EARTH'S NUCLEAR FUTURE: WHAT DIFFERENCE DOES ETHICS MAKE?

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ABSTRACT

The deliberate exclusion of the nuclear option from the official Protocol issued at the Kyoto conference on global warming demands a credible explanation. A fundamental conflict in visions between Green Crusaders versus Wealth Creators is one explanation. But it may also be explained by a political agenda for Global Governance requiring strategies for substituting global environmental pollution as an alternative to a war system with the ultimate goal of supranational control over divergent sources of geopolitical power. Although the more palatable rhetoric of "sustainable development" has replaced "limits to growth" slogans of the 1970s, this shift only masks the intransigent anti-natalist objective of downsizing the human population to fit a mythical "carrying capacity" for planet earth. Crisis entrepreneurs have short-circuited public understanding of how energy resources are being held hostage by an unelected, elitist, unrepresentative global bureaucracy. Nuclear energy advocates must adopt an aggressive strategy that can decisively counteract decades of regulatory ratcheting driven by bureaucratic vested interests.

INTRODUCTION

Albert Einstein is often quoted for his clairvoyant prediction that the future of nuclear technology would be decided in the village square. Events during the past quarter century demonstrate, however, that the locus for decisions about Earth's nuclear future has been converted from the metaphor of "the village square" into "our global neighborhood."[1]. What has wrought this conversion? The answer contains not only the key to understanding the public, but also the key to public understanding of the lamentations that have vilified nuclear technology as a source of electricity for the past quarter century.

A key piece in the puzzle emerges from the Kyoto conference on global warming. Its resulting Protocol makes it abundantly clear that energy policy decisions within sovereign nations have metastasized from "thinking locally" into "acting globally." The nuclear option is conspicuous by its absence from the Protocol's official recommendations about feasible alternatives to fossil fuels. Since the combined output of all officially-sanctioned alternatives could not possibly supply the increasing needs for energy in industrializing nations, what could explain the deliberate exclusion of the nuclear option by officials orchestrating the Kyoto Protocol? Any credible explanation would have to do justice to disturbing facts that have accumulated since the 1960s.

In this brief overview, I propose to examine, first, the conflicting visions and agendas that dictate opposing definitions of "energy needs" for nations with people who find themselves at different phases of industrialization. Once this conflict is clarified, I propose to examine the strategies and tactics with which opponents have attempted -- with uneven success -- to mold public perception about the nuclear option since the early 1970s. Emerging from this review should be a fresh appreciation of the Copernican insight: Things are often the opposite of what they seem. These considerations should enable those who support the nuclear option -- particularly in Pacific Rim nations -- to derive a more enlightened set of strategies for enhancing public understanding as well as for understanding the protean needs of the public.

VISIONS IN CONFLICT: CONFLICTING AGENDAS

There is a tenacious historical connection between ethical complaints about industrial civilization encroaching upon an otherwise natural world, and opposition to growth in the human population, including any source of prosperity that sustains it. In his recent book, *The Green Crusade: Rethinking the Roots of Environmentalism,* Charles Rubin reminds us of a striking similarity between the Temperance Movement which spawned Prohibition "to save us from our sins," and the Environmental Movement with its prohibitive strategies designed "to save the earth from eco-catastrophe." It appeals strongly to deep longings shared among many people whose temperament seeks tranquillity in a world of wild natural beauty uncluttered by dependency on tools and experts and specialists. Its ethic requires that "a violent, plundering humankind" must abandon an alleged rape of the earth's resources and derive its ethical norms from pre-existing ecosystemic harmonies so as to preserve a fragile, precarious balance of Nature.

An indicator of the political acumen of Green Crusaders lies in the fact that they have replaced Limits to Growth slogans of the 1970s with the more palatable language of Sustainability in the 1990s. Britain's prestigious scientific journal, *The Lancet,* featured a 1990 article by Professor Maurice King of the University of Leeds, announcing requirements for Global Sustainability:

- a deliberate quest of poverty;
- reduced resource consumption;
- prescribed levels of mortality control.

Professor King chastises the World Health Organization for having been exclusively concerned with the health of the *people* of the world. He avers that this misguided concern must now be replaced with a shared concern for "the health of the planet as a whole" as a precondition for protecting human health.[2]

No less a political figure than U.S. Vice President Al Gore has underscored the political importance of dramatic analogies in his book, Earth in the Balance: Ecology and the Human Spirit. Woven throughout his text is an analogy linking man's destructive role in the degradation of the earth to the destructive role of Kristallnacht ("night of broken glass") perpetrated by Nazis in Germany as a precursor to the Holocaust:

> *"Now warnings of a different sort signal an environmental holocaust without precedent. Today the evidence of an ecological* Kristallnacht *is as clear as the sound of glass shattering in Berlin."*[3]

Echoing Professor King, Mr. Gore dramatically links the ravages of industrial pollutants to a dysfunctional industrial civilization: "Our insatiable drive to rummage deep beneath the surface of the earth, remove all the coal, petroleum, and other fossil fuels we can find, then burn them as quickly as they are found -- in the process filling the atmosphere with carbon dioxide and other pollutants -- is a willful expansion of our dysfunctional civilization into vulnerable parts of the natural world."[4]

Among powerful political leaders, Mr. Gore is by no means alone in his sweeping indictment of industrial civilization and its technological contamination of a pristine "balance of nature." As Special Assistant to the United Nations' Secretary General, Kofi Annan, Maurice Strong's global peregrinations and vast political network lend added weight to his statements in June of 1992 while Secretary General of the Rio Summit: "Isn't the only hope for the planet that the industrialized civilizations collapse? Isn't it our responsibility to bring that about?"[5] Consider the amenities that Mr. Strong has publicly identified as "unsustainable" – household appliances, air-conditioning, suburban housing, high meat intake, frozen/convenience foods, and fossil fuels. The fact that Strong does not match his words with lifestyle deeds appears inconsequential, given his exalted vision and agenda for saving the planet.

Since 1990 *Green Rage: Radical Environmentalism and the Unmaking of Civilization* by Christopher Manes has been on library shelves. When the Unabomber's Manifesto became available on the Internet in 1996, it was a revelation for readers to compare the texts of these two publications and discover their striking similarities. Among his many "ecological reforms" Manes includes these demands: reduce human population, eliminate all fossil fuel use, end all cattle production, restore wilderness on developed land, reintroduce large predators such as grizzly bears and wolves, and deindustrialize the West.[6]

Clearly the Kyoto Protocol reflects a recurring pattern of thought underlying a political agenda in search of implementation in today's world. It may appear that this agenda lacks the strategy and tactics necessary for global implementation. Actually this is not the case. The Club of Rome gave us *Limits to Growth* in 1972 and, subsequently, its second report in 1974 *Mankind at the Turning Point.* Their 1991 publication *The First Global Revolution* by Alexander King and Bertrand Schneider contains this illuminating statement: "In searching for a new enemy to unite us, we came up with the idea that pollution, the threat of global warming, water shortages, famine and the like would fit the bill. All these dangers are caused by human intervention. The real enemy, then, is humanity itself."[7] By adopting this unifying strategy, the Club of Rome puts readers on notice that several "global environmental crises" actually provide a basis for a system of global governance that will entail the dissolution of independence among sovereign nations and their eventual replacement by a supranational realignment of power.

THE RISE OF GLOBAL GOVERNANCE: NUCLEAR ANTIDOTE?

A chronology of events emerging from the turmoil of the 1960s may prove enlightening to those in search of a deeper explanation for the meteoric rise of Environmentalism, as well as the emergence of a new profession: Crisis Entrepreneurs.

In October 1967 a small but catalytic book entitled *Report from Iron Mountain on the Possibility and Desirability of Peace* was published for Western readers. It caused then-President Lyndon Johnson not only to "hit the roof" but also to order it "bottled up for all time." The report was ostensibly the product of some fifteen experts who had met secretly since 1963 in underground vaults at Iron Mountain, New York. They allegedly faced a daunting task: to find a substitute for war that would provide the same "stabilizing function" as the war system.

> *"The war system makes the stable government of societies possible . . . by providing an external necessity for society to accept political rule. In so doing, it established the basis for nationhood and the authority of government to control its constituents."*[8]

The convened experts considered "a wide range of replacements" including:

- an omnipresent, virtually omnipotent international police force;
- an established and recognized extraterrestrial menace;
- massive global environmental pollution;
- fictitious alternate enemies.

Since in the near term each option appeared lacking in requisite public credibility, a "next best solution" had to be found.

> *"It may be … that gross pollution of the environment can eventually replace the possibility of mass destruction of nuclear weapons as the principal apparent threat to the survival of the species. Poisoning of the air, and of principal sources of food and water is already well-advanced, and at first glance would seem promising in this respect; it constitutes a threat that can be dealt with only through social organization and political power."*[9]

The anonymous authors of the Report state that at least a generation or even a generation and a half would be needed before environmental pollution would be sufficiently menacing on a global scale to provide the stabilizing moral equivalent of war. However:

> *"… the mere modifying of existing programs for the deterrence of pollution could speed up the process enough to make the threat credible much sooner."*[10]

Early attempts to dismiss the Report as "mere political satire" motivated by an animus against "think tanks" have recently been trumped by its republication under the admitted authorship of Leonard Lewin, complete with disclaimers in an exculpatory introduction by Victor Navasky.

There are fascinating parallels between the 1967 Iron Mountain Report and George Orwell's *1984* written while he was dying of tuberculosis in 1948. Both are brilliant satires. The fact that both are fictitious only serves to remind us that truth is stranger than fiction. Both provide a salutary warning about sleepwalking into the future. Any cavalier dismissal of the Report and its subsequent influence on political agendas amounts to a dismissal of the formidable task of finding more credible ways to explain away a number of actual events and developments that have occurred since 1967 -- not only in Western nations, but throughout the world.

In 1969 U. S. legislation enacted the National Environmental Protection Act, quickly followed in 1970 by an executive order issued by then-President Nixon establishing the Environmental Protection Agency. During the decade of the 1970s, a 380-member bureaucracy produced a virtual explosion of environmental regulations. In a brief twenty years, it has relentlessly ballooned into a bloated bureaucracy with 20,000 employees wielding enormous political power.

It can hardly be dismissed as coincidental that the April 1970 issue of *Foreign Affairs*, the official organ of the Council on Foreign Relations directed by David Rockefeller, was published just in time for the first Earth Day, April 22. It featured an article entitled "To Prevent a World Disaster" by George Kennan. Not only did Kennan claim that the eco-crisis posed a global threat so great that it was endangering all life on earth, but he also called for a centralized Super-Agency operating through international regulations to control environmental threats. Moreover, Kennan called for "a new crusade which must proceed at least to some extent at the expense of the . . . immensely dangerous preoccupations that are now pursued under the heading of national defense."[11] Translation: The global eco-threat must replace the military threat so that national sovereignty will lose its legitimacy and gradually wither away.

A keystone in the architectonic for Global Governance occurred in 1992, popularly referred to as the "Rio Summit" under the presiding direction of Maurice Strong. Its product, Agenda 21, contains a detailed and comprehensive set of directives for vesting political power in a centralized body charged with Global Governance. The Worldwatch Institute, in its 1992 paper titled "After the Earth Summit: The Future of Global Environmental Governance," states succinctly the purpose of this agenda:

> *"Nations are in effect ceding portions of their sovereignty to the international community and beginning to create a new system of international environmental governance as a means of solving otherwise unmanageable problems."*[12]

Since the early 1970s when Environmentalism began to emerge, the magnitude of these "unmanageable problems" has grown into a virtual Litany of Global Crises: over-population, global warming, ozone depletion, acid rain, pesticide poisoning and endangered species. This litany has opened a huge window of opportunity for what John Baden has called "Crisis Entrepreneurs" who not only regard themselves as Masters of the Universe, but who also cook data to manipulate opinion to justify costly regulations. Hence they produce huge benefits for politicians whose augmented power provides a license to constrain human liberty.[13]

Although this chronology of events by no means predetermines an unambiguous interpretation, it should at least invite a far less naive view about the global power brokers who have demonstrated at Kyoto that they hold hostage the future of nuclear technology, as well as the future of fossil fuels. It would be naive in the extreme to expect that "the merits of nuclear technology itself" and improvements in safety designs will eventually turn the tide of public acceptance.

NUCLEAR ELIMINATION: SECULAR SALVATION OR ETHICAL TRAVESTIES?

Perhaps renowned theologian Henry Nelson Wieman could not have foreseen the profound ramifications of his statements following the atomic bombings of Hiroshima and Nagasaki in 1945:

> *"The bomb that fell on Hiroshima cut history in two like a knife. Before and after are two different worlds. That cut is more abrupt, decisive, and revolutionary than the cut made by the star over Bethlehem. It may not be more creative of human good than the star, but it is more swiftly transformative of human existence than anything else that has ever happened."*[14]

From its inception, vociferous opponents of nuclear fission technology have discredited it as the Siamese twin of destructive weaponry, devoid of any redeeming benefits. Images of Faust and Frankenstein have been repeatedly invoked to warn us against an impending doom at our own hands. "Protection" has been uncritically equated with "elimination" of anything nuclear.

Now that the campaign to eliminate nuclear technology can be viewed from a longer historical perspective, evidence suggests that it would be a profound mistake to assume that anti-nuclear strategists have been primarily focused on eliminating nuclear weaponry. It that were the case, there should be widespread rejoicing over the current prospect of transforming weapons-grade plutonium by blending it with uranium to form mixed-oxide fuel (MOX) and then burning it up forever in reactors to generate electricity. No such beneficial outcomes are to be permitted if anti-nuclear zealots have their way.

Whereas nuclear electricity was once an exclusive lightning rod for attracting anti-growth forces, the alleged "global warming crisis" has mobilized opponents to target coal, petroleum and all other hydrocarbons for virtual elimination. Clearly the primary focus of opponents has not merely been to eliminate "cheap, abundant energy," but rather to achieve the steady incremental dismantling of industrialized societies and the population growth-rates they support. It is simply assumed that the drive to deindustrialize the planet is ethically self-justifying, since "everyone knows" that a population bomb is inexorably ticking away toward explosion.

Now that the world's best demographers are seriously considering the possibility that world population will peak in our lifetimes, and then commence an indefinite decline, the drive to deindustrialize the planet is destined to forfeit its claim to ethical justification. Moreover energy-growth advocates appear far more ethically persuasive when they express consternation at the suggestion that anyone would deliberately deprive human beings of their birthright to basic necessities for life, liberty and the pursuit of happiness which affordable energy makes possible. Among Globalist Elites who have been orchestrating a plan designed in the 1980s to diminish population growth-rates to match Earth's "carrying capacity," the Club of Rome has consigned itself to ethical limbo by adopting a unifying strategy based on its stated conclusion: "The real enemy is humanity itself."

Matters of fact and future depopulation scenarios remain peripheral for those already committed to downsizing the human population. They continue to pursue both their political agenda and authoritarian power to control lifestyle choices.

In contrast to other energy sources, the key to eliminating the nuclear option and its enormous energy potential has always been its historically unique treatment: it is the only technology in history which from

its inception has been stringently regulated by government bureaucracies, always justified by the quest for "protecting public health and safety." The relentless pursuit of health and safety has become in modern guise the secular equivalent of "religious salvation." With safety pursued as secular salvation, a corresponding quest for precautionary certitude has precluded traditional trial-and-error acceptability. The prevailing mindset is "no trials without prior guarantees against errors." Regulatory bureaucracies, as a matter of self-preservation, have quickly institutionalized this mindset in a pattern of regulatory ratcheting -- continuously tightening and never loosening their grip -- intensifying public belief that "there is no safe level of exposure to ionizing radiation."

DEFROCKING THE CULT OF RADIATION PHOBIA

Among the earliest and most vociferous nuclear critics was Ralph Nader who in the early 1970s launched meetings for his new organization, "Critical Mass," by featuring world-renowned anthropologist, Margaret Mead. She exhorted her audience at the time "to make people feel that everything they value in the world is at stake" if nuclear power is allowed to continue. The success of antinuclear forces, she said, "will depend on the degree we link *it* with all the other problems of the world." Since people are not afraid of dying *suddenly* but of dying *slowly*, she urged her listeners to concentrate on those aspects of nuclear power that would evoke the most fear – namely the long-range deteriorating effects of low-level radiation.[15]

The intentional inculcation of public fears about radiation could not have had its enduring success without the linear no-threshold hypothesis (LNT). It assumes that it is "morally better" for health protection to assume that any radiation exposure, no matter how small, has some harmful effect which can and ought to be prevented. Presumably this hypothesis is derived from scientific data in radiobiology that are virtually conclusive. Such is not the case. During the infancy of radiation science, the LNT hypothesis was adopted because it was administratively useful for reasons that no longer exist. Among prominent radiation experts, Leonard Sagan now observes that the LNT model is based on "politics and social concerns" not on science. An emerging consensus concludes that current regulations for radiation exposure have become pernicious obstacles to the ethical goal they purport to achieve: public health protection. Swedish radiobiologist Gunnar Walinder in his recent book, *Has Radiation Protection Become a Health Hazard?* states unequivocally:

> *"The linear, no-threshold hypothesis is one of the greatest scientific scandals of modern times."*[16]

An entire ethical framework for alleged health protection has been erected on the scaffolding of beliefs which are at odds with the actual status of scientific evidence. Despite a vast array of radiobiological data, there is no conclusive evidence to prove the existence or absence of a threshold. It is ethically dishonest to claim that the LNT hypothesis is an unassailable scientific conclusion, when in fact it is only an inconclusive theory, an extrapolated hypothesis, an ultraconservative exercise of prudence. It ignores the fact that *humans could not exist if the LNT hypothesis were applied to and imposed upon personal lifestyle exposures to natural terrestrial and cosmic radiation*. Evidence of human exposure to wide variations in natural background radiation ought to compel regulatory standard-setting to be based upon standard deviation from wide variations in background exposures.

The absence of any evidence of harm from low level exposures is not due to incompetence or lack of attempts to find effects. How much longer will a regulatory bureaucracy be allowed to ignore Lauriston Taylor's statements in his 1980 Sievert lecture?

> *"No one has been identifiably injured by radiation while working within the first numerical standards set by the NCRP and then the ICRP in 1934. Let us stop arguing about the people who are being injured by exposure to radiation at the levels far below those where any effects can be found. The fact is, the effects are not found despite over*

forty years of trying to find them. The theories about people being injured have still not led to the demonstration of injury and, though considered as facts by some, must only be looked upon as figments of the imagination."[17]

When defenders of the LNT status quo argue that proving the absence of harm would require immoral experimentation on hundreds of thousands of human beings, their claim is specious. The "experiment" has already happened in India, Iran, and Brazil where people have lived in natural radiation fields for countless generations where exposures are 10 times higher than average exposures. When the health of people in locations with higher radiation exposure is compared with the health of others having less exposure, no observable damage is found.

Furthermore, there is growing evidence too strong to ignore that low levels of radiation are not simply harmless but actually beneficial. Just as there are net beneficial effects from low levels of exposure to otherwise toxic substances -- e.g. copper, selenium, fluoride, nickel -- there is now persuasive evidence of net beneficial effects from exposure to low level radiation. Indeed it may be essential for the continued well-being of living organisms which have evolved in relation to wide variations in exposure to natural radiation sources. Hormesis is the hypothesis counter to, and incompatible with, the LNT hypothesis. Both LNT and ALARA guidelines unjustifiably assume that any degree of reduction in radiation exposure will do some good. To the contrary, evidence suggests three possible hormetic outcomes: (1) increased growth and fertility in both plant and animal organisms; (2) increased longevity, and (3) reduction in cancer frequency.[18]

Dr. Myron Pollycove has recently given expression to a supreme irony: "Had we known 30 years ago what we know now about the beneficial effects of low-level radiation, it would have changed the course of nuclear history."[19]

ETHICAL TRAVESTIES

Theodore Rockwell has exposed "the tyranny of safety" by asking a seemingly unanswerable question: "What's wrong with being cautious?"[20] When ultra-protective officials admit that they are not really saying small amounts of radiation *are* harmful, only that they *might be*, they try to exonerate a nonscientific position with the query" What harm is done? Rockwell's answer: *Plenty of harm*. Rockwell identifies four different kinds of harm resulting from a "cautionary" policy – (1) detrimental health effects created by fear; (2) ridiculous regulations degrading confidence in science and government officials; (3) billions of dollars wasted; (4) accelerated environmental degradation.

Rockwell compels us to consider the actual harm done to real people. It is an ethical travesty that fear of radiation can become fatal: (1) fear of bearing a "nuclear mutant" led 100,000 European women to choose unnecessary abortions after Chernobyl; (2) thousands of people avoid life-saving medical procedures such as mammograms or radiotherapy because they involve radiation; (3) regulatory roadblocks preventing management of harmless low-level wastes are causing many hospitals to shut down radiomedical treatment centers; (4) thousands of deaths from pathogens infecting seafood, eggs, beef and poultry could be prevented by irradiating food.

It is an ethical travesty that billions of dollars have already been spent on trivial radiation risks based on grotesque scenarios about single atoms destined to migrate through miles of desert soil to contaminate a potential water source in some distant future, not to mention the "sick buildings" allegedly produced by measurable radon, requiring costly remediation or destruction. An obsession with hypothetical health effects from but one technology siphons attention away from widespread harms claiming lives of human beings daily. Fear endangers human health.

The LNT model is deeply entrenched in standard-setting procedures of UNSCEAR, BEIR, ICRP and NCRP (UBIN). It is an ethical travesty that officials in these bureaucracies have deliberately declined to cite, discuss, or refute the data and theory contradicting the LNT model. Regulatory vested interests to "keep the hazard alive" include incentives for empire building, research funding, legalized plunder, sales of instruments, and a steady income from serving a fearful public. It cannot be denied that bureaucratic powers are the alpha and omega of Earth's nuclear future.

CONCLUSION

There is an invaluable lesson in the realization that the Nuclear Age swiftly became transmuted into the Age of Environmentalism, ushering in an era of exploding bureaucracy. Inflated by the enormity of the task of saving an entire planet from nuclear destruction -- and then fashioning an ideal society for countless unborn generations -- a frustrated intelligentsia has summoned forth a vast repertoire of imaginative skills. With all the fervor of medieval monks, environmental experts have been trained to foresee and forestall every conceivable What-If? so as to anticipate and exhaust every imaginable eventuality on paper before anything can be permitted in the real world. Rather than a healthy advance, the Environmental Impact Statement is but a replication and throwback to the era of Chinese mandarins and pre-Revolutionary French philosophes whose enormous power once gave them a free hand to mold society according to their preferences.

William Tucker has revisited the centuries-old question, How do bureaucrats gain and retain their power? His answer is simple: ". . . by extending the rules of society to cover *as many aspects of life as possible.* Moreover, the rules are often made so complicated that *no one except bureaucrats* is able to understand them."[21] The more obscure and arcane the rules and regulations, and the more indispensable to the workings of everyday life, the greater the exercise of arbitrary power becomes. The LNT model has not only given "arbitrary power" new meaning, but has also provided a salutary reminder of the irreconcilable clash that separates bureaucratic rule-making from demands of the scientific method.

Obsessed by their impossible task of fashioning an ideal world, intellectuals and bureaucrats lose sight of a stark reality: rule-making and science are worlds apart. Tucker reminds us that scientific method requires *inductive* thinking -- framing hypotheses and testing results of experimentation against predictions. Bureaucratic reasoning is *deductive* -- attempting to deduce a logical conclusion from an assumed premise, proceeding from what we know to what we don't know. A divorce from reality is swift and sure. Fortunately history attests that the spirit of scientific adventure will always bury its undertakers.

The ultimate irony about the transformation of the Nuclear Age into the Age of Environmentalism accompanied by the Rise of Global Governance lies in the fact that bureaucratic, authoritarian dominance of a society betrays its reversion to a second childhood. Attempts to confine nuclear technology to a prolonged childhood are bound to become culturally and scientifically obsolete.

> *"When I was a child, I spoke as a child, I understood as a child, I thought as a child. But when I became a man, I put away childish things."*

The formidable geopolitical forces currently arrayed against the nuclear option may declare themselves victorious, but it will remain a Pyrrhic victory because the pressures of energy needs among real people will not be vanquished.

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