Impeding ecological sustainability through selective moral disengagement

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Abstract: The present paper documents the influential role played by selective moral disengagement for social practices that cause widespread human harm and degrade the environment. Disengagement of moral self-sanctions enables people to pursue detrimental practices freed from the restraint of self-censure. This is achieved by investing ecologically harmful practices with worthy purposes through social, national, and economic justifications; enlisting exonerative comparisons that render the practices righteous; use of sanitising and convoluting language that disguises what is being done; reducing accountability by displacement and diffusion of responsibility; ignoring, minimising, and disputing harmful effects; and dehumanising and blaming the victims and derogating the messengers of ecologically bad news. These psychosocial mechanisms operate at both the individual and social systems levels.

Keywords: consumptive lifestyles; collective efficacy; environmental ethics; moral agency; moral disengagement; population growth; psychosocial change; self-efficacy; token gestures.

Biographical notes: Albert Bandura is David Starr Jordan Professor of Social Science in Psychology at Stanford University. He is a proponent of social cognitive theory, which is rooted in an agentic perspective. His landmark book, *Social Foundations of Thought and Action: a Social Cognitive Theory*, provides the conceptual framework for this theory. In his book, *Self-Efficacy: The Exercise of Control*, he presents the definitive exposition of the centrality of people's beliefs in their personal and collective efficacy in exercising some measure of control over their self-development, adaptation and change. He was elected to the presidency of the American Psychological Association and to the American Academy of Arts and Sciences and the Institute of Medicine of the National Academy of Sciences.

1   Introduction

The present paper examines the selective disengagement of moral self-sanctions as an impediment to collective action designed to stabilise and reverse the ecological

degradation. Human conduct can be distinguished in terms of whether it falls in the realm of social custom or morality. This distinction is based, in large part, on the gravity of the social consequences of the conduct. Harming others by one's practices becomes a matter of morality. The harm to the earth is largely the product of human activity. Societies, therefore, have a moral obligation to preserve the environment so that future generations have a habitable planet.

We are witnessing hazardous global changes of mounting ecological consequence. They include widespread deforestation, expanding desertification, rising earth's temperature, ice sheet and glacial melting, flooding of low-lying coastal regions, severe weather events, topsoil erosion and sinking water tables in the major food-producing regions, increasing loss of fertile farmland, depletion of fish stocks, loss of biodiversity, and degradation of other aspects of the earth's life support systems. As the unrivalled ruling species atop the food chain, humans are wiping out species and the ecosystems that support life at an accelerating pace (Wilson, 2006).

Environmental degradation of human origin stems from three major sources: population size, the level of consumption; and the damage to the ecosystem caused by the technologies used to supply the consumable products and to support a given lifestyle (Ehrlich et al., 1995). A comprehensive approach to environmental sustainability must address all three resources of impact on ecological systems and quality of life. There are limits to the number of people the earth can support sustainably. The world's population was 3 billion in 1950, more than doubled to 6.5 billion in the next 50 years, and is increasing by about a billion every 15 years toward a rise of over 9 billion in the year 2050. Adding billions of consumers will take a heavy toll on the earth's finite resources and ecological system. The diverse forms of environmental degradation suggest that we have already exceeded the size of the human population the earth can sustain. Clean, green technologies, renewable sources of energy, and adoption of less consumptive lifestyles will help. But adding billions more consumers will offset the benefits of these other remedies. Lifestyle changes must, therefore, be coupled with reduction of population growth.

## 2   Mechanisms of moral disengagement

In the development of moral agency, individuals construct standards of right and wrong that serve as guides and deterrents for harmful practices. They do things that give them satisfaction and a sense of self-worth, and refrain from behaving in ways that violate their moral standard because such conduct will bring self-condemnation. It is through the ongoing exercise of evaluative self-sanctions that moral conduct is motivated and regulated. Adoption of moral standards is only half of the story and, in many respects, the less challenging half. Moral standards do not create an immutable internal moral control system. The self-regulatory mechanisms governing moral conduct do not operate unless they are activated and there are many psychosocial manoeuvres by which moral self-sanctions can be selectively disengaged from harmful practices (Bandura, 1999). Indeed, large-scale inhumanities are often perpetrated by people who can be considerate and compassionate in other areas of their lives. They act in the name of religious, political, social, and economic doctrines (Bandura, 2004; Reich, 1990; Zimbardo, 2007). Moreover, people can be ruthless and humane simultaneously toward different individuals depending on whom they exclude from their category of humanity.

There are a variety of conditions, some of which are documented by Wenk (1979), that foster a foreshortened perspective when it comes to environmental practices. Bountiful immediate rewards of consumptive lifestyles can easily override distant adverse effects, especially if slowly cumulative. Many of those effects are often unanticipated and, to make matters worse, some are irreversible. The incentive systems of business organisations are strongly oriented toward practices that bring profits in the short term. Intense competition for natural resources and a good share of the market in the global marketplace create further pressure to do whatever is needed to succeed. To ensure their political survival, politicians cater to parochial interests and lobby for local projects that are not always environmentally friendly. The media tend to focus on crises of the day rather than on policy initiatives designed to avert future trouble. A foreshortened perspective in a disastrous course calls to mind Collins' (2007) apocryphal story of the person who jumps off the Empire State Building. As he passes the 68th floor he thinks to himself, '*So far, so good*'.

People often find themselves in moral predicaments when they pursue activities that serve their self-interests but violate their moral standards by inflicting human and environmental harm. All too often, moral considerations yield to strong social forces favouring environmentally detrimental activities. People can rid themselves of the moral problem, however, by selectively disengaging their moral self-sanctions from detrimental social policies and practices. This enables them to engage in the detrimental activities with freedom from the restraint of self-censure.

Figure 1 presents a schematisation of moral exclusion, the eight psychosocial mechanisms by which moral sanctions can be disengaged from detrimental practices, and the particular points in the process where they undermine and neutralise moral control. In three of the mechanisms, that operate at the *behaviour locus*, people transform harmful practices into worthy ones through social and moral justification, exonerative social comparison, and sanitising language. This is the most effective set of disengagement practices. Investing harmful activities with worthy purposes not only eliminates self-censure, but engages self-approval in the service of the detrimental environmental activities. Functionaries work hard to become proficient in the activities and take pride in their accomplishments.

Figure 1   Psychosocial mechanisms through which moral self-sanctions are selectively disengaged from detrimental practices at different points in the exercise of moral agency
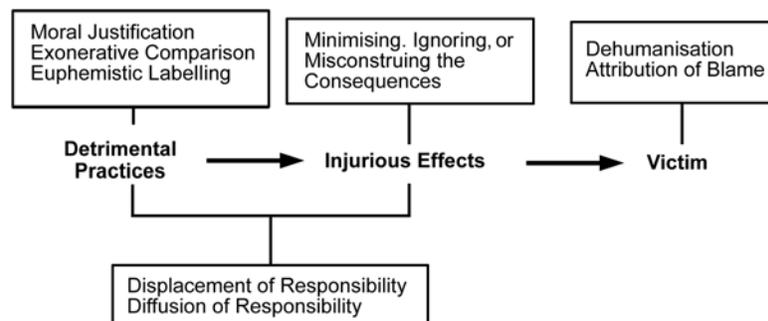
Source: Bandura (1986)

In two of the mechanisms operating at the *agency locus*, people are absolved of a sense of personal accountability for harmful practices by displacement and diffusion of

responsibility. At the *outcome locus*, the harmful effects of the practices are disregarded, minimised, or disputed. In the two remaining mechanisms operating at the *recipient locus*, the victims who bear the brunt of worsening ecological conditions are marginalised and depersonalised and blamed for their plight. The messengers of harmful effects and those working toward ecological sustainability also are derogated and discredited. The sections that follow analyse in some detail how each of these eight mechanisms of moral disengagement are enlisted in the service of unsustainable environmental practices. These various mechanisms usually operate in concert rather than isolatedly at both the individual and social systems level.

There is no disembodied group mind doing the moral disengaging. Rather it is people acting together on shared beliefs. However, moral disengagement at the social systems level is not simply the aggregation of the moral beliefs of individual members. It is an emergent group phenomenon arising from the interactive, coordinative, and synergistic dynamics both within and between social systems. Collective moral disengagement requires a network of participants vindicating harmful practices that take a heavy toll on the environment and the quality of human life (Bandura, 1999). Groups, of course, operate through the behaviour of its members.

The exercise of moral agency is part of the broader social cognitive theory (Bandura, 1986, 2006a). In this transactional view of self and society, psychosocial functioning is the product of a dynamic interplay between intrapersonal influences, in the form of cognitive, affective and biological determinants; the behavioural practices engaged in; and environmental influences Personal agency operates within a broad network of sociostructural influences. These social systems are devised to organise, guide, and regulate human affairs (Giddens, 1984). Social systems do not arise by immaculate conception. Social cognitive theory rejects a duality of human agency and a social structure as a reified entity disembodied from individuals. Social systems are the product of human activity. The rules and practices of social systems, in turn, influence human development and functioning.

Consider, by way of example, the enormous environmental resources, human investment, and industrial production activities it takes to grow, manufacture, transport, and market tobacco products that take the lives of over 400,000 people annually in the USA. Moreover, tobacco products account for a sizable share of the soaring health costs in societies requiring a lot of economic activity to fund. High smoking rates worldwide will usher in a global cancer epidemic. Promotion of this deadly product depends heavily on a vast network of otherwise considerate people engaged in a bewildering array of occupational pursuits. It includes: *Agriculturalists* defending their livelihood. *Tobacco executives* disputing that nicotine is addictive and that smoking is a major contributor to lung cancer. *Chemists* discovering ammonia as a means to increase the nicotine 'kick' by speeding the body's absorption of nicotine. *Biotech researchers* genetically engineering a tobacco seed that doubles the addictive nicotine content of tobacco plants. *Movie actors* agreeing to smoke in their movies for a hefty fee. *Funded scientists* disputing evidence of harmful effects, and even *historians* sanitising the history of the tobacco industry. *Advertisers* targeting youth with merchandising and advertising schemes depicting smoking as a sign of youthful hipness, modernity, freedom and women's liberation. *Investors and shareholders* seeking profits from this deadly product: *Lawyers* fending off liability suits against the tobacco industry. *Legislators* with bountiful campaign contributions not only exempting nicotine from the drug legislation even though it is the most addictive substance, but passing pre-emption laws that block States from regulating

tobacco products and their advertising. *Department of Agriculture* essentially banning low-nicotine tobacco by making farmers ineligible for government price supports if they grow low-nicotine varieties. *President Carter* firing his head of the Department of Health, Education and Welfare for refusing to back off on the regulation of tobacco products. *Trade representatives* threatening sanctions against countries that erect barriers against the importation of US cigarettes. *Tobacco companies* dumping huge quantities of cigarettes in the tiny Caribbean island, Aruba, that serves as the distribution point for drug lords who launder their narcotics money through control of cigarette sales in Latin America. *US Government* opposing a worldwide ban on cigarette advertising and sponsorship of entertainment and sports events even with exemptions for countries with constitutional protection of such activities. This is a remarkably vast array of environmental resources and talents recruited in the service of a deadly product that sickens and kills people when used as intended. It is an extraordinary feat of moral sanitisation of a highly destructive product.

Analysis of the internal documents of the tobacco industry testifies to the extensive use of the various mechanisms of moral disengagement (White et al., 2007). By these exonerative means, employees of the tobacco industry see themselves as victimised defenders of human rights, fighting off zealous health posses, bent on depriving people of the pleasures of smoking. As shown in this example, moral disengagement is not just a matter of intrapsychic machinations operating at a subterranean level. It is rooted in a lot of social machinations by a huge cast of moral disengagers pursuing their livelihood in a diverse array of social systems. By diffusing responsibility through subdivision of the tobacco business, the contributors see themselves as decent legitimate practitioners of their trade rather than as parties to a deadly operation.

3   Social and moral justification

Social and moral justifications sanctify harmful practices by investing them with worthy purposes. This enables people to preserve a sense of self-worth while causing harm by their activities. The justifications take a variety of forms. They may include economic advantages in the competitive global marketplace, societal benefits, strengthening national security, protecting the free enterprise system, and curbing intrusive government. National, constitutional and economic justifications also do heavy duty in promoting products and industrial production processes that are hazardous to the environment and human health (White et al., 2007). Their depicted wondrous benefits are usually accompanied by dire warnings of costs to human well-being were the products to be withdrawn or subjected to governmental regulation.

Unlike the other mechanisms of moral disengagement, which serve mainly to free harmful practices from moral consequences, social and moral justifications serve a dual function. Sanctifying detrimental practices as serving worthy purposes enlists moral engagement in the activity. Belief in the worthiness of an enterprise not only eliminates self-censure from its harmful aspects, but engages self-approval and brings social recognition and economic rewards for being successful at it.

In conservative environmentalism, as Lakoff (2002) succinctly describes it, human domination over nature is the natural order. Nature is a resource that can be owned and used by the owners in pursuit of personal interests and how they choose to live their lives. Viewed from this environmental ethic, transactions concerning natural resources should

be governed by free-market principles without governmental intrusion. Regulators are seen as meddlesome bureaucrats masquerading under the guise of protecting the public against harmful products and practices. They are charged with hassling innovative, hard-working people who have achieved their success through self-reliant dedication. In the words of Gingrich (1995), a leading conservative spokesman, "*To get the best ecosystem for our buck, we should use decentralised and entrepreneurial strategies, rather than command-and-control bureaucratic effort*". The products of unfettered pursuit of self-interested activities within legal bounds, are said to contribute to the welfare of others. In this business ethic, the intrusion of broader social considerations in the market process is viewed as a 'taxation' that hampers productivity and profitability (Friedman, 1993).

Under market-driven incentives, technological ingenuity will supposedly provide solutions for environmental problems. As noted earlier, the human ecological impact is a product of per capita resource consumption and population size. Faith in technological remedies faces the inhospitable reality that we do not have much time left to change our ways. With the rising earth's temperature unleashing uncontrollable heating processes that feed on each other, our irreversible ecological damage may take us to the point of no return before technology could save us. Without curbing population growth and lifestyle changes to stabilise and reduce the ecological damage already caused, adaptation to progressively aversive life conditions is likely to become the order of the day. It is easier to safeguard political careers and enlist public support for protective adaptation to environmental threats than for mitigation of threats requiring changes in lifestyle practices that degrade the environment.

An alternative form of environmentalism, grounded in a contrasting ecological ethos, views human well-being as inextricably linked to the health of the ecological systems. Natural resources must, therefore, be used in a sustainable way to preserve a habitable planet for future generations. These diverse conceptions of nature also differ markedly in the importance of preserving biodiversity. In the latter environmental ethic, diversity of species is essential for sustaining the ecological supports of life. Because of the intricate interdependence of the ecosystems, humans need the other species. The conservative environmental ethic favours a more anthropocentric view that humans are an exclusive species on this planet and many of the so-called lowly species are of little or no consequence in the large scheme of things.

The notion of nature as an economic commodity is in no way confined to a conservative ethic, however. It comes in all types of ideological stripes. As the locus of influences goes increasingly mega-corporate and transnational, nature is widely viewed in terms of market value rather than its inherent value in the local milieus. Even some of the most basic necessities of life are now being treated as commodities priced in terms of supply and demand. For example, the growing scarcity of fresh water is a looming crisis, especially in developing countries with teeming populations, limited water resources, and inadequate delivery systems. Sinking water tables, receding glaciers that feed rivers, and heavy pollution of rivers that render the water undrinkable and hazardous to health foreshadow dwindling water supplies. Faced with a large populace and lacking the infrastructures to deliver fresh water, some developing countries are outsourcing this function to outsiders who are there to make a profit on their investment (Mann, 2007). The poor may be priced out of a vital 'commodity' they cannot forgo.

In times past, people were highly dependent on their immediate habitat for their livelihood. It was, therefore, in their self-interest to conserve their environment.

These efforts were often backed up with normative and ethical sanctions. In contemporary societies, most of the peoples of the world live under congested urbanised conditions where they are harmonising more with their constructed concrete environment than with their natural environment. They are fed, clothed, provided with water supplies, countless labour-saving devices, and the energy needed to power a high-tech lifestyle. The necessities of life are produced by faceless workers in far off places. As long as consumers' daily needs are met, they have little incentive to examine the humaneness of the working conditions, the level of pollution by the production processes, and the costs exacted on the environment to produce, ship, and market the profusion of goods and dispose the wastes. Under these modernised conditions, lifestyle practices are disconnected in time and place from the very ecological systems that provide the basis for them. Environmental conservation becomes an abstraction rather than an experienced necessity. Ecological destructions by high consumptive lifestyles makes this type of consumerism an ethical issue. There is much to be said for a less congested and polluted planet with an inclusive sustainable way of living in harmony with the environment.

Pursuit of unfettered self-interest and affluent lifestyles was of lesser concern when there were fewer people, consuming less luxuriantly, and only a limited number of countries enjoyed privileged control over bountiful resources in their own milieu, through territorial expansion, or exploitive extraction from weak countries. Their low-level technologies could not do much ecological harm. Any detrimental environmental effects were, for the most part, locally situated. It is a different story in the current era with teeming populations seeking a life beyond mere subsistence level. A host of developing countries with the means to adopt high consuming standards of living are now competing vigorously for declining natural resources, and wielding powerful technologies of global ecological impact that affect everyone in one way or another.

Consider an example of environmental devastation of potentially major global consequence. The earth has two sizable 'lungs' that absorb a goodly amount of carbon dioxide from the atmosphere. They include the Amazon rainforest and the dipterocarp forest in Indonesia. Given the billions of tons of heat-trapping gases that humans discharge into the air, they can ill-afford to destroy these vital restorative resources. Nevertheless, they are being treated as a resource to be used in ways that are destroying them.

The Amazon rainforest is being clear cut and burned at a fast pace to create farmland. This valuable ecological resource is being converted from a carbon absorber to a carbon emitter. International environmental groups have made efforts to save the rainforest by funding the creation of protected natural reserves. These conservation projects have aroused vigorous opposition by powerful business and political groups (Rohter, 2007). Business interests want to open up the rainforest to mining, logging, and agricultural projects supported by a network of highways, dams, and ports. Political extremists branded the conservation effort as a new form of colonialism organised by a '*Green Mafia*'. In the fight for public opinion, they claim that the environmental problem is a pretext for a foreign plot to seize the Amazon with military designs in the region. A major share of the general public, having been convinced that the environmental initiative by outsiders is a threat to their sovereignty, side with the opposition forces. In this inhospitable political climate, the market approach of payment for halting deforestation and reducing carbon emissions is regarded as suspect.

China has signed a multi-billion dollar deal with the Indonesian government to clearcut over four million acres of its forest for lumber and to replace it with plantations for palm oil used in cooking, detergents, soaps, and lipstick (Perlez, 2006). A clan elder explained that his people love their trees but the logging will bring jobs and modernise their life. As he put it succinctly, '*Wood is gold*'. Vast areas of mangrove forests in this region have already been converted to cropland as well as urban and commercial uses.

These vital earth's lungs are falling victim to the ethic of nature as property for human exploitation. The massive deforestation will further fuel the earth's temperature rise. Waiting until the effects of massive deforestation become locally aversive before taking action will most likely launch a vicious feedback cycle of progressive ecological degradation that is irreversible.

Some of the social and moral justifications are aimed at dispelling concern over the population growth problem. As shown in Figure 2, population growth is soaring globally. Developed nations are stabilising their population, but developing ones, where most of the growth is occurring, are rapidly doubling their populations. A large share of the population in these countries is under 20 years of age, entering the reproductive years. Many of these countries have quadrupled their populations since 1950.

Figure 2   Population growth in developed and less developed countries
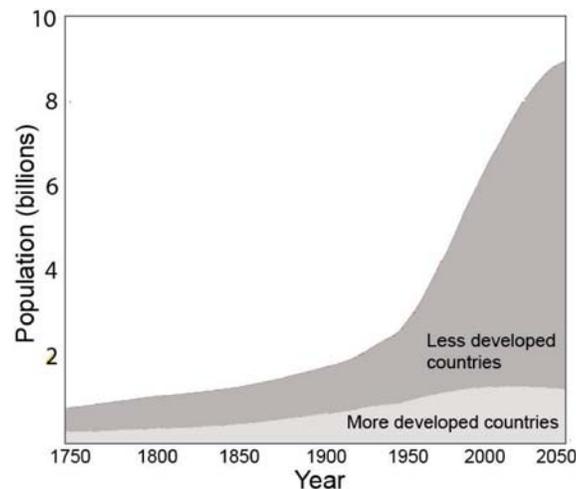
Source: Population Reference Bureau (1998)

Droughts produced by climate change have fuelled fights over scarce water and arable land in heavily populated Sub-Saharan Africa. Under these pressures, the fragile environment is becoming increasingly uninhabitable for millions of people. Masses of displaced refugees in squalid camps fighting for basic necessities of life is but a small preview of things to come. Even with the present population, millions of people are living in hovels in mega-cities. They are struggling to survive with scarcities of food, fresh water, basic sanitation, medical services, and other necessities of life. Almost half of the earth's population is living in severe poverty on less than $2 a day (Madrick, 2003). Swelling populations are creating a humanitarian crisis.

The fertility rates in developed countries are slightly below the replacement level at 2.1 children per woman. Fearing a declining population will stifle economic and consumption growth, some of these countries have launched campaigns with generous incentives to get women to produce more babies. These incentives include cash payments

for each childbirth, lengthy maternity leaves, good childcare, compensation for lost wages, more flexible work arraignments, and even pension supplements.

A few of the European countries have witnessed a recent slight rise in birthrate. The German minister of Family Affairs reports that the baby boomlet has "*filled me with delight*" (Stinson, 2007). The basis for her joy is puzzling to say the least. It takes many years, continuing familial costs and hard work, and extensive societal resources to grow babies into adult workers. Not all of them turn out well. To achieve continual economic growth, industries need workers now not 20 years hence. So they have to import them rather than wait for the homegrown ones to mature. Production of goods can be outsourced to places providing cheap labour. However, countries seek the educated and skilled from abroad and use migrants from disadvantaged countries to provide cheap labour for menial jobs that their homegrown ones would not do.

In some countries, the pressure on women to boost their childbearing include punitive threats as well (McAvory, 2003). The former prime minister of Japan, Yoshiro Mori, suggested that women who bore no children should be barred from receiving pensions,

> "It is truly strange to say we have to use tax money to take care of women who don't even give birth once, who grow old living their lives selfishly and singing the praises of freedom."

In this campaign for more babies, childbearing is reduced to a means for economic growth. A Japanese politician expressed this instrumental view in stark dehumanising terms when he characterised women as disobedient "*baby-making machines*" (Pollitt, 2007). Cannon (2007), editor of the *Deseret Morning News*, reminds his readers that God commanded humankind to "*multiply and replenish the Earth*". In Cannon's view, it is not only '*selfishness*' but reverence of '*self actualisation*' and '*secularism*' that are to blame for the impending '*empty cradle*'. Emancipation from the pressures of market demands to produce young workers is the new challenge to the protection of women's reproductive rights, which is part of the larger issue of human rights.

Social, economic, political, and religious justifications are offered for the seemingly paradoxical practice of raising birthrates in the midst of an escalating global population that already exceeds the planet's carrying capacity. The proponents for a more prolific fertility argue that an expanded young workforce is needed to support an aging population. This remedy may provide some short-term benefits but at the cost of worsening the environmental problem in the long-term. Enlarging a young cohort creates a new wave of population growth that, in turn, requires an even larger growth in population to support them in their old age. Population promoters do not explain how societies should fund the growing pension and health costs incurred by the progressively expanding populations when they age. Adding more people will increase a workforce but is troublesome in the long-term for society that has to care for them through old age. The societal problem is compounded because the free-market fundamentalists, who want women to bear more babies, fight against taxes to cover the costs of raising them, and caring for them when they become elderly, on the grounds that taxes are bad for business. Producing more babies to fund pensions and elder care many years later is an ill-conceived and highly costly remedy.

Developed countries with a lowered birthrate also justify enlargement of their population to forestall a prophesied troubled future of societies in decline. Howe and Jackson (2007) foresee dire consequences for countries with a falling

birthrate – economic stagnation, huge fiscal deficits, slashed budgets for national development, a demoralised populace, and loss of geopolitical power. The 'cornucopians' view the planet as providing bountiful natural resources that permit virtually limitless growth (Simon, 1981). Increasing numbers of workers and consumers are needed to fuel continual economic growth. Moreover, growing populations require expanding industrial activity to provide employment for them. Failure to do so spells social trouble.

The ethics of extravagant and wasteful consumerism, rooted in a market-driven model, also warrants comment. This type of lifestyle degrades ecological systems with massive extinction of species. It is promoted by striving for perpetual economic growth with exemption from the environmental costs. Booming economic activities and hard-driving competitiveness raise value issues concerning the purposes to which human talent, advanced technologies, and resources are put. Much of the intense market activities promote lavish consumption that neither uses our finite resources wisely nor leads to a better quality of life. Many of these practices may be profitable in the short run but, as previously noted, they are unsustainable in the long-term. This becomes an issue of growing importance as powerful market forces from abroad shape local economic activities that have significant impact on the ecological systems and natural resources on which those activities depend. Such practices are likely to take a heavier toll on the environment if the transnational forces operate on an ethic of unbridled economic self-interest aimed at maximising profits with little regard for the ecological costs they incur.

4   Exonerative comparison

How lifestyle and industrial practices are viewed is coloured by what they are compared against. By exploiting the contrast principle, detrimental practices can be made righteous. If used skillfully, framing the issue by advantageous comparison can not only make the lesser of two evils socially acceptable, but even morally right. The disputes over the Kyoto Protocol illustrate how, through exonerative comparison, both sides of the controversy feel righteous about their high output of greenhouse gases.

Developed countries were required to cut their national emission of heat trapping gases depending on their per capita output. But developing countries were exempted because they were minor contributors to the global climate problem. The USA and Australia rejected the Protocol on the grounds that it would hamstring their economies and place their nations at a competitive disadvantage in the global marketplace. It was further argued that the Protocol was unfair because large developing countries, like China and India, are surging ahead as competitive economic powers free of any limits. With their booming economies raising consumption levels in huge populations they will be major contributors to greenhouse gases.

Developing countries rejected caps on their countries' greenhouse gas emissions on the grounds that global warming is a problem the rich industrialised countries created so they should be the ones to cut their emissions. They asked why should countries striving to modernise stifle their economic and industrial growth for a problem they did not create? Viewed from their perspective, they argued that they have the same right to modernise their society and raise the standard of living for their people as did the rich industrialised countries. They, too, want to live prosperously. This usually involves modelling the 'good life' of Western consumerism.

To lessen concentration of greenhouse gases in the atmosphere requires substantial reductions in emissions in the immediate future. This calls for absolute reduction of emissions not just slowing the growth rate. Through comparative exoneration, the contending parties freed themselves of restraint over their polluting practices.

5   Euphemistic language

Language shapes perceptions and thought processes on which actions are based. Activities can, therefore, take on quite different appearances depending on what they are called. Moral self-sanctions can be reduced by cloaking harmful activities in sanitised, convoluted and innocuous language. Doublespeak renders them benign and socially acceptable (Lutz, 1996). For example, the acid rain that is killing lakes and forests is disguised as "*transit particle deposition from an unidentifiable source*" (Quarterly Review of Doublespeak, 1988). The convoluted form of Doublespeak disguises by piling on inflated words that do not add meaning (Lutz, 1987). In his book, *Telling It Like It Isn't*, Rothwell (1982) characterises the sanitising form of euphemisms as '*linguistic novocain*' that numbs us to unpleasant and harmful realities; and the convoluted form as '*semantic fog*' that obscures and conceals detrimental practices.

The US Environmental Protection Agency sanitised its lexicon to neutralise public perception of environmental hazards (Herald, 1981). In this linguistic cleansing operation a senior official at the agency banished the word '*hazard*' because it is "*a trigger word that excites the American public needlessly*". An EPA press aide further explained that "*Health hazards aren't going to be mentioned*". The justification for keeping people uninformed about carcinogens and other toxic chemicals in their environment was to spare them unnecessary uneasiness. The linguistic detoxification was extended to titles of the agency's offices as well. The Office of Hazardous Emergency Response was renamed the "*Office of Emergency and Remedial Action*". Even the regulatory personnel were sanitised. The '*enforcement personnel*' were renamed '*compliance assistance officers*' in the likeness of helpmates rather than enforcers of environmental laws.

In President George W. Bush's linguistic ecological camouflaging (Salant, 2003), distant vision of the hydrogen '*Freedom Car*' powered by '*Freedom Fuel*' served to deflect the public's attention from the need to reduce carbon emissions by increasing auto fuel efficiency in the here and now. The decision to revise the Clean Air Act that spared the power industry from upgrading their plants to reduce the level of polluting emissions was called '*Clear Skies*'. An initiative that favoured the timber industry with liberal logging privileges in national forests was dubbed '*Healthy Forests*'.

The nuclear power industry devised a unique lexicon for sanitising nuclear mishaps. An explosion is an '*energetic disassembly*'; a fire is '*rapid oxidation*'; a reactor accident is a '*normal aberration*' or a '*plant transferent*'; and plutonium contamination is '*infiltration*' or "*plutonium has taken up residence*" (NCTE Doublespeak Award, 2006). What to do with radioactive waste from nuclear power plants is a daunting challenge. The Nuclear Regulatory Agency solved a good part of it linguistically by redefining what is radioactive waste material (Lutz, 1996). About a third of it was classified as BRC, 'Below Regulatory Concerns'. This allowed the nuclear power industry to dispose of it any way they wish. A uranium processing plant was called "*Feed Materials Processing Center*", suggestive of an animal feed processing plant. Its radioactive waste contaminated the ground water.

Linguistic camouflaging of the detrimental effects of social policies and practices is a flourishing morally neutralising strategy (Bolinger, 1980; Lakoff, 2002; Lutz, 1987; Rothwell, 1982). Sanitising language is not just a word game, however. It shapes people's perception of reality and increases their willingness to engage in detrimental activities (Bandura, 1999).

There is much loose talk, as well documented by Bartlett (1994), about 'sustainable development'. He questions whether the term is oxymoronic in that one cannot have eternal economic growth without increased consumption of non-renewable resources. The linguistic remedy eliminates the conflict between growth and sustainability in resources that get depleted. All too often, the term 'sustainable' is appended to development as a camouflage in promoting ever-rising consumptive growth. This style of living cannot be continued indefinitely, especially with unsustainable population growth.

Advocates for environmental preservation sometimes manage to undermine their mission with languid metaphors. Rather than portraying the harmful effects of human practices in vivid, concrete terms they are characterised as leaving an '*ecological footprint*'. We are beginning to witness footprint creep. We now have a '*carbon footprint*', '*decision footprint*', *Global Footprints Network* and '*consumption footprint*'. The footprint has invaded other ecological domains as well. We now have a '*water footprint*'. There may be more types of footprints in the offing. Deforestation does not leave a static trace. The altered ecology becomes an active carbon emitter. When carbon dioxide is deposited in the atmosphere it remains there for ages as an active agent trapping heat. The public is energised to collective action by aversive life conditions and forethought of worsening crises, not by visions of a metaphoric footprint. The term '*global warming*' conveys the image of a mildly pleasant condition. It may be warming in the northern regions of the planet, but parching in regions near the equator.

6   Displacement and diffusion of responsibility

Moral control operates most strongly when people acknowledge that they are contributors to harmful outcomes. They are spared self-disapproving reactions by shifting the responsibility to others or to situational circumstances. This absolves them of personal responsibility for the harm they are causing. The exercise of moral control is also weakened when personal agency is obscured by diffusing responsibility for detrimental behaviour. This is achieved by division of labour in which the subdivided activities seem harmless in themselves. Group decision making is another common practice for reducing a sense of personal accountability. Collective action, which makes one's contribution seem trivial, is yet another form of self-exoneration for aggregate harmful effects. Global effects are the cumulative products of local actions. The adage, '*Think globally, act locally*' is an effort to restore a sense of personal accountability for the environmental harm produced collectively.

Displacement and diffusion of responsibility are not just cognitive machinations. They are built into the very structure of social systems to obscure personal accountability. Insulating structural arrangements are created that provide authorities with protection from social criticism and spares them loss of self-respect for authorising harmful practices. After all, they have to live with themselves. In surreptitious sanctioning systems, authorises remain intentionally uninformed and create schemes of deniability that leave them blameless. Most enterprises require the services of many people, each

performing subdivided jobs that seem harmless in themselves. After activities become routinised as detached subfunctions, people shift their attention from the morality of what they are doing to the operational details and efficiency of their specific job (Kelman and Hamilton, 1989).

Displacement of responsibility is often enlisted in industrial disasters. Corporate vindication is achieved by shifting the blame. For example, the world's worst industrial disaster occurred in Bhopal, India where 40 tons of methyl isocyanate gas escaped from the Union Carbide pesticide production plant. Thousands of people were killed, seriously injured, or partially disabled and nearly 200,000 were severely affected in other ways (Weir, 1987). The US parent company displaced responsibility by blaming the Indian government for its failure to regulate the plant and for allowing people to live nearby (Bandura et al., 2002). Some of the worst affected communities existed before the factory opened in the middle of Bhopal near the train station for convenient shipping. Union Carbide also blamed the explosion on sabotage, an assertion rejected by environmental groups.

Critics of conservationists blame global warming on natural cyclic changes in climate. Making the planet the doer absolves consumptive lifestyles and population growth of any responsibility for the earth's rising temperatures. As will be shown later, exoneration of the human connection is at odds with a mounting body of scientific evidence documenting a human contribution. Disappearing forests by clear cutting, pollution of water supplies by discharges of industrial and agricultural wastes and raw sewage, depletion of fish stocks by over fishing with vast nets, and alarming extinctions of species through destruction of their habitats are but a few examples of environmental degradation that abound. These effects are plain to see, are quantifiable, and unquestionably of human doing.

It is in the climate change arena where the vigorous battles are now being fought. This is because the stakes are very high, everyone is a contributor to it, and it affects everyone in one way of another. Judging severity of the global threat for collective action requires prediction from scientific knowledge, which always contains some uncertainties, making it ripe for challenges. Moreover, there is urgency for corrective measures given the limited time before the temperature rise may become irreversible. At that point, there is no turning back.

Naysayers argue that climate changes simply reflect the natural historical cycle of frigid and scorching climates. We just happen to be in a hot phase. Viewed from this perspective, there is nothing to get morally excited about. However, the vast body of scientific evidence, analysed by the world's leading climate experts (IPCC, 2007), shows that humans are driving up the earth's temperature over and above natural cyclical changes. There is no longer any serious scientific dispute over this verdict. Moreover, the expert analysts report that the earth's temperature will rise faster and be more devastating than previously predicted. The global ecological problem is too serious and the time for corrective action is too short to continue to play the skeptic game.

At the global level, the earth's temperature rise is linked to the number of people (Meyerson, 1998). However, in some quarters and media accounts, which thrive on controversy, the emerging alarm over the rise in heat-trapping emissions is peculiarly disembodied from the growing multitude of consumers as a problem requiring attention. More people consuming more resources, produce more environmental damage, and generate more greenhouse gas emissions. This relation underscores the influential role played by population growth in climate change.

Another commonly used displacement strategy is to disguise responsibility for subverting public policies designed to protect the environment. This is achieved be creating front organisations that masquerade under benevolent names and conceal their real purpose (Lutz, 1996). Industry financed 'scientific skeptics' add further credibility to the deceptive schemes (Gelbspan, 1997). The scenario typically portrays a concerned citizenry fighting Big Government with its voracious appetite for laws and regulations that work against the public interest. If front organisations are cloaked in a seemingly grass-roots campaign, they gain an even greater sense of independence and credibility.

Lutz (1996) provides a rich catalogue of creative masquerading of lobbying efforts to shape laws and weaken regulations in ways that work against protection of the environment. Timber industries fight restrictions on cutting forests under the cloak of the '*Forest Protection Association*'. Corporations masquerade under "*Citizens for Sensible Control of Acid Rain*" to defeat bills to curb acid rain. Utility companies and other organisations created the "*Endangered Species Reform Coalition*" to eviscerate the endangered species law. A host of polluters joined forces under the benevolently labelled "*Clean Air Working Group*" to gut the Clean Air Act. Real estate and gas and oil companies formed the seemingly environmentally-friendly organisation, '*National Wetlands Coalition*', to open up the wetlands for commercial development. The fishing industry cloaked themselves in the '*Sea Lion Defense Fund*', not to save the endangered sea lions, but to remove limits on fishing the sea lion's favourite foods.

7 Disregarding, minimising, and disputing detrimental effect

When people pursue activities that serve their interests but produce detrimental effects they avoid facing the harm they cause, or they minimise it. If minimisation does not work, the scientific evidence of harm can be discredited. In this way doubt and controversy is created despite substantial evidence to the contrary. As long as the harmful results of one's conduct are ignored, minimised, or the evidence is discredited, there is little reason for self-censure to be activated, or any need to change behavioural practices.

Causality is difficult to gauge when the outcomes of behavioural practices are slowly cumulative and widely separated in time. Moreover, outcomes are the product of multiple determinates operating in concert. Codetermination provides fertile ground for disputes about the true causes of detrimental outcomes. Demanding complete scientific certitude serves as a handy justification for inaction. Evasion only makes the challenge more difficult. To further complicate assessment of effects, minor changes can set in motion cyclic processes that feed on each other in ways that eventually result in large-scale changes. For example, global warming thaws vast arctic regions of permafrost releasing methane and carbon dioxide trapped in the frozen soil for thousands of years (Walter et al., 2006). Methane is more powerful than carbon dioxide in trapping heat in the atmosphere. The trapped heat thaws more permafrost which, in turn, further raises the earth's temperature in a vicious positive feedback cycle. The rate of methane release is much faster than expected, and the amount of carbon dioxide released vastly exceeded the amount emitted annually by burning fossil fuels. These are massive unforeseen effects on the world's atmosphere. Gambling with environmental interventions with little forethought of their consequences and disputing their human origin when they occur, is a highly risky business.

Sound theoretical knowledge on how human lifestyle practices affect the interdependent ecological systems, and reliable proximal markers of long-range outcomes aid risk assessment. The ability to extrapolate future outcomes of different courses of action based on established knowledge enables people to take corrective action to avert possible disastrous futures. The prospective focus is especially critical in environmental protection because some of the detrimental changes that human practices unleash may turn out to be irreversible.

Beck (2007) has categorised the various stages of denial of adverse climate affects. The first stage is outright denial or treating it as nothing new. It also happened centuries ago so its just part of a natural change. Global climate change must be evaluated in terms of trends. Naysayers select a specific time or place that may provide contradictory evidence to challenge the predictions. The next stage of negation acknowledges that the earth may be warming but we do not know why it is happening and, besides, predictions of what's to come are unreliable. The prediction models are alleged to be faulty, global systems are herently chaotic so they are unpredictable, and scientific consensus is really collusion. Moreover, critics claim there is no proof that CO_2 causes global warming. It is water vapour or the sun that is doing it.

In the next stage, one acknowledges a climate change but can still neutralise any moral concerns by trivialising the change or even ascribing benefits to it through selective inattention to adverse effects. Warmer weather is said to make life more pleasant in cooler northern regions. This may be personally comforting as long as one disregards the millions of people living near the equator whose lives are impaired and dislocated by rises in the earth's temperature produced elsewhere. Arguments in the final stage claim that the earth's temperature is uncontrollable by human action, and, regulatory policies to curb carbon emissions will be economically disastrous. If nothing new is happening climatically, and it is not of human origin or mitigatable by human action, there is no need to change lifestyle practices. Nor is there anything to get morally exercised about. Polluting behaviour is freed from the restraint of moral self-sanctions.

Derogation of those working toward ecological preservation is a common tactic for neutralising moral concern over lifestyle practices that impair the ecological supports of life. The proponents are disparaged as '*doomsayers*', '*scaremongers*', '*environmental wackos*', '*tree huggers*', and the like. Bloggers who target deniers that environmental problems are of human doing are called '*kooks*'. The critics christened Al Gore, the indefatigable environmentalist, as '*ozone man*'. The British press labelled Prince Charles, who called for a sustainable stewardship of the environment, as a "*loony eccentric prince who talked to plants*" (Shnayerson, 2007).

The so-called doomsayers gave the 'doomslayers' an easy victory with a short time frame for projected price rises of a few metals that did not happen. This event is heralded as evidence that human ingenuity will find solutions to resource scarcity (Myers and Simon, 1994). We are only now witnessing regions in which surging population growth is outstripping food and water supplies. Considering how our detrimental environmental practices are spinning out of control, Malthus may very well have the last tragic laugh.

Scientists come in for especially harsh treatment because they are the bearers of disturbing news about what is happening to our battered planet (White et al., 2007). They are ascribed nefarious motives and disparaged as '*self-appointed guardians*', '*hysterical crusaders*', and '*misguided zealots*'. Their research is discredited as '*junk science*', and their findings are trivialised. If scientists are regarded as

untrustworthy and their science is dismissed as faulty, there is no need for people to bring self-sanctions to bear on their detrimental practices.

Moral disengagement by indifference to harmful realities extends beyond disregarding, minimising, or disputing their occurrence. It includes ignoring escalating population – the root cause of environmental degradation. A view, currently in vogue, contends that population growth is no longer an ecological problem. This erroneous view arises from failure to consider the differential pattern of population growth across regions of the planet and the changing shift of populations. The population growth problem must be addressed globally not dismissed as a myth by selective focus on some industrialised countries with declining birthrates. As shown in Figure 2, the soaring population growth is occurring mainly in developing countries with high rates of unplanned childbearing.

Compare the claim that the population bomb has 'fizzled' with population growth trends. China has a population of 1.3 billion and is adding about 7 million people annually. India has passed the 1 billion mark, and is on the brink of surpassing China as the most populous nation in the world. At its current fertility rate their population will double to a staggering 2 billion in 44 years. Africa has a population of 944 million and, at its present growth rate, will swell to 2 billion in 35 years. The population in the Middle East and North Africa is about 400 million and is projected to surpass 700 million in 50 years. The USA has the highest rate of population growth among industrialised countries. Although the rate of population growth globally has slowed somewhat, it is still at a pace to add about 1 billion people every 15 years. Dismissal of global population growth cannot go on indefinitely. Mounting aversive consequences of environmental degradation will eventually force the international community to address the population problem.

There is also mass migration of people from heavily populated poor countries to more habitable or prosperous ones. Some of the people are migrating in search of a better life. Others are seeking a safe haven from internal ethnic atrocities. And still others are 'environmental refugees' subjected to forced migrations because of the growing inhabitability of their environment as their fertile land turns into desert through prolonged drought and loss of water resources. Poor regions are especially vulnerable to temperature rises, because if their crops fail or their water sources shrink, they have no reserves to draw on. The oft-repeated scenes of hordes of emaciated people struggling to survive under squalid conditions in refugee camps is more likely to depersonalise and dehumanise them than raise social compassion. The large-scale international migration, which will swell with increasing environmental destruction, is changing the face of national populations. It is becoming the source of major regional upheavals that breed sectarian violence.

As Dyer (2007) reminds us, the population bomb is rapidly ticking away, but is being ignored as a major contributor to climate change and ecological destruction. Population growth is an escalating global problem not a disappearing one. In an attentional sleight of hand, soaring population growth disappears as a problem and population decline is elevated to an alarming one that '*haunts our future*' (Howe and Jackson, 2007). Even some of the leading environmental conservation organisations, which morphed from active grass-roots environmentalists to cautious bureaucracies accommodating to political forces, disembodied ecological damage from population growth, a major contributor to the problem (Foreman, 2007; Kolankiewicz and Beck 2001; Ryerson, 1998/1999). The population of the USA was 150 million in 1950 that grew to 300 million in 2006 and is heading to 420 million in the next 45 years. Most of this increase stems

from migration. After a grueling internal fight over the role of immigration in population growth for fear of its racial implications, the Sierra Club jettisoned domestic population growth from their agenda as an environmental conservation issue.

Fear of alienating donors, criticism from the progressive left, and disparagement by conservative vested interests claiming that overpopulation is a 'myth', served as further incentives to cast off the rising global population as a factor in environmental degradation. Population growth vanished from the agendas of other mainstream environmental organisations that previously regarded escalating numbers as a major environmental threat (Nicholson, 2007). Greenpeace announced that population "*is not an issue for us*". Friends of the Earth declared that, "*it is unhelpful to enter into a debate about numbers*". The common justification for the retreat is that it is consumption not human numbers that is creating environmental problems, despite evidence that more people produce more ecological damage. To construe ecological woes as due to consumption and dismiss the number of consumers as of minor consequence overtaxes credibility. The ecological and social strains of population growth and geographic mobility of environmental refugees and those seeking a life beyond mere subsistence call for humane solutions not evasions. This will require helping developing countries to preserve a habitable environment, providing them with the means and enablement for planned childbearing, and promoting sustainable development that improves their livelihood.

David Brower, the inspiring founder of the Sierra Club, would have probably viewed this retreat for political reasons as a tragic irony. He put it well when he once said, "*You don't have a conservation policy unless you have a population policy*". The escalating global population is now a much more serious ecological threat. Noting that the current global population exceeds the earth's carrying capacity, some prominent scientists have taken bold steps in the inhospitable political-correctness climate to break the stranglehold of the population taboo. Christopher Rapley, Director of the British Science Museum, argues that stabilising the population at an ecologically unsustainable level is not much of a solution. In his view, we need fewer people to curb global warming (Clover, 2007). High consumption lifestyles wreaking havoc on the environment and harming other people's lives is a moral issue of commission. Evasion of the influential role of population growth in environmental degradation is a moral issue of omission. A few columnists and commentators are also beginning to give voice to the global consequences of willful indifference to the population part of the global problem (Bunting, 2007; Feeney, 2007; Pallitt, 2007). Mounting ecological degradation will force renewed attention to population growth.

Population growth has become politically incorrect for a variety of reasons. About two-thirds of the greenhouse gases are produced by the richest industrialised countries with high consumption lifestyles, but only about 3% by Africa, the poorest continent. To target poor countries that suffer the ecological harm of extravagant lifestyles spewing pollutants elsewhere is analogous to blaming the victim. Ironically, ignoring poor people's need for help with planned childbearing and social supports that enable them to achieve it is victimisation by benign neglect.

Immigration is a minefield in political life. On the one hand, industrial, agricultural, and service industries want cheap labour and workers to perform the dirty and toilsome manual jobs that their own citizens will not do. They rely heavily on migrant workers regardless of whether they come in legally or illegally. Using economic justification, the industries also argue that they need cheap labour to stay competitive in the global market

place. They use their political clout to secure their labour needs. On the other hand, the migrant groups are marginalised, denied adequate services, human rights and, in some countries, even stripped of a national identity if their offspring born in the host country are denied citizenship. The families that are better off are not about to groom their own offspring for toilsome menial jobs with paltry wages and lowly social status. So industrialised countries import or, by discriminatory practices, produce a disadvantaged ethnic underclass that remains largely unassimilated and is resented for its intrusion on the prevailing cultural norms, traditions, and practices.

To complicate matters further, immigration is an emotionally charged issue with deeply-engrained prejudices, favouritism toward certain ethnicities and occupational stratums, and indignation over illegal entries. These conflicting forces have spawned political correctness in both the political right and political left. Some people exploit this contentious issue for political purposes, but most do not want to talk about population growth for fear of rousing the controversial spectre of immigration and being branded a racist.

Burgeoning populations also fuel civil strife with devastating humanitarian consequences. In many underdeveloped countries a major share of the population is under 20 years of age. As previously noted, in many developing countries their populations will double in 20–30 years. The added stress of deteriorating life conditions facilitates the collapse of weak states and the rule of law. Many of the recent violent conflicts are in countries with young populations, living in poverty, under autocratic rulers often plagued by corruption (Leahy, 2007). The age structure, intense competition for sparse resources, and widespread social discontent makes young men ripe for recruitment for civil wars and terrorist activities. Large youth populations living under repressive and poverty-ridden conditions will be a growing threat to international security. To worsen this problem, water sources are being rapidly depleted as the demand by soaring human numbers outstrips the supply. The looming water crisis will spawn growing regional conflicts over the allocation of water from sources crossing national borders (Brown, 2007). Water will be the major global issue over which people fight.

Religious opposition to contraception also diverts attention away from the ecological effects of population growth (Collins, 2007; Ryerson, 1998/1999). The Catholic hierarchy forbids contraceptives on the grounds that sex should not be dissociated from procreation. Family planning also got tainted with abortion politics. Religious fundamentalists and other religious groups formed an opposition alliance. However, a heated dispute has recently erupted among Christian groups over whether global warming is a moral issue that should be featured in their agenda (Goodstein, 2007). A coalition of prominent evangelical leaders, representing millions of followers, declared that they are stewards of God's creation. As such, they bear moral responsibility to curb the earth's rising temperatures to save it from further degradation. This call to action drew heavy fire from leaders of conservative Christian groups, who argued that global warming has not been proven to be of human origin. Nor, in their view, is it reducible by human action. They told the evangelicals to remove global warming from their agenda and restore priory to sexual morality, which requires targeting abortion, homosexuality, same-sex marriage, and teaching sexual abstinence to youth. They further warned the evangelical environmentalists against associating with those '*liberal crusaders*', who are bent on limiting free enterprise as well as population growth.

Unlike the Christian fundamentalists, a number of Muslim countries are adopting the Pakistan model that uses religious texts and clerics to promote family planning and

distributes contraceptives in mosques. Pope Benedict XVI recently issued a green message urging young Catholics at a massive religious youth rally to save the planet from environmentally unsustainable development (Winfield, 2007). His proposed remedies included use of biodegradable packaging, recycling, installation of solar panels, and enrollment in carbon offsetting projects for reforestation. Because of the Vatican opposition to contraception, family planning to curb global population growth was conspicuously absent from his agenda for environmental salvation. Rather, his view on this issue exacerbates the environmental problem with forewarnings that low birthrates "*cause enormous difficulties for social cohesion*" (Stinson, 2007). Contrary to this claim, we saw earlier that throngs of people competing for basic necessities of life breed social discord not social cohesion. Growing more consumers means more pollutants that can overwhelm any gains from the prescribed mitigating practices.

Coercive and mandatory birth control schemes further tainted family planning. Libertarians, feminists, and human rights groups joined the ranks of opponents to it. Reports in periodicals and magazines on population and its impact on the environment dropped sharply in the late 1970s and remained cast off thereafter (Henson, 1994). By the third population conference, the UN shifted its focus from the population problem to the empowerment of women and human rights issues (Foreman, 2007; Kolankiewicz and Beck, 2001). Writing from a feminist perspective, Pollitt (2007) comments on the irony of some of the developed countries doing the right thing in providing supportive aid to working mothers but for the wrong reason, i.e., to produce more babies. Pollitt suggests that societies should develop the talents of the countless millions they already have but write off, rather than embark on national fertility campaigns to enlarge their population.

In this electronic era, promoting educational development will contribute more to innovation and economic growth than merely breeding more people. They are expensive to raise, require a lot of costly societal services and, if inadequately educated and marginalised, they become social and economic burdens on society. Adding more people is not a reliable route to economic growth (Ryerson, 1995). The quickest way for countries to enhance their social capital is to remove gender inequality and educate their women. The moral issue, here, concerns the harm caused by social exclusion from the opportunity structures of a society.

The need to fund pensions and health costs of an aging population are used as economic justifications for increasing the size of the population. These justifications and the media portrayals they spawn, are infused with pejorative stereotyping of the elderly as idle simpletons leading barren lives (Signorielli, 1985), and draining precious societal resources but having little to contribute to the life of a society. The people of today are aging more successfully than those of yesteryear (Baltes and Baltes, 1990; Bandura, 1997; Rowe and Kahn, 1998). They are healthier, more knowledgeable, more intellectually agile, and able to work longer productively. In the current realities of late adulthood, life is characterised more by a shift in pursuits and personal renewal than by withdrawal from an active life (Bandura, 1997). But societal structures and practices lag behind the capability of the elderly so their skills and knowledge go untapped (Riley et al., 1994).

The elderly often get blamed for problems created by societal structural impediments to the continuance of productive lives. China, which is easing is family planning laws to produce more workers, is a good case in point. The problem is partly a product of an early mandatory retirement policy that retires blue-colour workers at age 55, and professionals and government workers at age 60. Women are required to retire even

earlier (French, 2007). Allowing people to keep their jobs longer if they are good at it and derive satisfaction and other benefits from it would relieve the pressure on the pension system. However, the structural solution is politically unpalatable because raising the retirement age may spark some social protest. Moreover, extending employment for older workers can increase unemployment of younger ones, which risks political unrest. The workforce problem, arising partly from governmental policies, is displaced to population decline with proposed fertility remedies that only worsens the social and environmental problems down the line. Jeffery Sachs advocates policies that provide incentives for workers to save more toward their retirement as another way of easing the pension problem (Peters, 2007), rather than using population growth as the remedy.

In patriarchally-oriented societies, male resistance to contraception and viewing offspring as symbols of male virility adds to the family count. Relegating women to a subservient role in which they have little say about family matters and restricting their educational opportunities confines them to a life of early and frequent childbearing. In many of the countries with high fertility rates, after women have had several children they do not want any more. Frequent childbearing compromises the kind of lives that they can lead and the standard of living they can provide for their children.

Unless people see family planning as improving their welfare, they have little incentive to adopt it. Indeed, adoption of contraceptive methods tends to be low even with full knowledge and ready access to them (Ryerson, 1995). Providing contraceptive services alone is not enough. Nor are fleeting media campaigns, exhortations, moral appeals for responsible parenthood, and motivational slogans are not of much help. Failure to address the psychological determinants of human behaviour is often the weakest link in social policy initiatives. Along with providing family planning services, stemming the population growth requires changing social norms and removing the psychological impediments to contraception in spousal relationships rather than just placing the burden on women. Promoting psychosocial conditions conducive to planned childbearing supports women's reproductive rights rather than infringe on them. Cleland et al. (2006), a leading population expert, builds a strong case for revitalising family planning in the world's poor countries. He regards promotion of family planning as especially important because of the unusually broad scope of its benefits. It reduces the cycle of poverty, decreases maternal and child mortality, liberates women for personal development by relieving the burden of excessive childbearing, enables universal primary education, and aids environmental sustainability by stabilising the world's population.

Reducing unplanned childbearing is the fastest and most cost-effective way of curbing the accelerating ecological destruction. Moreover, its benefits are immediate. Trying to change the ways of a populous is a tough undertaking. It is costly, vulnerable to the vagaries of competing influences, may have unintended adverse consequences, and usually involves long time lags before any benefits are realised.

Some of the applications of social cognitive theory are aimed at reducing the soaring population growth, especially in developing countries with high fertility rates. They double their population in a short time (Bandura, 2002; 2006b; Singhal et al., 2004). Long running serialised dramas serve as the means to alleviate widespread problems and improve the quality of people's lives. These dramatic productions are not just fanciful stories. The engrossing plotlines bring to life people's everyday struggles, the impediments they face, and the effects of different social practices. They help people to see a better life and inform, enable, and guide them to take the steps to realise it. Hundreds of episodes, over several years, allow viewers (or listeners in the case of radio

dramas) to form bonds to the models, who evolve in their thinking and behaviour at a believable pace. Audience members are inspired and enabled by them to improve their lives.

These productions are not 'family planning' programs foisted by outsiders on the women of poor countries. They are created only by invitation from countries seeking help with their societal problems. The media personnel in the host countries are provided with the resources and training to create serials that are tailored to their culture and address their needs. The programs are grounded in the internationally endorsed values codified in United Nations covenants and resolutions. These values embody respect for human dignity, equality of opportunity, and support of human aspirations.

The plotlines address, among other matters, the problem of mounting population numbers and possible solutions in broader human terms. In many societies women are marginalised, disallowed aspirations, denied access to education, forced into prearranged marriages, granted little say in their reproductive lives, and denied their liberty and dignity. Such violations of human rights are typically justified in terms of the values and sovereignty of the country. By including intersecting plotlines, this psychosocial approach addresses different aspects of people's lives at both the individual and social structural level rather than focuses on just a single issue. The plotlines include improving the status of women so they can have more say in their lives, portraying the benefits of planned childbearing, increasing educational opportunities for girls, depicting the detrimental effects of the dowry system, injustice of forced marriage, risks of early childbearing, genital mutilation, snatching brides by abduction and rape, and prevention of AIDS.

This psychosocial approach fosters personal and social change by enlightenment and enablement rather than by coercion (Bandura, 1997). In the case of the population issue, it is not a matter of restricting people's choice to procreate, but rather enabling them to choose their preferred family size informatively and planfully. Many worldwide applications of this approach in Asia, Africa, and Latin America are raising the status of women, enhancing people's beliefs in their efficacy to control their family size by planned childbearing, and increasing adoption of contraception (Bandura, 2002; 2006a, 2006b; Rogers et al., 1999). These changes are achieved by improving diverse interrelated aspects of people's lives not by just targeting contraception.

Tanzania provided a unique opportunity for an experimental evaluation of the effectiveness of this method for personal and social change. The current population of Tanzania is 39 million with an annual per capita income of $ 200. The fertility rate is 5.4 children per woman. The projected population at this rate is 57 million by 2025, and 88 million by 2050. Such huge population growth would overwhelm efforts at economic development.

The program was broadcast in one large region of the country and the remaining region, which did not receive the program, provided the basis for evaluating its effectiveness. The program raised people's belief in their efficacy to control their family size. Prior to the program, many believed that God ordained the number of children they will have or their husbands decreed it. The greater the exposure to the program, the more the marital partners discussed the need to take control over the number, timing, and spacing of their children. The broadcast area had a substantial increase in the number of new families adopting contraceptive methods compared the control region (Figure 3). Adoption of contraceptive methods also increased when the program was later broadcast in the control area. Plotlines addressing the AIDS problem quickly debunked false beliefs

about how the virus is transmitted and raised adoption of safer sex practices to curb the spreading AIDS epidemic (Vaughan et al., 2000).

Figure 3   Mean number of new family planning adopters per clinic in the Ministry of Health clinics in the broadcast region and those in the control region. The values left of the dotted line are adoption levels prior to the broadcast; the values between the dotted lines are adoption levels when the serial was aired in the broadcast region but not in the control region; the values to the right of the dotted line are the adoption levels when the serial was aired in both the broadcast region and previous control region
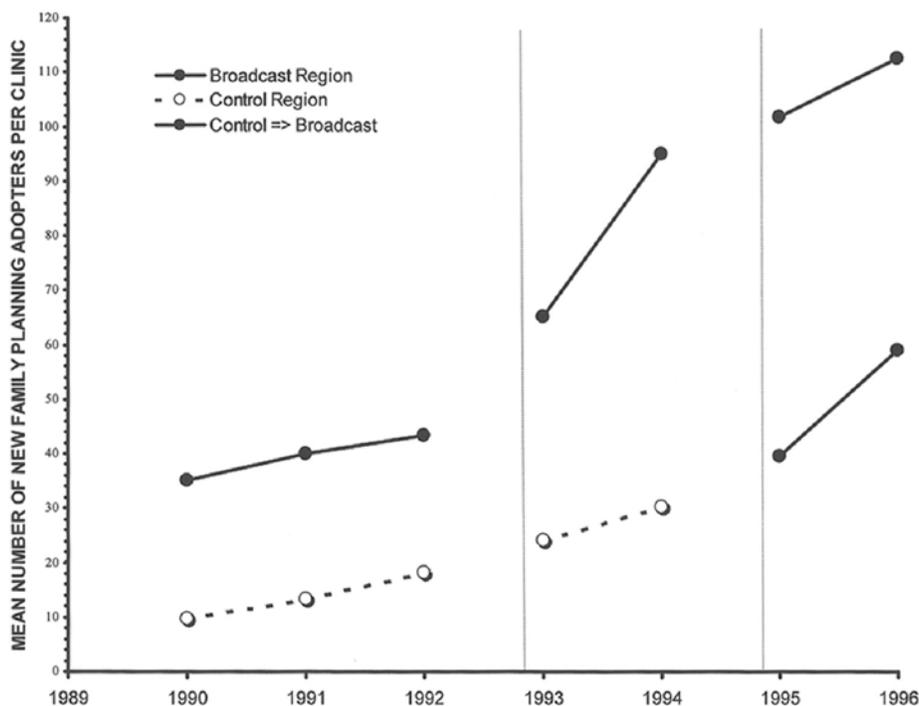
Source: Drawn from data in Rogers et al. (1999)

8   Dehumanisation and disparagement

The strength of moral self-censure for harmful practices also depends on how those who suffer the consequences are regarded. To perceive another as a sentient human being with the same basic needs as ones' own arouses empathic reactions through a sense of common humanity (Bandura, 1992). The joys and suffering of those with whom one has a sense of kinship are more vicariously arousing than are those of strangers or those divested of human qualities. It is difficult to inflict suffering on humanised persons without risking self-condemnation. But it is easy to do so if they are viewed as subhuman objects. Many conditions of contemporary life are conducive to impersonalisation and dehumanisation. Bureaucratisation, automation, urbanisation, and high mobility lead people to relate to each other in anonymous, impersonal ways. Strangers can be more easily dehumanised than can acquaintances. In addition, social and political practices that divide people into ingroup and outgroup members create human estrangement that fosters dehumanisation. People group, divide, devalue, and dehumanise those they disfavour. Their well-being is easy to discount when they are in far-off places.

It is also easy to remove other species from moral consideration and to destroy their habitats when they conflict with self-interests. Such species are regarded as lowly pests that stand in the way of economic development and destroy people's livelihoods. Opponents single out an endangered bird, rodent, or reptile to ridicule legislative protections and disparage those who promote them. Given the intricate interdependence of species, humans can ill-afford to be wiping out species on which they must depend. The recent alarm over the surprising decline of honeybees worldwide, for whatever reasons, underscores the grave risks of messing with the ecosystem. Without honeybees pollinating our major fruits, nuts, and vegetable crops, the disappearance of this lowly insect can drive the ecological life-support system into a crisis affecting food supplies. The changing ocean ecology is another example of human activity threatening the intricate interdependences of ecological systems. Carbon emissions are increasing the ocean's acidity, threatening destruction of organisms at the base of the marine food chain that supports the fish food supply (Kleypas et al., 2006). Such developments are making interdependent environmentalism a lived reality, not just an abstract ethos. There are undoubtedly other crises in the making through rapid extinction of species lower in the food chain.

Moral self-sanctions can be disengaged or blunted by depersonalising people or stripping them of human qualities. The infliction of human suffering at the global level is, in large part, by indirection rather than done directly. We saw earlier that the world's wealthiest countries are producing most of the heat-trapping gas emissions that are raising the global temperature. It is the people living in poor, developing countries in sub-Saharan Africa and Central Asia who are bearing the brunt of the adverse climate shift. As the receding glaciers in mountain ranges are further melted by the rising earth's temperature, the rivers they feed will provide declining water for personal, agricultural, and industrial use. Water shortages, crop failures, and expanding desertification are forcing mass migration of people who lack the resources and means to protect themselves against the degradation of their environment by the climate change. Displacement of millions of people is creating a growing humanitarian crisis. Their meager livelihood contributes little to the temperature rise, but they suffer the adverse consequences of it.

Ebell (2006) has been extolling the benefits of global warming. He argues that it makes life more pleasant for folks in the northern regions. Moreover, cold spells kill more people than do heat waves. A bit of global warming is, therefore, not only life-saving but makes life more pleasant. As he explains it,

> "Given our obvious preference for living in warmer climates as long as we have air-conditioning, I doubt that we're going to go on the energy diet that the global warming doomsters urge us to take."

The rich energy diet is making life more burdensome for those of lesser means who bear the brunt of the adverse effects of lavish lifestyles of wealthy countries. A sense of common humanity arouses empathy and compassion for the plight of the needy and the most vulnerable. Such sentiments motivate efforts to improve their life conditions (Bandura, 2004). Ebell seems to exclude from his category of humanity those who are the most adversely affected by the climate change resulting from polluting lifestyles elsewhere.

Some of the technological remedies for the earth's rising temperature create new moral predicaments through unintended harm to needy people. Efforts to address the growing energy problem, for example, focus on a supply fix to the neglect of demand

reduction through conservation. Biofuels are being heralded as a partial solution for the heavy dependence on fossil fuels. The diversion of corn from food supplies to biofuel is raising the cost of corn. The poor, especially those in countries where corn is their staple food, suffer the unintended hardship on their livelihood. Because livestock are fed corn, the biofuel diversion is also raising the price of milk and other dairy products, as well as a wide variety of foods in which they are ingredients. The diversion of land use from food production is not confined to corn. Food prices are also driven up by converting cropland used for other basic foods for production of ethanol. As food prices soar, foreign food-aid money can feed fewer hungry people (Dugger, 2007). Some analysts (Grain, 2007) report that the rush to agrofuels will cause huge environmental and social damage as forests and small-scale food farming are converted by agrobusiness to large-scale cultivation of plants for biofuels. To feed the voracious appetite for energy to fuel high consumptive lifestyles, the poor are being priced out of basic necessities of life. Expanding world hunger by placing staple foods in competition with biofuels for high-energy lifestyles is a matter of humanitarian concern.

9 Concluding remarks

Were Darwin writing today, he would be documenting the overwhelming human domination of the environment. Many of the species in our degrading planet have no evolutionary future. Humans are wiping out other species and the ecosystems that support life at an accelerating pace (Wilson, 2006). Unlike former mass extinctions by meteoric disasters, the current mass extinction is largely the product of human behaviour. By wielding powerful technologies that amplify control over the environment, humans are producing hazardous global changes of huge magnitude.

We are witnessing the growing primacy of human agency in the co-evolutionary process (Bandura, 2006a). Through genetic engineering, humans are creating transgenic biological natures, for better or for worse, rather than waiting for the slow process of natural evolution. They are now changing the genetic makeup of plants and animals. Unique native plants that have evolved over eons are disappearing as commercial horticulturists are supplanting them with genetically uniform hybrids and clones. Not only are humans cutting and splicing nature's genetic material but, through synthetic biology, they are also creating new types of genomes.

Expanding economies fuelling consumptive growth by billions of people is intensifying competition for the earth's vital resources and overwhelming efforts to secure an environmentally and economically sustainable future. Powerful parochial interests create tough impediments to improving living standards globally through sustainable ecodevelopment in which economic growth preserves the environmental basis for it. Through collective practices driven by a foreshortened perspective, humans may be well on the road to outsmarting themselves into an irreversible ecological crisis.

People are beginning to express concern over catastrophic climate change, advocate environmental conservation in the abstract, but resist curbing their behavioural practices that degrade and destroy the life of the planet. Under troublesome life conditions people generally seek quick fixes that require no significant changes in lifestyle. Once they get wedded to rewarding lifestyles that exact a toll on the environment they devise schemes that enable them to stick with their behavioural practices without feeling bad about their adverse effects. They make cosmetic changes in their energy and resource use that make

them feel like conservationists. On average, Americans consume more energy in a week than an inhabitant in India does in an entire year. Environmental conservation calls for more fundamental lifestyle changes than switching to more efficient light bulbs and doing a bit of recycling. People remain faithful to their driving habits but seek to power them with supposedly environmentally-friendly fuel that inflicts hardships on the less advantaged. They create marketplace systems that enable them to continue their consumptive ways but grant them forgiveness for their ecological sins through the purchase of carbon offsets for green projects. Going green through ecologically degrading behaviour is an odd way of saving the planet. Through carbon cap and trade schemes, industries can spew greenhouse gases but buy carbon credits from more efficient companies with unused allowances rather than clean up their act.

As in the case of token remedies at the individual level, tinkering with environmentally and economically unsustainable systems aggressively promoting ever rising consumption rates with polluting technologies will not beget a green future. Substitutes for genuine behaviour change usually accomplish too little too slowly. If we are to preserve a habitable planet it will not be by token gestures and schemes for buying one's way out of wasteful and polluting practices. Rather, it will be by major lifestyle changes with commitment to shared values linked to incentive systems that make environmentally responsible behaviour normative and personally worthy. A sustainable future is not achievable while disregarding the key contributors to ecological degradation – population growth and high consumptive lifestyles.

Ecological systems are intricately interdependent. Global-level changes affect everyone regardless of the source of the degradation. Because of this interconnectedness, lifestyle practices are a matter of morality not just environmental sustainability. Most of the current human practices work against a less populated planet with its inhabitants living sustainably in balance with natural resources. Given the growing human destruction of the earth's environment, Watson (2007) may not have been too far off the mark when he characterised the human species as an "*Arrogant primate that is out of control*". One should add morally disengaged to the characterisation as well. If we are to be responsible stewards of our environment for future generations, we must make it difficult to disengage moral sanctions from ecologically destructive practices.

Acknowledgement

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Disguising environmental harm

Albert Bandura of the Department of Psychology at Stanford University argues that we can disguise environmentally harmful practices and dress them up in words to help ease our consciences, but such practices will have a negative impact on the planet and the quality of life of future generations, no matter how we label them. Writing in a forthcoming issue of the Inderscience publication the International Journal of Innovation and Sustainable Development, he explains that we must stop attempting to disguise our actions and switch on our environmental conscience to save the world.

As consumers we are repeatedly bombarded with messages telling us to consider the environment and to save energy in the face of global climate change. However, much has been made recently of the fact that personal economic savings on energy consumption might be offset by increased consumption of goods and services. What may at first appear to reduce the level of ecological harm that we cause, may in effect be cancelled out and possibly lead to even greater harm.

Moreover, many of us pursue practices that are detrimental to the environment but which we justify by a kind of moral disengagement. This frees us from the constraints of self-censure and we defend our actions on the basis that such practices are somehow fulfilling worthy social, national, or economic causes and, as such, offset their harmful effects on the future of our planet.

Moral disengagement equates to switching off one's conscience and there is nothing like self righteousness to exonerate and sanitize malpractice in the name of worthy causes. Convoluted language helps disguise what is being done and reduces accountability, and also ignores and disputes harmful effects. Learning about moral disengagement shines the light not only on the malpractices of others but on ourselves, argues Bandura, after all morally disengaged or not the conscience will still prick.

Bandura, in his paper, hopes to bring some clarity to the environmental dilemmas we face. He highlights how we can be selective about acknowledging the global consequences of our behaviour and points out that harmful practices, thinly disguised as worthy causes, could cause widespread human harm and degrade the environment nevertheless.

"We are witnessing hazardous global changes of mounting ecological consequence," he says, "they include deforestation, expanding desertification, global warming, ice sheet and glacial melting, flooding of low-lying coastal regions, severe weather events, topsoil erosion and sinking water tables in the major food-producing regions, depletion of fish stocks, loss of biodiversity, and degradation of other aspects of the earth's life-support systems. As the unrivaled ruling species atop the food chain, humans are wiping out species and the ecosystems that support life at an accelerating pace"

Bandura also points to soaring population growth as a major source of environmental degradation and believes that mounting numbers will wipe out the benefit of clean, green technologies.

He adds that, "If we are to be responsible stewards of our environment for future generations, we must make it difficult to disengage moral sanctions from ecologically destructive practices."