The politics of true convenience or inconvenient truth: struggles over how to sustain capitalism, democracy, and ecology in the 21st century

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Abstract. This critique of inherent flaws in today's growth-driven natural capitalism argues its key contradictions and basic conflicts can be typified by the cultural politics and political economy found in the environmental advocacy of Al Gore Jr, especially in his Nobel Prize winning activities on global climate change in works like *An Inconvenient Truth*. In such criticism he aims neither to dismiss the dangers of global climate change nor to derogate the findings of ongoing scientific research, like that done by the co-awardees of the 2007 Nobel Peace Prize with Al Gore, namely, the Intergovernmental Panel on Climate Change. Rather, it is meant to begin a more pointed reassessment of how today's global climate-change debates are too entwined in the reproduction of most existing power relations and global market exchange. At best, Gore's work seems essentially to 'greenwash' existing networks of corporate organization and expert technocracy with renewed institutional legitimacy that only rinses today's unsustainable economic status quo in the refreshing, but not fully cleansing, waters of sustainable development ideology. While there is a need for systemic reforms in economic production, government regulation, technological innovation, and social distribution to mitigate climate change, Gore's many engagements with big business, venture capital, and global media do not appear to offer such a radical transformation. Instead, his basic project of decarbonizing the commodity chain mainly would appear to be a new program for further economic development that might not even retard, much less fully reverse, current climate-change trends.

1 Introduction: Earth in the balance

This analysis is a brief critique of market-friendly, growth-perpetuating natural capitalism, particularly that present form which recognizes the past excesses of commercial development as the most likely causes of global climate change, as it revalorizes this industrial waste to concentrate and accelerate future commercial expansion. Such efforts seek to maintain the dynamic destructive developmental project of global exchange without making any radical criticism of its intrinsic inequalities, embedded waste, and frenetic consumerism. A thorough critique of this economic formation is a much larger undertaking than can be completed in one paper. Some of the key contradictions and basic conflicts, however, can be typified in a close critical reading of the broader cultural politics and political economy expressed in the environmental advocacy and thinking of Al Gore Jr, especially in his Nobel Prize winning activities on climate change in works like *An Inconvenient Truth* (2006a) or *Earth in the Balance* (2006b).

Such a critique is meant neither to dismiss the dangers of global climate change nor to derogate the findings of ongoing scientific research, like that done by the co-awardees of the 2007 Nobel Peace Prize with Al Gore, namely, the Intergovernmental Panel on Climate Change (IPCC). Instead, it is meant to begin a pointed reassessment of how today's global climate-change debates often are too entangled in the reproduction of existing power relations. At best, they often green-wrap corporate technocracy with renewed institutional legitimacy that 'greenwashes' an unsustainable economic status quo in the refreshing, but not cleansing, waters of sustainable development. While there is a need for systemic reforms in economic regulation, technological innovation,

and social distribution, Gore's many engagements with big business, venture capital, and global media do not seem to promise such a transformative change.

For some so-called US neoconservatives, especially in the days after September 11, 2001, redefining America's global 'responsibility' to manage the current world system of states, economies, and societies became an almost obsessive calling. To Kagan (2003, page 96) this necessity was quite clear: everyone in the world must acknowledge and accept "the new reality of American hegemony". Others, like President George W Bush [43rd US President, hereinafter Bush (43)], determined this moment as a historic turning point where America must extend "the benefits of freedom across the globe ... to bring the hope of democracy, development, free markets, and free trade to every corner of the world" (Bush, 2002, page 2). This hegemony was regarded as a true convenience for Washington, but its risky workings also hold Earth in the balance with a host of inconvenient truths, including philosophical and political struggles over how to sustain capitalism, democracy, and ecology (Beck, 1992; Gore, 2006b; Luke, 1999) in the 21st century. For some the world will not be enough until Bush's vision is made real; for others the planet might not survive long enough for all to even see any of this action.

Something went awry for Kagan, Bush, and the USA on the road from Kabul to Baghdad. Nonetheless, one must not mistake the reversals encountered by the Bush (43) administration in Iraq as a sign that all Americans will shrink from the struggles entailed by managing world affairs. Indeed, President Bush (43)'s defeated Democratic opponent from 2000, Al Gore Jr, arguably is thinking even bigger, better, and bolder thoughts about this task by outlining his own program of moral imperatives for the USA to serve as the planetary protector of the Earth and all its human and nonhuman inhabitants. An ironic, but inconvenient, truth about Gore's long march through the institutions of the American government (Gore, 2006a; 2006b) is how much his *An Inconvenient Truth* also aims, albeit after taking a softer path, "to bring the hope of democracy, development, free markets, and free trade to every corner of the world". In fact, Gore's worries (1992) about Earth hanging "in the balance" of ecological collapse appear to be morphing the old "land ethic" of Aldo Leopold into a new "planetary ethic" for managing the entire planet from the United States of America for maximum ecological and economic sustainability (Luke, 2005a, pages 228 – 238).

This analysis critically examines one very visible version of such a 'planetarian ethics', namely, the works of Al Gore on the "inconvenient truth" of global warming (Luke, 2005b, pages 154 – 171). By reconsidering how Gore articulates his view of the truth, to whom this truth appears to speak, and what social forces are likely to embrace his truth statements for dealing with the Earth's environment at a planetary scale of operation in various world scientific, economic, and political organizations, it also assesses the struggle over sustaining development and democracy in this century. While it appears morally just, one must ask if projects like Gore's Alliance for Climate Protection, or the recently announced Global Roundtable on Climate Change (GROCC), might only continue existing strategies for global economic growth that still serve inequitable geopolitical agendas after the missteps of the Bush (43) administration from New York to Baghdad to New Orleans. In a sense, much of this planetarian ethic was captured by the Nobel Prize Committee in its 2007 Peace Prize statement as it praised the IPCC and Albert Arnold (Al) Gore Jr "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change" (Norwegian Nobel Committee, 2007). Indeed, who builds up this knowledge for whom, and then how, what, when, and why counteractive measures are to be made are central concerns for a planetarian politics in the coming decades.

The intellectual roots spreading underneath Gore's program spring from common 'sustainable development' thinking. In other words, how can the US sustain the true convenience of national prosperity amidst an environment facing too many inconvenient truths regarding the inequitable and irrational use of energy, resources, and information in a new global economy (Luke, 2005a)? That sustainable development is an ecopolitical project which might be neither sustainable nor developmental becomes irrelevant (Friedman, 2006). It is a palatable approach to "green-wrap" the economic and political project of "sustainable degradation" (Luke, 2006, pages 99 – 112) already now fully in play. Arguably, the world has already overshot its renewability limits since the 1970s. Memorable events like Earth Day 1970 and 1990 arguably bookend those decades in which cycles of sustainable degradation became a material reality. In his writings, Gore recounts how he too has fretted over ecological losses, which were first marked by others over thirty, forty, or fifty years ago (McNeill, 2000). Still, he claims that conditions today are dangerously different. Quantitative increases in many industrial pollutants are adducing qualitative changes in the Earth's environment and the equity of its global economy (Lamb, 1977; Long, 2004; Maslin, 2004). Hence, the next decade is a decisive conjuncture that demands radical action.

2 Inconvenient truths: ozone man becomes CO_2 man

Like his earlier book, *Earth in the Balance* (1992; 2006b), Al Gore's *An Inconvenient Truth* (2006a), as a book, movie, and popular culture phenomenon, is getting tremendous attention in the USA. As it is being read, watched, and discussed, this manifesto about global climate change, like Lomborg's recent *The Skeptical Environmentalist* (2001), is influencing the political debate about global warming. While *An Inconvenient Truth* is more apocalyptic than *Earth in the Balance*, it also is a stirring call to action that brings even greater attention to Al Gore himself, and thereby enables him to tout this environmental program for saving the planet.

Since he is intent upon saving the Earth, Gore has affirmed he will not trifle with running for the office of President in the United States of America. In many ways, he need not enter that electoral marathon, because the first job is bigger than the second, and he already has it. He frequently jokes that "he used to be the next president of the United States", winces with the laughter, and then steps forward to perform his now greater mission. By popular acclamation, following self-nomination, he presumably now holds a much higher, more exalted, and probably lifetime office—namely, Planetary Proconsul with its attendant duties as Defender of the Climate, Duke of Earth, and, finally, Deliverer of the Environment. Oscar winner, Nobel Prize winner, Grammy presenter, as well as former Vice-President of the United States, Global Environmental Negotiator, Senator from Tennessee, Vietnam vet, and best-selling author, Gore certainly has advanced where no mere US president has ever gone before.

Still, the characteristics of transnational media markets make it both necessary to, and essentially impossible not to, let this proconsular status lapse lest he become 'old news' again. New exercises of 'mass persuasion' are constantly required to spin global warming. Like famine in Africa, bankruptcy in the American farm belt, or muscular dystrophy in childhood, citizens can soon lose interest, once telethons sign off the air. Hence, global warming must be revitalized continuously to keep the topic rolling as 'must see' pop culture infotainment. For example, an octet of Live Earth concerts was staged successfully this year on the auspicious palindromic date of 07/07/07, as "a 24-hour music extravaganza across seven continents, featuring as many as 150 of the world's top recording artists, introduced by an army of 'celebrities and thought leaders' (think Cameron Diaz and Richard Branson), playing before a total live audience of a million people, and reaching 2 billion more via television, radio, and the Internet" (Booth, 2007).

While one must wince at the larger environmental impact of Live Earth, it was what hit-record producer Pharrell Williams predicted would be "the biggest party on Earth" ever staged (Booth, 2007). Going to this event, or participating in it via MSN, NBC, Sirius, XM, and other global media outlets, in July was tagged as something "everyone can do to reduce the magnitude of climate change" since the "proceeds from the globalized concerts went to Gore's new environmental foundation, called the Alliance for Climate Protection" (Booth, 2007). Kevin Wall, who managed the recent Madonna tours and the Live8 concerts to end global poverty, organized the "A-list" of all artists "scheduled to appear", found the venues "slated for the performances", and arranged the ticket sales in New York, Washington, Rio de Janeiro, London, Johannesburg, Shanghai, Kyoto, and Sydney. As a media production, the day gathered "two billion sets of eyeballs", and then effectively did "hand the mike to Al Gore" (Booth, 2007).

As part of the festivities, David de Rothschild published *The Live Earth Global Warming Survival Handbook: 77 Essential Skills to Stop Climate Change—or Live Through It* (2007) to serve as "the official companion to the Live Earth Concerts". A few of the seventy-seven recommended skills are whimsical, and some—like those tied to personal travel, hotel stays, electronics use, and concert refreshments—undoubtedly were ignored more than honored on 7 July 2007, but many of the skills in the handbook are sensible choices for low-impact frugal lifestyles. Such public service briefings are valuable but, granted the troubling reality of global warming, many inconvenient truths of the current climate crisis have never been fully explored by Gore. Once he took the mike on 07/07/07, he simply pushed the current fight against global warming—asking all to adopt such earth-minded frugality skills. After all, the World Health Organization claims 160 000 people die annually now because of global warming. Climate change is now endangering, or already has started extinguishing, many species of wildlife and local environments, ranging from frogs and polar bears to coral reefs and the Arctic ice cap. Some 100 million people worldwide already are threatened by rising sea levels, and 200 million could be displaced by 2050 in these waters. Beyond New Orleans or Amsterdam, this means cities like Los Angeles (14 million), New York (17 million), Buenos Aires (13 million), Lagos (20 million), Mumbai (23 million), Shanghai (13 million), Tokyo (26 million), and Jakarta (15 million) face major flooding problems. When more answer Melissa Etheridge's call in her Oscar-winning song, "I need to wake up", from *An Inconvenient Truth*, they will discover the sea is already up to their ankles.

In other respects, then, how truth, inconvenience, and their revelation are constructed in Gore's analytical accounts indicates much about green politics in the current context. Gore's (2006a) baroque subtitle for his *An Inconvenient Truth* book, *The Planetary Emergency of Global Warming and What We Can Do About It*, is full of clues. Here, Gore evokes a state of emergency, a planetarian scale of response/rule/regulation, and an ethics of individual and collective action for 'doing something'. Even when something is finally done, however, there are no guarantees that the actions taken will do anything truly effective about the 'it' Gore has tagged as a planetary emergency (Baden, 1994). The situation is not yet hopeless; but, even 'the skeptical environmentalist', Bjorn Lomborg (2007), admits it also is not immediately reversible or completely correctable.

Consequently, Gore focuses on nascent qualities of the Earth's severe climate crisis:
"the Earth's atmosphere is so thin that we have the capacity to dramatically alter the concentration of some of its basic molecular components. In particular, we have vastly increased the amount of carbon dioxide—the most important of the so-called greenhouse gases" (2006a, page 25).

Credible research and well-respected scientists have come to a stronger consensus since 1992 about the reality of these anthropogenic climate changes and their tie to greenhouse gases in 2007 (Fagan, 2002; Stevens, 1999). Gore sees this as a truth; but, in his mind, denying this fact continues to be such an inconvenient truth that the American government, as well as many of its citizens, still ignore it. Or so, at least, does the scenario for his movie pitch begin.

Gore's own exile in the wilderness outside of Washington's 24/7 news cycle, therefore, is used to exaggerate the degree to which global warming has been ignored in the USA. When coupled with the unwillingness of either President Bush (41) or Bush (43) to enter into a serious debate about climate change, and a propensity at the White House to harass scientists in government service who study global warming, there is an illusion of inattention to climate change that Gore depicts as smug complacency unable to face 'an inconvenient truth', namely, this alarmingly rapid and intense increase in greenhouse gases associated with global warming since the 1950s. That his own *Earth in the Balance* (1992; 2006b) pushed a similar message sixteen years ago, that many American scientists have studied climate-change issues thoroughly since the nuclear winter debates of the early Reagan years, that the National Academy of Sciences put this global warming problem on the table nearly thirty years ago during the Carter Administration, or that Gore himself became enthralled as a Harvard undergraduate during the late 1960s with the climatological research of Roger Revelle who made use of measurements started almost half a century ago in Hawai'i are other inconvenient truths that are finessed deftly by Gore to build a sense of drama about global warming.

Since 1750 industrial societies with their reliance on burning fossil fuels for energy have released over 1.1 billion tons of CO_2 into the atmosphere (Romm, 2007, page 21), but this energy also helps generate a world planetary product of about US $70 trillion annually. The models about varying atmospheric CO_2 levels and the greenhouse effect were developed as early as 1895, but CO_2 levels then were only 290 parts per million (ppm) in the atmosphere (Kolbert, 2006, page 201). By 1960 CO_2 levels exceeded 315 ppm, which an observatory in Hawai'i detected after having been installed only two years. Levels of CO_2 rose steadily to 337 ppm by 1979 (Kolbert, 2006, page 201). Ironically, it is since the 1970s, and despite Earth Day, the environmental movement, green parties entering government around the world, energy conservation after the 1973 and 1979 oil shocks, and a US National Academy of Science Report (1979) connecting CO_2 concentrations to the probability of climate change, that one half of the billion-plus tons of CO_2 emitted into the atmosphere during the Industrial Revolution has happened during these past three decades (Romm, 2007, page 21).

Now global warming, as a scientific phenomenon as well as a public policy problem, represents a tremendous opportunity for ideological innovation even as different schools of ethical analysis juggle the implications of its deleterious effects on the planet. In his current approach to the climate crisis, therefore, Gore identifies carbon dioxide as the main threat. This focus, on the one hand, is credible because CO_2 is the main greenhouse gas and, on the other hand, because its reduction would follow from buying and burning less hydrocarbon energy, especially that imported from foreign sources.

Tagging CO_2 as the target, therefore, has many geopolitical and macroeconomic benefits. Moreover, Gore also likes to respond to naysayers about climate-change countermeasures by citing the success of chlorofluorocarbon (CFC) reduction measures from the 1987 Montreal Protocol. Doubts persist, but Gore notes:

"our experience with the ozone layer shows us that the people of the world actually can work together to repair some of our own mistakes, despite our often conflicting political and economic interests. Today, as the CO_2 crisis unites us, we must remember the lesson of the CFC battle: that cool heads can prevail and alter the course of environmental change for the better" (2006a, page 295).

Some of this is true. Yet just as much, if not more, is false. Big ideas, like 'a climate crisis', on the one hand, and an economic program, on the other hand, for living like 'Earth is in the balance', permit Gore to express a policy rationale to redirect American-led agendas for planetary management.

After his Nobel award, and in disclaiming 2008 presidential aspirations, Gore joined Kleiner Perkins Caulfield and Byers as a partner in this high-end Silicon Valley venture-capital company. Already a founder of Generation Investment Management, which he started in 2004 with the former Goldman Sachs executive David Blood, Gore said he would work to harmonize Generation's and Kleiner's activities as he became more "involved in the full Kleiner portfolio related to green tech" (Buckman, 2007). Whatever salary he draws at Kleiner, Gore has pledged to his Alliance for Climate Protection, but he has made no comment about the potential profits he could realize from Kleiner Green Technology Investments.

Indeed, Gore's appeal to reshape the US economy ironically also acknowledges tacitly the current realities of American economic and political hegemony. Some 80% of the world's regime of energy comes from hydrocarbons, and the USA is the key node in the world's energy consumption, transportation, and production, as well as in the pricing, burning, and disposing systems behind that trade in coal, oil, and natural gas. The International Energy Agency documents that the world consumed 82 million barrels of oil per day in 2004, and it sees this figure continuing to rise to 115 million barrels of oil per day by 2030 (*Wall Street Journal* 13 February 2007, page A11). Since the USA burns billions of gallons of gasoline a year, it is imperative that its centrality in these networks be perpetuated and strengthened even as that centrality becomes more decarbonized via green capitalism. No longer just 'O_3 Man' as President Bush (41) once maligned him, Gore creatively has invented himself to become 'CO_2 Man' under President Bush (43).

3 Decarbonization as development

As CO_2 Man, Gore (1992) intimated long ago that climate consciousness will not come immediately to all, but there is a climate-conscious vanguard that must act now on behalf of all life and the Earth itself, once these special souls are filled with 'spiritual nourishment' or 'faith' by ecology. Like many who assure others that their quest for higher knowledge leads not to greater power but, rather, to a deeper appreciation of the cosmos, Gore's celebration of capitalism, democracy, and ecology gets all tied together as 'balance'. Gore states:

"perhaps because I have ended up searching simultaneously for a better understanding of my own life and of what can be done to rescue the global environment, I have come to believe in the value of a kind of inner ecology that relies on the same principles of balance and holism that characterize a healthy environment" (2006b, page 367).

This vision of Nature – Society relations, whether one watches Gore's film or plows through the book *An Inconvenient Truth*, as an all-encompassing whole is dangerous. And its dangers are evident in his analysis of today's planetary emergency as well as his recommendations for responding decisively to its challenges. As Adorno would observe, "in conceiving the possibility of encompassing all reality unambiguously, even if only in a structure, a claim is implicit that he who combines everything existing under the structure has the *right and power* to know adequately the existing in itself and

to absorb it into the form" (1984, page 115, original emphasis). Here, as a bringer of inconvenient truths, Gore's unshaken enlightenment schema becomes quite problematic. It unfortunately appears that Gore "the believer in balance" also aspires to serve as "the rescuer of the global environment" since he knows he has cultivated a better, healthier understanding of what must be done (Luke, 2005b, pages 154–171).

To see how capitalism, democracy, and ecology might survive in the 21st century, one should look here. Gore's Alliance for Climate Protection or the new Global Roundtable on Climate Change tied to the Earth Institute at Columbia University—to highlight only two recent American examples—underscore inconvenient truths about how Gore sees how "the change in the way we live our lives" (2006a, page 286) will happen. In one respect, Gore's *An Inconvenient Truth* is a splendid screen. It simultaneously displays what will happen if the change does not occur, while it obscures how major corporations, big banks, technical associations, and academic centers already are starting that change. As Beck (1992, page 222) would suggest, "techno-economic action remains shielded from the demands of democratic legitimation by its own constitution. At the same time, however, it loses its non-political character. It is neither politics nor non-politics, but a third entity: economically-guided action in pursuit of interests."

While it does not tell us everything, the list of who serves on Gore's governing council at the Alliance for Climate Protection is quite indicative of Beck's point. The council is composed of Gore as well as Theodore Roosevelt IV (Managing Director at Lehman Brothers, a major investment bank based in New York), Larry J Schweiger (President and CEO of the National Wildlife Federation), Carol M Browner (former EPA administrator and principal at the Albright Group, a Washington corporate and government consulting firm headed by former Secretary of State, Madeleine K Albright), Brent Scrowcroft [Lieut. General USAF (retired), and President of the Scrowcroft Group], Lee Thomas (retired President and COO of Georgia-Pacific Corporation, an integrated natural resources firm based in Atlanta), Orin S Kramer (general partner of Boston Provident, a large New England insurance and financial services company, and chair of New Jersey State Investment Council), and Cathy Zoi (former Executive Director of the Bayard Group, a digital energy monitoring firm in Sydney, Australia). While all green minded, these individuals also constitute an interesting transnational network of corporate, government, and technological interests already organizing as very strong policy blocs to defend existing hydrocarbon-burning energy systems by decarbonizing them gradually or sustainably.

Likewise, the Global Roundtable on Climate Change is backed by scores of corporate, nongovernmental organization (NGO), and government supporters, ranging from Alcoa, American Electric Power, Citigroup, Dupont, Ford, General Electric, Goldman Sachs, J P Morgan Chase, Norsk Hydro, Rolls Royce, Toyota, Walmart, to the Climate Institute, International Panel on Climate Change, Alliance for Climate Protection, Natural Resources Defense Council, World Wildlife Fund, to the City of Reykjavik, International Energy Agency, Papua New Guinea, United Nations Environmental Program. Over ninety international companies are enrolled, and the remarks by Alain Blenda, Chairman and CEO, Alcoa, typify a sense of the techno-economic imperatives at work here:

"Of course, addressing climate change involves risks and costs. But much greater is the risk of failing to act. I am convinced that we can build a global plan of action on climate change in ways that create more economic opportunities than risks. The work of the Global Roundtable on Climate Change is an excellent example of the type of effort needed to extend the climate change issue from one of talk to one of action. Though the challenge is significant, I believe we can all grow and prosper in a greenhouse gas-constrained world. Actually, I believe there is no other option" (http://www.earthinstitute.columbia.edu/grocc).

As the first press release from GROCC announced, sustainable development of energy and industry must drive the battle against climate change, so "an unprecedented group of companies and organizations from around the world—known as the Global Roundtable on Climate Change, or GROCC—have endorsed a bold post-Kyoto framework for affecting change at the levels of policy and industry, particularly in regard to creating sustainable energy systems necessary for achieving economic growth" (http://www.earthinstitute.columbia.edu/grocc).

Like Al Gore, these individuals and institutions may indeed have come to believe in the value of a kind of 'inner ecology' that relies on Nature's principles of balance. On one level, GROCC could be dismissed as merely a talking shop for big business, big government, and big academia. It is far more likely, however, that their intended changes for the way we live hide more inconvenient truths "under the cloak of normality" in everyday corporate activity that conform to common patterns in propertied, expert, and commercial affairs in whose "contemporary discussions, the 'alternative society' is no longer expected to come from the parliamentary debates on new laws, but rather from the application of microelectronics, genetic technology, and information media" (Beck, 1992, page 223).

These tendencies are terribly inconvenient truths, but they are quite concrete. The commodification of climate change ironically preserves much of "the technical apparatus of production and destruction which sustains and improves the life of individuals while subordinating them to the masters of the apparatus" (Marcuse, 1964, page 168). Once retrofitted for sustainability, such programs to mobilize decarbonization as development transmutate particles of globally naturalized capital into bursts of locally celebrated natural capitalism which recast, as Marcuse claims, "the instrumentalities for this ever-more effective domination of man by man through the domination of nature....Today, domination perpetuates and extends itself not only through technology but *as* technology, and the latter provides the great legitimation of the political power which absorbs all culture" (Marcuse, 1964, page 158, original emphasis), even edgy art-house films about the coming catastrophes of climate change or books of slick graphics about global warming.

On another level, Gore's and GROCC's nostrums for climate change mount a full-court press, testing the latest technofixes for recognized technoflaws in today's consumer economy. Ranging from green venture capital, cradle-to-cradle design, safe nuclear energy, and green engineering, to limited cap-and-trade emissions markets, soft-path energy economics, and green technology, these approaches to an alternative society are all openings for natural capitalism to test sustainable development when they are, in fact, anchors for a new revitalized regime of sustainable degradation forged in response to the current conditions of capitalist production. As O'Connor (1988, pages 16–17) would argue, these innovative corporate alliances are tactics to organize the crisis more closely. The second contradiction of capital simply problematizes, as business opportunities,

- external physical conditions (viability of ecosystems, adequacy of ozone levels, stability of climate, predictability of soil, air, and water quality);
- labor power (environmental stress for labor, toxicity of work, ecological safety, productivity in ecological crises);
- communal conditions (new corporate and state interventions in exchange, reorganizing capital and labor relations, changing character of the commodity).

Sustainable degradation, as the foundation of natural capitalism, recapitalizes nature and naturalizes capital by recognizing the destruction of Nature, the eco-exploitation of labor, and the reorganization of production are fresh opportunities to produce power and profit.

Environmental efforts, like Gore's Alliance for Climate Protection, accommodate rapid ecological degradation as the Earth's assets now given over to 'sustainability science' to be more carefully managed. Once constantly measured, monitored, and manipulated within certain well-established ranges of exploitation via more organized market mechanisms, climate-changing companies can maintain economic development by sustaining the degradation of natural environments with products tied to:

- greener growth, not necessarily truly green growth;
- a cleaner environment, not a really clean environment;
- individual choice, not collective institutional transformation;
- painless consumer changes (Priuses, green buildings, and compact fluorescent light bulbs, etc) as new principles for living, not burdensome producer regulation (stringent carbon taxes, serious fuel regulation standards, etc).

Sustainable degradation embraces decarbonization as a mode of development, since it celebrates capitalists for embracing an ecology of commerce that wrings waste from existing conditions of production by stemming needless/profitless/senseless losses of material, energy, money, and labor. Plainly, this green business ethos is much more than we have had to date, but it also is far less than we might need in order to move decisively forward.

To an extent, society and the state both are being forced to confront a few of the contradictions of capitalism, and they can negotiate some stopgap solutions via urban redesign, environmental planning, and ecological reform. In turn, all can say that something 'is being done' to respond to climate change, ozone depletion, biodiversity loss, but it mostly aims at systematizing environmental degradation in sustainable forms. Greater value, better labor, more capital follow from maintaining the appearances of pursuing ecological balance, while exploiting each rich opportunity for pushing environmental degradation.

While Gore sees saving the Earth as an immediate moral imperative, sustainable degradation turns it into a long-term business plan, as his recent affiliation with Kleiner Perkins Caulfield and Byers reaffirms. Nonetheless, allying moralizers with managers will not be easy, particularly since the atmospheric alterations and biospheric ill-effects of global warming are apparent now. In the next century they will worsen, so sustaining capitalism, democracy, and ecology will be a tremendous challenge with an intrinsic legitimation problem. It is no accident that major industrial magnates, like Jeffrey Immelt of GE, are using GROCC as a flak jacket for what lies ahead, since he wants not only business but also NGOs, academia, and government to draw the angry fire to come from the public. Hence, he observes:

"Global businesses are assuming their just place as catalysts for action on climate change. But action by business alone is not enough. While we believe that applying technology against problems will create positive business opportunities that can result in positive change, national, state, and local governments, academia, and other non-governmental organizations must step forward with equal force. The Global Roundtable is an excellent venue focused on such a positive, proactive approach" (http://www.earthinstitute.columbia.edu/grocc).

More ominously, big insurance and financial kingpins also are calculating their coming losses as the climate changes. Hurricanes Katrina and Wilma in 2005 were not unanticipated, but their magnitude and concurrence did alter the risk calculi of insurance issuers. Now the insurance business wants to warn all the world's economies and societies about bigger and darker risks lying ahead as the air warms, the oceans increase in temperature and acidity, the weather becomes unstable, the seas rise, and the coastal regions flood all around the world. As Clement Booth, Executive Board member of Allianz SE observes:

"The insurance industry has always played a key role in helping business and society understand new risks. We provide an early warning, if you will. Allianz believes it is already seeing signs that climate change is a serious emerging risk, and we expect it to remain a top-tier issue for the insurance industry for many decades to come. I believe it is our responsibility to address and tackle this risk, making homes and businesses safer and more secure for our clients" (http://www.earthinstitute.columbia.edu/grocc).

Behind the cloak of normality, then, one finds the existing fields of liberal democratic capitalism pulling together loose networks of what one might call 'technocrats', 'bureaucrats', and 'plutocrats' to form 'envirocratic' transnational alliances and global roundtables of mutual interest to cope with ecological collapse in a public spirited manner—but still turn a profit, stay in power, and dominate the debate.

4 Conclusions: 'I [we] need to wake-up'

The project of global climate crisis management, as outlined by Gore, marks one of the greatest efforts to expand, as Michel De Certeau claims, "the empire of the evident in functionalist technocracy" (1988, page 203). Indeed, as this overview of the struggle for capitalism, democracy, and ecology in the 21st century has sought to demonstrate, Al Gore's telling of 'inconvenient truths' is being done in a manner that aspires to exert greater control over most planetary places, processes, and practices in the state of emergency threatened by worldwide climate changes.

More draconian complexities, however, also could await those who follow Gore. Since only 1% of all cars and trucks registered in the USA are hybrids, only 5% of current light bulb sales are compact fluorescents, and only 2.3% of electricity generation comes from renewable sources of energy, voluntary changes motivated by ethical consumption thus far have not been, and in the future probably will not be, sufficient. The institutional problems of responding efficaciously to climate change, then, are immense. To cite one example, Joseph Romm, head of the Office of Energy Efficiency and Renewable Energy in the US Department of Energy under President Clinton, argues that "global warming will change American life forever and end politics as we know it" in our lifetimes (2007, page 230).

That is a rather big bite to swallow in suburbia, and few will want to have their helping of it. In his view, it is now imperative that "the nation and the world embrace an aggressive multidecade, government-led effort to use existing and near-term clean-energy technologies" (Romm, 2007, page 230). This program would entail planning out a fifty-year-long energy-generation and energy-conservation campaign, which stresses radical action immediately. During the mobilization, the USA and other major industrial countries must act so that:

"1. We replicate, nationally and globally, California's performance-based efficiency program and codes for homes and commercial buildings. From 1976 to 2005, electricity consumption per capita stayed flat in California, while it grew 60 percent in the rest of the nation.
2. We greatly increase the efficiency of industry and power generation—and more than double the use of cogeneration (combined heat and power). The energy now lost as waste heat from U.S. power generation exceeds the energy used by Japan for all purposes.
3. We build 1 million large wind turbines (fifty times the current capacity) or the equivalent in other renewables, such as solar power.

4. We capture the carbon dioxide associated with 800 proposed large coal plants (four-fifths of all coal plants in the year 2000) and permanently store that CO_2 underground. This is a flow of CO_2 into the ground equal to the current flow of oil out of the ground.

5. We build 700 large nuclear power plants (double the current capacity) while maintaining the use of all existing nuclear plants.

6. As the number of cars and light trucks on the road more than triples to 2 billion, we increase their average fuel economy to 60 miles per gallon (triple the current U.S. average) with no increase in miles traveled per car.

7. We give these 2 billion cars advanced hybrid vehicle technology, so that they are capable of running on electricity for short distances before they revert to running on biofuels. We take one-twelfth of the world's cropland and use it to grow high-yield energy crops for biofuels. We build another half-million large wind turbines dedicated to providing the electricity for these advanced hybrids.

8. We stop all tropical deforestation, while doubling the rate of new tree planting" (Romm, 2007, pages 22 – 23).

Such foundational changes are not impossible, particularly if the world is truly facing the greatest emergency in human history, but they now surely seem improbable.

Stratagems numbers (3) and (7) versus number (5), for example, have often been seen, at least in the USA, as politically antithetical, because windmills and nuclear plants have had different political supporters. It is not clear that stratagem number (1) is the best standard in the USA, much less the world, since standards other than those from California might be superior. Stratagem number (6) for cars and trucks is business as usual in current, sprawl-driven urbanization patterns; and, stratagem numbers (1) and (2) have been routinely dismissed for decades as cost ineffective in the USA and elsewhere, because many business groups oppose serious conservation. Finally, no one knows what will happen if stratagem number (4) is implemented, since this project must capture and sequester in gas and/or liquid forms massive quantities of CO_2, or about 82 million barrels per day in 2004. This will require a massive new infrastructure, as elaborate and expensive as today's oil industry, to implement successfully, but without the same widely distributed demand for the product being processed as one finds for gasoline.

Even so, Romm's truly radical plan also might be too little, too late. It openly aims at keeping global CO_2 emissions higher than 2005 levels at 400 ppm, or the figures predicted for 2010, while anticipating they could very well increase to about 550 ppm. If the plan worked perfectly, global warming will continue steadily, and the Earth's overall degradation will become more evident to everyone. Therefore, while this vast economic and engineering effort unfolds, it also could very easily lose political support. Temperatures would rise 1 °C (1.8 °F) by 2015, they could rise another 1.5 °C (or 2.7 °F) by 2100, and much of Greenland's ice sheet would melt, increasing sea levels maybe by 20 ft (Romm, 2007, pages 22 – 24). At the same time, as Gore (2006a; 2006b) would affirm, even greater disasters could be avoided, and CO_2 levels eventually might be brought back to 1990 levels of 356 ppm (Kolbert, 2006, page 202) early in the 22nd century with these interventions. However, this reindustrialization campaign would require a sustained systemic policing of world greenhouse gassing, energy conservation, and land use for almost ninety years—three human generations, or more than twice as long as the Cold War, to name a recent global struggle on a lesser scale.

As the GROCC consortium of transnational capital, environmental NGOs, and academic mandarins are anticipating, Romm's plan is just one representative blueprint for administering sustainable degradation: it just needs a good solid business model. Who will build more efficient power plants, manufacture hybrid vehicles, construct more nuclear generating capacity, sequester captured, stored, and piped CO_2, stop

deforestation, and build wind turbines? It is no surprise that ninety major global firms want to, as the CEO of Alcoa asserts, "all grow and prosper in a greenhouse gas-constrained world." Romm's design requires only a more comprehensive consensus among business and government leaders about selling the goods and services needed by a world where CO_2 concentrations increase, temperatures rise dramatically, much of the world's existing ice fields melt, sea levels rise at least 20 ft, thousands of square miles of settled ground is flooded, and this chaos goes on for decades, if not centuries. Whether it is called 'ethical consumption', 'corporate social purpose', 'green steward-ship', or 'cradle-to-cradle design', this is the reality of 'sustainable degradation', namely, how to profit from ecological crisis. Like Romm, Gore and his Alliance for Climate Protection are hoping to develop, with the GROCC, as Alcoa's Belda states, "a global plan of action on climate change in ways that create more economic opportunities than risks" or the type of plan "needed to extend the climate change issue from one of talk to one of action".

More critical analyses, such as this one, must question the reduction of an entire planet to these national or, perhaps even, transnational policeable spaces. Oddly enough, many of those who accept such efforts at global policing pushed by authorities like Gore and the IPCC are the same people as those who reject outright other efforts at global policing by figures like President Bush (43) or Robert Kagan. There is far too much presumption of a power and knowledge not yet attained implied by Gore's naïve belief in 'an Earth in Balance', reprocessed GIS images, and ecological moralizing PowerPoints as *An Inconvenient Truth* implies.

Pictures alone do not make the Earth's ecologies fully legible, but they embolden those backing Gore's green ideology to lay down the basis of a new regulatory regime that ironically few, if any, democratic publics have elected to endure. Authority is clearly being asserted here in the global warming debates, but it is not very clear that it is being affirmed by voters, the public, or people in general. After all, we must remember that Live Earth was mostly a rock extravaganza, not a global plebiscite, and the Nobel Peace Prize is an honorary recognition, not a writ of sovereignty. Whose space gets policed transnationally when, how, and by whom remain important open questions.

It is inconveniently true that no one knows if global warming is definitely human caused, although the preponderance of evidence, according to the IPCC, suggests that it is; the nearing disaster Gore and others see coming will not be quickly reversed—if only because anthropogenic greenhouse gassing is so pervasive. At the same time, it also is conveniently true that strategies now being proposed to reduce human green-house gassing, forestalling the predicted apocalypse, and initiating a reversal in carbon emissions are well within the scope of precautionary principles. That is, given the balance of indicators which suggest that climate change is quite real, traceable in part to humans, and possibly reversible now at a comparatively low cost, implementing comprehensive precautionary measures makes more sense than risking the alternatives of doing nothing, or even increasing greenhouse gas emissions, under the belief that humans are not causing any climate change. *The Stern Review* (Stern, 2007) makes similar points with complex econometric justifications: pay a little now, or pay much more later.

Some in the USA are lobbying for a new 'cooling tax', to be levied in the USA now while there is still sufficient time to alter negative global warming trends. A tax of only 27 cents per gallon on gasoline and diesel fuel as well as \$30 per ton on coal used for electricity generation, according to Garrett Gruener, a dotcom venture capitalist, and Daniel M Kammen, Co-Director of the Berkeley Institute of the Environment at the University of California, should provide enough incentive for American drivers to switch to hybrid and/or plug-in hybrid cars, utilities to lower carbon emissions from

power-generating facilities, and consumers to upgrade the energy efficiency of existing buildings. These taxes would, in turn, amount to less than 1% of today's $17 trillion US economy, and they would amount on average to about $555 a year per capita for all carbon generated by transportation, lighting, and home heating (Gruener and Kammen, 2007, pages H1, H4).

Here is where the real battle today begins over sustaining capitalism, democracy, and ecology in the 21st century. Levy taxes or impose regulations? Create a green state or trust in green capitalism? Given the uncertainties of global climate change, does one accept precautions, or does one take risks? If the choice favors precautions, then how many, who pays for them, when are they implemented, where are they most pressing, and what will they entail? If risk is favored, then do individuals and groups all stick with business as usual, push a cheap mix of more climate-neutral innovations on the margins as insurance against unanticipated further atmospheric changes, or plan for rapidly catastrophic ill-effects if the climate change models prove correct down the road.

This is the last inconvenient truth in Gore's *An Inconvenient Truth*. The detailed diagnosis of global climate change, when read attentively, undercuts its equally promising prognosis for global economic, political, and social change to reverse the mounting ill effects of global warming. Gore asserts: "our new technologies, combined with our numbers, have made us, collectively, a force of nature" (2006a, page 249). Yet, this new force of nature is essentially unknown because it is so forcefully fresh. Moreover, as humanity's numbers increase, and technology advances, this strange force is only going to grow in its scope and power as well as its unpredictability. Even if we begin to rescue ourselves from future CO_2 emissions that could otherwise accrue in the atmosphere, and if we rapidly decarbonize today's energy regime to reduce current pollutants, today's already dangerously high levels of greenhouse gases which are legacies from the past will remain aloft for many more decades as we endure more planetary policing of our everyday lives. Gore writes that humanity must choose between making "the 21st century a time of renewal" or deciding to leave "a degraded, diminished, and hostile planet for our children and grandchildren—and for humankind" (2006a, page 296). Ironically, the prevailing systems of sustainable degradation as well as Gore's planetarian ethics actually seem to be forcing us to have it both ways.

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