists. As a result, in the majority of cases where a post-marketing surveillance trial shows that a particular drug is associated with unpleasant side effects, the company will continue to suppress the findings whilst maximizing the profits until an independent source finally discovers the problem.

Apart from failing to test its products properly, there are many other ways the industry demonstrates that it is far more concerned with profit than with conquering disease. Instead of researching new compounds, the industry spends a great deal of time and income copying existing medications and looking for new marketing angles for these in order to compete with already well tried and tested versions on the market. This means that the majority of 'new' drugs offer nothing new in clinical terms but are merely variations of existing ones. This has resulted in doctors being constantly faced with scores of different antibiotics, painkillers, tranquillizers, sleeping tablets and so on. The brand names vary, but the ingredients are almost identical.

Also by using misleading advertising the drug industry continues to encourage doctors to prescribe their products inappropriately or excessively. According to a survey published in the *Annals of Internal Medicine*, 62 per cent of the industry's advertisements in medical journals were found to be either grossly misleading or downright inaccurate. Also the World Health Organization (WHO) found that, of up to 30,000 drugs on the market at any one time, only 16 per cent were seen to be essential.

According to Coleman, vivisection is without a doubt the most vital key for the success of the pharmaceutical industry

because, whatever the results, the industry cannot lose. If an experiment shows that a drug is harmless when fed to animals, the industry labels that drug as safe when given to humans. But if, on the other hand, experiments show that a drug causes serious problems when fed to animals, these results will be dismissed on the grounds that animal experiments cannot be regarded as relevant to humans because of the enormous anatomical and physiological differences.

By using this double-edged absurdity the pharmaceutical industry continually launches drugs for human consumption which are found to lead to most serious problems when given to animals. In his book, Coleman lists names and detailed information, provided by relevant drug companies, of over 50 different medications currently in use which were found to cause cancer or other serious problems when fed to animals. For example, even tamoxifen, currently hailed as one of the greatest 'wonder drugs' in the prevention and treatment of breast cancer, was found to cause liver tumours when fed to rats. He also lists names of 85 thoroughly tested medications which passed animal experiments with flying colours but nevertheless had to be withdrawn from human consumption because they were found to cause serious side effects in humans, some fatal.

With all this evidence available, it is difficult to avoid the sad but inevitable conclusion that animal experiments are used not for developing safe drugs for human consumption but because animals are relatively cheap for experimental purposes and offer great commercial advantages for the world's pharmaceutical industry. According to Coleman, "If the cocaine barons of Colombia knew how easy it was to make money legally by selling prescription drugs, they would give up their smuggling racket overnight and move into the 'ethical' drug industry."

If the pharmaceutical industry is able to get away with so much, it is largely because of the enormous influence which it holds over governments and their respective drug regulatory authorities. Even though governments have the power to discipline the drug industry they hardly ever do so. On the contrary, their allegiance is almost always to the industry. After all, the drug companies not only provide lucrative employment but also contribute billions to the treasury.

To safeguard the industry, the law in Britain prevents the government from releasing any information concerning drug companies and their products, so much so that even the medical profession, let alone the public, has no right of access to information concerning prescription medicines.

Even victims who have suffered from side effects of licensed medicines are unable to find out anything about the drugs they have taken.

One reason for the maintenance of this secrecy has been that a great many important individuals among the drug regulatory authorities have close ties to the industry. For example, according to the 1992 Annual Report of the Medicines Commission, out of 21 members of the Committee on the Safety of Medicines (CSM), the majority of those listed were found to have personal interests of one sort or another with the pharmaceutical industry.

The power of the drug industry to control its own destiny was vividly illustrated again in 1993 when an attempt was made in the British Parliament to introduce legislation which was intended to overcome the secrecy behind the decisions about drug-licensing applications. The proposed bill failed to pass onto the statute book because the time available for the bill 'ran out'.

As long as the government sides with the industry, drug manufacturers are able to comfort themselves with the sure knowledge that even if things go wrong and they are sued, they will be extremely unlikely to lose. If all else fails, the industry will argue that, since the drug was granted a licence, the company concerned did everything it was expected to do by the relevant authorities (including animal experiments) when testing the safety of their product. The company can hardly be blamed, goes the argument, for any serious side effects which became apparent only after a licence was granted.

In another important book by the same author, *How to Stop Your Doctor Killing You*, Coleman offers some practical guidelines on how to protect oneself from excessive 'doctoring'. From this book, I quote some extracts: "We live in a world where cruelty is honoured, where dishonesty is rewarded, where power is taken by the vicious and the brutal and where the inept, the incompetent and the uncaring prosper. We live in the world where integrity is sneered at, where honesty is described as controversy, where passion is regarded as an embarrassment and where truth is a dangerous commodity . . ."

"We have dirtied our land and polluted our air and water. We live in a filth of our own making; a filth that gets worse each day and which contaminates our very lives . . . If you feel that something is wrong, and you feel passionately that something ought to be done about it, then stand up for your principles, shout and make your voice heard . . . I have no doubt that many small-minded people will sneer and tell you that you will win the battle. And the benefits of victory surely far outweigh the insults of

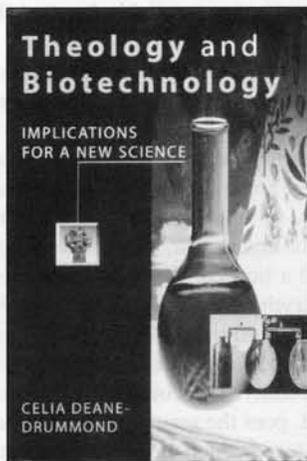
the insignificant. Only when you have found something you are prepared to die for will you really know what life is all about."

Some readers may regard Dr Coleman's books as being too emotional, too impassioned. But at the very least he is not afraid to speak his mind. Whether people love or loathe him, no thinking person can ignore him. This is why he has been for over 20 years one of the world's leading advocates on human and animal rights in relation to health. Long may it continue!

Tuula E Tuormaa

Tuula E Tuormaa is a researcher and writer on clinical ecology and nutritional medicine.

Breaking the Theological Silence on Biotechnology



THEOLOGY AND BIOTECHNOLOGY: Implications for a New Science

Celia Deane-Drummond, Geoffrey Chapman (Cassell), London, 1997, 162pp
£15.99 (pb), ISBN 0-225-66849-1

The devil took Him up on an exceedingly high mountain, and showed Him all the kingdoms of the world and their glory. And he said to Him "All these things I will give You if You will fall down and worship me." (*Matthew 4.8-9*).

The rapid development of biotechnology has given us the power to control all life, to recreate the Earth in our own image, to redesign living creatures including ourselves for commercial ends. One would expect religious leaders to be up in arms about scientists usurping the role of God; yet, with a few exceptions, there is a stunning silence. This book attempts to bring such issues to the centre stage of the theological debate.

Biotechnology, the subject of the title of this book, is actually the specific focus of one chapter. The other five explore a range of issues that provide the necessary back-

ground – the development of environmental ethics and of eco-theology and the links between these subjects and the theologies of feminism and Third World liberation. In exploring many diverse perspectives a middle way is taken between, for example, the views of humans as the crown of creation and views of them as parasites of the planet, and between the position that God is nature and the position that nature has nothing to do with God. Both the reductionist materialism of Richard Dawkins and the abstract, other-worldly speculation of many theologians is rejected.

Celia Deane-Drummond, with doctorates and lectureships in both theology and plant science, is eminently qualified to write such a book. She is the author of *A Handbook in Theology and Ecology* and has worked for several years for ICOREC, the organisers of the groundbreaking Assisi Conference on faith and the environment. The breadth of her research is substantial and the book is a valuable résumé and comparison of the environmental views of everyone from Karl Barth to Teilhard de Chardin, Karl Rahner to Hans Küng, Jürgen Moltmann to Leonardo Boff and John Cobb to Rosemary Radford Ruether.

Her emphasis throughout is upon ethical questions and the book thoroughly explores the issues of rights and responsibilities, dangers and benefits, justice and democracy. This focus reflects the contemporary priorities of Christian eco-theology, but it is an approach that inevitably reaches similar conclusions to those of secular thinkers on these matters. Whilst she rejects the "can do, must do" ideology of the technocrat she does appear to conclude that if we can do it and the material benefits clearly outweigh the risks, we should cautiously and selectively proceed. It would be unfair to blame the author here because the book is as much an overview of contemporary theology as a personal perspective. The pragmatic tendency to reinterpret religious traditions until they are reconciled with contemporary science and the demands of the 'real world' permeates much contemporary Protestant and Catholic theology. Theologians, such as Wendell Berry, Seyyed Hossein Nasr and the late Philip Sherrard, who call for a reconstruction of science and the 'real world' to fit spiritual insight and religious tradition are decidedly thin on the ground.

Traditional religion has, or at least had, something much more powerful and unique to offer the environmental debate. It had an attitude of reverence for the natural world. It had a sense that it has an innate order, a Dharma or Tao or R'ta, a wholeness and a purpose beyond human understanding. It had an understanding that the central purpose of our existence is

to participate in and maintain this order. Participating in and maintaining the wholeness of nature was the means whereby humans maintained their own wholeness. Here I am not referring to pantheism, the (heretical) identification of nature with God, but of panentheism, the almost universal belief in the appearance, immanence or revelation of the divine in and through the natural world. Nature was perceived as a gateway to the divine, a theophany, through which and in which the spiritual dimension of life was encountered. This was as true for St Francis, the Celtic saints and Moses in front of the burning bush as it was for the Shaman, the Taoist mystic in his mountain retreat and the Zen monk contemplating the pine tree in his monastic garden.

From this perspective, the principal question raised by biotechnology is not an ethical question but a spiritual one. Jesus does not reject the devil's offer of world domination for ethical reasons (it could give him the power to do good) but because in gaining the whole world he would lose his own soul. Biotechnology offers us a Faustian bargain – we are offered the (probably-illusory) power to feed the world and cure all illnesses, but in accepting this offer we destroy forever our sense of the sacred, our sense of being part of a greater whole that is beyond our understanding. The story of the primordial paradise that is lost through the hubris of Man is found in many traditions, including Islam, Judaism, Christianity and Taoism. In accepting the temptation to control all life we inevitably turn nature into a mere commodity, something to be moulded for utilitarian ends – and in doing so we reduce ourselves from being participants in a divine plan to being masters (if the technology works) of a meaningless world.

The book is an excellent overview and analysis of the state of the growing theological exploration of environmental ethics. The author, however, in concluding that we cannot reject biotechnology out of respect for the sacred in nature because "such an approach seems to be out of touch with modern biology" appears to surrender to the logic of Mephistopheles. We need religion to abandon this secular, pragmatic, utilitarian approach, which underlies both our present environmental crisis and the pervasive sense of purposelessness in modern life, and to work instead to throw the merchants out of the cosmic temple before it is completely desecrated.

Robert Vint

Robert Vint is the Administrator of REEP, the Religious Education and Environment Programme, which trains schoolteachers to introduce the environmental dimension of world faiths in the classroom.

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