

**B4-- STATE OF THE SPECIES, END OF THE MILLENIUM, SNR,
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How 77 million baby boomers respond to their growing awareness that they will die may well be the key to how future generations will live.

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Today, at the birth of a new millennium, it is amazing to realize that it really is possible for the human species to have a conceptual framework that ignores the single greatest challenge facing it. Because elders have always sought to serve their young, we cannot yet see that we have suddenly become the first generation in history to pose the single greatest threat to those who will follow us. But if we can wake up and realize this new reality, we will also move swiftly to correct it. For there is perhaps no more powerful impulse than the one that moves us to transcend our creature-death by living on through those who will follow us.

I realized that for myself as I lay in bed one night in the early 1980s. A thought suddenly entered my mind: "what if this were my last night on earth?" The thought was followed by a profound experience, as I found myself half-imagining, half-feeling that I was in fact living through my last night. It felt half-real, spurred by the realization that I probably would spend my last night on earth lying on my back in the darkness just like this, waiting for the end.

My first reaction was to turn my attention to what had been. Like all of us I had often derived some satisfaction from remembering past triumphs or loved ones. I found myself seeking to summon up the powerful experiences, the successes, the loves, family, friends, mentors, the people who had mattered from my past life. I sought to smile at the funny parts, feel moved at the deep parts, angry at the bad and happy at the good.

And I could not. I was dying, for God's sake! How paltry my previous life seemed by contrast, how meaningless my half-forgotten memories of long-past events. The people I had known had become ghosts, my past "achievements" dust. The taste of death was bitter, my heart turned cold, remembering the past.

But then I had two experiences I will never forget. The first was that I really wanted there to be people at my bedside whom I loved. I found myself longing for the face of the Beloved I had not yet met, hoping there might gather as-yet unborn children.

But the second experience came as an utter surprise. I was suddenly overwhelmed by a desire that work I was doing at this time of my death, would be relevant to people who would live beyond me, to young people who were just starting out in life and would be living for decades beyond my death -- and hopefully to their children and their children's children in turn. I found that the most important fact for me at the time of my death was that there would be future generations to whom I could contribute. For their sake.

But, even more importantly, for my own.

I was astonished when I reflected on this experience in the days that followed. For I searched my memory and realized that I had never had a conscious thought or concern for future generations prior to this experience. It was as if this concern was genetically coded deep within me, that I harbored a deep subconscious connection with future generations of which I was totally unaware.

At this solemn moment at the end of 1999, as we approach a new Millennium - and occasionally allow it to lift our thoughts beyond our daily lives and to remind us of the brevity of our lives in the vast sweep of the generations who have preceded and will hopefully succeed us - such thoughts are more apt, and more troubling, than ever.

As we survey the state of the species at the end of the Millennium requires a perhaps irrational optimism at this moment to

believe that we are capable of protecting our descendants. As sales of recreational vehicles, corporate donations to politicians and computer-driven stock trading soar, short-termism is actually growing at the very time we need to be thinking more long-term than ever. Long-term thinking may well require reversing the impact of evolution itself, as E.O. Wilson suggests. Technological and economic forces that threaten the biosphere upon which future generations will depend for their lives appear to have a life of their own. And, as discussed below, we cannot yet even see the new threat to species-survival.

Perhaps the greatest obstacle for feeling genuine concern for future generations is that it requires us to break through our denial of our own death. To really see and feel oneself as part of the great flow of generations is to confront the shortness of life, the inevitability of its loss, and the meaningless of many of the things to which we are most attached.

Ironically, however, the connection between confronting one's own mortality and thinking about our descendants also provides the greatest hope that the species can be saved. For it may just well be that being forced to confront death by old age and sickness may be the opening to concern for future generations.

The possibility exists that millions of us - including 77 million U.S. baby-boomers who are now facing the death of their parents and will soon enough confront their own - will find that awareness of our mortality spurs a growing concern for future generations for the most "selfish" of reasons: because concern for their wellbeing is necessary for our lives to have meaning.

It will not be long before we find out.

OUR FAUSTIAN BARGAIN

"People place themselves first, family second, tribe third, and the rest of the world a distant fourth. Their genes also predispose them to plan ahead for at most one or two generations. During all but the last few millennia of the 2

million years of (their) existence ... humans existed in small preliterate, hunter-gatherer bands. Life was precarious and short. A premium was placed on close attention to the near future and early reproduction, and little else.

"So today the human mind still works comfortably backward and forward only a few years, spanning a period not exceeding one or two generations. Those in past ages whose genes inclined them to short-term thinking lived longer and had more children than those who did not."

-- E.O. Wilson, "Is Humanity Suicidal?", 1996

"In effect, we are behaving as though we have no children, as though there will not be a next generation"

-- Lester Brown, State of the World 1998, p. 18

As a new Millennium dawns, the human species is flourishing - if human life is measured by the number of people multiplied by their longevity. And despite the great horrors and injustices that continue to afflict billions around the world, most qualitative material criteria - leisure time, disposable income, women's rights, reducing slavery, hours worked, threat of world war, knowledge of the world, amount of manual labor, infant mortality, access to healthcare, education and sanitation - are also improved over a century ago. Our spiritual progress is more debatable - while we are perhaps more materialistic and less inclined to faith than our predecessors, we are also far less fearful and anxious. All told, however, it seems clear that life is far better for far more people than when the last Millennium began.

This represents a monumental achievement in humanity's preeminent issue since its inception: our struggle to control natural disasters and health threats that have killed hundreds of millions over the centuries. Our victory over nature, however, has proven a Faustian Bargain. For in conquering nature we now find ourselves embarked on a potentially suicidal course that could destroy it for our descendants. We suddenly find ourselves the first generation in all human history to pose the single greatest threat facing all those who will follow it.

The incredible fact is we just happen to be alive at the moment when one generation has first acquired the technological power to determine how people hundreds of years from now will live. Since we are the first, our conceptual framework does not include a concern for future generations. The idea that elders serve their young, for example, is one of our bedrock principles, our most fundamental cultural memes - as it has been for all civilizations which have preceded us. And since our conceptual frameworks shape our view of reality, we thus literally cannot see that we are the first elders in history to so threaten their young - it is simply not part of our conceptual vocabulary. Generations before us have taken for granted such simple maxims as "if you take care of the present the future will take care of itself." We are the first who cannot.

Ask yourself, for example, how much does it matter to you, dear reader, if future generations curse our name? Do you really care if we poison the biosphere for future generations? How much would you be willing to radically change your lifestyle - to drive a far more fuel-efficient vehicle, pay higher gasoline taxes, or pay other taxes needed to clean up the oceans and maintain biodiversity - if it was required to ensure that people you will never know will live decently?

The chances are that you, like most of us, have never pondered and meditated on such questions. For until now, no one has had to. No one.

The experts who study such matters have reached a consensus that the earth's biosphere is threatened by the combination of global warming, biodiversity loss, chemical contamination, ocean pollution, nuclear and toxic waste disposal, and depletion of water aquifers, forests, soil and the ozone layer. This fact means that just as war and peace were the great issues of the past millennium, saving the biosphere for future generations will be the great imperative of the next. These threats to the biosphere, separately and together, have two unique features:

-- *They threaten future generations far more than ourselves, unlike nuclear war which we have an immediate self-interest in avoiding. Though we are living through the greatest mass extinction of species in 36 million years, for example, it is future generations not us who will suffer its effects;*

-- *They pose a systemic threat to the entire biosphere, not just local regions or localities, and will require a wholesale change in our economies and civilizations to correct.*

TO BE CURSED BY FUTURE GENERATIONS

"Oh my God! I'm back! I'm home! All the time it was ... we finally, really did it. You maniacs! You blew it up! Oh, damn you! Goddamn you all to hell!"

-- Taylor, "Planet of the Apes" (at realizing that humanity had blown itself up)

My original impulse was to think of future generations as another oppressed group for whom I felt concern - like the poor, gays, Third World peasants, Afghan women, Kosovar refugees, or the East Timorese.

As my concern deepened to the point of starting a project called "Protecting Future Generations" with former SMUD commissioner and now Pace Energy Project head Ed Smeloff, however, I realized that future generations were in a very different category from these other groups. On some level, I realized, concern for future generations was wired into me in a way that was not true for my concerns for the oppressed. My concerns for the latter had to do with childhood feelings of anger at injustice committed toward me that led me to identify with the pain of others. It had something to do with what we call "compassion".

My concerns for future generations seemed of a much more primal nature. As the years passed and the answers of my youth became the questions of my majority, I began to question whether life had meaning. But though I felt I simply did not know, one thing seemed

obvious: if life did have meaning, it would require the existence of future generations. I became aware, deep within, of a profound disquiet at the thought I was part of a generation that would damage the lives of all who would follow us - not for their sake, but my own. I need to believe that there was at least the possibility that life had some transcendent meaning - if not for the cosmos, at least for people who would live centuries from now, on this planet. The idea that they would curse us bothered me profoundly, for reasons I could not fully understand.

And then one day, at a party, I finally understood.

"What are you doing these days?", a woman asked. "Well, i've just helped found a group called 'Protecting Future Generations,' I answered.

"Do you have any kids?," she asked.

"No," I answered. "here I am working on a group dedicated to protecting future generations, but I've never gotten around to having any future members my own. If I were on my deathbed, it would be by one regret. It seems strange to be working for future generations when I don't have any kids of my own."

"Well, maybe that's why you're working on it," she responded.

On the way home, I got it.

Future generations will need us. But we need them even more if our lives are to have even the hope of transcendent meaning, if we are to live - and die - at peace. My sense of self and inner peace are disturbed in ways I can't even describe at the prospect that all beings who live after us will curse us.

BETWEEN SEVENTH AND TENTH

"We are in the midst of a mass extinction, an event not seen since the disappearance of the dinosaurs 36 million years ago."

-- John Tuxhill, Worldwatch Institute

Current threats to the biosphere are unprecedented in all previous human experience, and can only be met through a massive transformation in our civilization.

None now alive need fear that their water supply will be poisoned by nuclear wastes buried 300 years ago, that they will suffer a crippling disease because of human-caused global warming that began 200 years ago, or that they will experience thirst or drought because long-dead ancestors depleted the world's water aquifers. But all those born after us will have these fears.

If E.O. Wilson is right, moreover, saving the biosphere may require a sudden shift in patterns that have been built up over the millennia. It appears that we may be alive at an astonishing evolutionary moment, when the very behaviors that evolution has *rewarded* - the ability to procreate, wage war and transform raw materials into finished goods - may have become the greatest *danger* to our future existence.

Although the problem is environmental, protecting the Earth's biosphere will thus require a new politics far different from today's environmental movement. Saving the rainforests, creating a hydrogen-based economy, cleaning up the world's oceans, etc., will require an investment of resources and will at least as great as that devoted to waging war in the 20th century. And the world's economic, legal, political and social institutions will need to be transformed, e.g. by giving legal standing to representatives of future generations rather than continuing to restrict standing as has the U.S. Supreme Court led by Justice Anthony Scalia.

The necessary precondition for such an institutional transformation will be a great psychological and spiritual awakening of care for future generations rivaling the broad movements toward

individual human rights - the slow spread of democratic forms of government, the anti-slavery, suffrage, women's and civil rights movements, etc. - that animated the 19th and 20th centuries.

The present environmental movement's tactics cannot save the environment because it promotes the short-term thinking that created the problem in the first place. A recent anti-global warming TV ad campaign developed by the National Environmental Trust, for example, focuses on such short-term economic and health threats as flooding and asthma. But although it can be argued that global warming has already begun to contribute to flooding or storms, it poses a far, far great danger to future generations than ourselves. And short-term economic and social concerns usually trump short-term environmental ones. As a result, the sad fact is that despite the well-funded, well-meaning and massive efforts of today's environmental movement, the biosphere is getting worse.

The "environment" ranks somewhere between 7th and 10th in issues the public cares about, and the politicians respond by focusing far more on domestic issues like taxes, healthcare and education. And even when they do discuss the environment, their policies focus more on relatively safe and specific issues like preserving a forest or stopping coastal oil drilling, rather than the wholesale economic shifts required to avert systemic threats like global warming or biodiversity loss.

Nothing symbolizes the failure of the 2000 Presidential race to respond to the Millennial Issue more than the behavior of Al Gore, one of the few politicians who understands the threat to the biosphere. Rather than seeking to mobilize the nation to save the planet, however, his overall strategy is focused on assuring the business community that he is not an "environmental fanatic". Friends of the Earth has reported that he has an even weaker environmental record than Bill Bradley, and he has reneged on his Kyoto pledge to take global warming to the public if the Senate failed to ratify the Kyoto Protocol. And even his timid record, of course, is light-years ahead of that of oil industry scion George W. Bush.

Hungarian spiritual teacher Laszlo Honti suggests a simple question in determining personal and social priorities: *what does Gaia want?* Nothing illustrates the sad state of the species more in the year 2000 than the growing gap between life's clear need to preserve the biosphere for future generations and our politicians' neglect of the need to do so.

WHAT DOES SYLVIA EARLE KNOW THAT WE DON'T?

When I began working on the issue of protecting the biosphere for future generations, I was quickly humbled by a simple fact: I didn't have the background to objectively assess the real issues in the debate over global warming, biodiversity loss and the like. The issues were simply too complex.

Between mid-1997 and mid-1999 I read dozens of reports and books, went to innumerable briefings and press conferences, attended the global warming negotiations in Kyoto, interviewed many experts including those on key committees of the Intergovernmental Panel on Climate Control. By the end I had a layperson's understanding, but still could not debate the technicalities with the specialists working on these issues.

And one moment had more impact on me than all of the books, reports, conferences and interviews.

It was at a Capitol Hill briefing by eminent experts on ocean pollution from Harvard. They were clearly alarmed at the state of the oceans, and presented a great deal of information on the alarming decline of coral reefs, the reduction in fish populations, the slow poisoning of vast amounts of ocean flora and fauna.

I do not remember any of this information at present. but I remember clearly a quiet, older speaker whom I had never heard of before. Her name was Sylvia Earle, and she was introduced with great respect as America's Jean Cousteau. The moderator explained that she had spent much of her career under water, studying the oceans, and the plant and animal life within it. As she stood to speak, there

was a kind of hush. It was clear the audience did know who she was, and that she was someone special.

She spoke quietly, which made her passion all the more striking. the ocean was in mortal danger, she said. she had never seen things so bad.

It was so bad, she said haltingly and in obvious discomfort at one point, that she had given up eating fish. There were just too many chemicals in them, and she feared for her health.

Somehow the idea that Sylvia Earle feared to eat fish had more impact on me than all the other words combined. She was an expert. I wasn't.

And I was still eating fish.

CAN WE UNDERSTAND?

"Under a 15 percent reduction in developed country (greenhouse gas) emissions by 2010, with smaller reductions in developing nations, an estimated 700,000 deaths per year could be avoided by 2020."

-- World Resources 1998, World Resources Institute, p. 140

Is the biosphere really threatened? One of the reasons it is not at the top of our political agenda is the change in thinking required for citizens to reach an assessment of the complicated technical issues involved. Laypeople did not really need specialized knowledge to make informed judgements on where they stood on the great issues of the 20th century. A citizen reading newspapers and books had enough information to decide where she or he stood on World Wars I and II, the Cold War, civil rights and Vietnam.

When assessing the danger to the biosphere, however, most of us cannot know enough to decide the issue directly. We must instead assess whether the small groups of specialists qualified to make

judgements have done so in an open and fair manner, and whether they have reached consensus.

A layperson cannot understand the genuinely arcane technical issues involved in assessing biospheric threats. MIT Professor and global warming "skeptic" Richard Lindzen, for example, was only somewhat exaggerating when he stated that only those who have taken graduate studies in climatology and devoted a years of study to the climate thereafter were entitled to a position on global warming. The fact is that the debate over global warming involves technical questions such as historical patterns of warming, the relative reliability of atmospheric and ground measurement, the "anthropogenic" or human contribution to greenhouse gas emissions, and a variety of other similar questions requiring specialized knowledge.

But informed citizens can assess whether the specialists who do understand the issue have reached a consensus on it, and whether that consensus was arrived at fairly. Global warming experts, for example, have formed the International Panel on Climate Change (IPCC), and have reached a clear consensus that global warming is human-caused and poses a serious threat to human wellbeing in the 21st century. Since 95-98% agree with the IPCC, and a tiny handful with Dr. Lindzen, it seems clear that we non-experts have little choice but to conclude that global warming is a serious problem. Indeed, it is clear by Dr. Lindzen's own criteria that any non-specialists who agree with him - including the Republican majority in the U.S. Senate - are doing so out in pursuit of their own narrow interests rather than because they have reached an informed judgment on the issue.

It is thus a matter of the greatest concern that the world's specialists in each of the following areas have reached consensus that their area of concern is under considerable threat:

- o *global warming*, which the IPCC says "is likely to have wide-ranging and mostly adverse impacts on human health, with significant loss of life."**

o *biodiversity loss*, as we continue to live through the greatest mass extinction of species in 36 million years, weakening the gene pool for our descendants in ways that can never be undone;

o *chemical contamination*, as we spew over 1 million tons of 10,000 chemicals into the atmosphere annually, without the slightest idea of how they will together affect the human species over the next century;

o *ocean pollution*, which is depleting fisheries and coral reefs, major sources of both biodiversity and nutrition, and dangerously rendering many of those fish that do remain unfit for human consumption; and

o *depletion of water aquifers, forests and top soil*, which will present the threat of mass starvation to growing Third World populations in the coming century.

o the disposal of *toxic* and *nuclear* wastes, which threaten water supplies, and has yet to be satisfactorily resolved.

In addition, although there is less consensus, there is considerable concern in the scientific community about the potential danger of *endocrine disruption*, the effect of global warming on *ozone layer depletion*, and the potential dangers of *biotechnology*, e.g. in the present widespread use of gene-altered food that has never been tested over time on human populations.

This combination of systemic and long-term threats amount to a vast and ungodly experiment with the very basis of human life. We have never tested any of these problems on human society before, let alone all of them in toto. The minimal tests done on a few generations of rats or fruit flies before we declare a chemical legal tells us nothing about how it will affect future generations of humans, let alone how thousands of them will affect future life in combination with global warming, biodiversity loss, and all the rest.

It is as if we have suddenly declared ourselves the first "rat generation" and decided to experiment whether we and our successors will live or die.

There are, of course, technological optimists like Amory Lovins and Peter Schwartz, who suggest that the economic case for introducing alternative fuels is so great that we will introduce them quickly enough in the 21st century to avoid not only long-term calamity, but even the need to restructure our lives.

The problem with this thesis, however, is both that it rests on an unprovable hypothesis about the future and is something of a non self-fulfilling prophecy. Believing it undercuts the sense of urgency needed to accelerate the shift to renewable energy. If politicians believe that we need not worry overmuch about the future of the biosphere, for example, they are far less likely to remove the institutional barriers that Lovins and others say are blocking our renewable future. And meanwhile, as we have noted, the biosphere continues to degrade daily.

Each year, for example, the species spews some 6 trillion tons of carbon dioxide into the atmosphere. The Kyoto Protocol envisions at most reducing emissions by 5%-10% below 1990 levels by the year 2012. Even if we met this target, it would be a miniscule reduction compared to the 70% reduction that the IPCC says is necessary to stabilize CO2 emissions for future generations. And we are unlikely to meet it. The U.S. Senate refuses to ratify the treaty, and the pressures of tens of millions of Chinese, Indians and other Third World people wishing to enjoy a western lifestyle are likely to produce an increase in the years to come.

It is possible, in short, to debate the rate at which we are destroying the biosphere for future generations. But there is no question that continuing present trends will mean, sooner or later, that the biosphere will be destroyed. It is only a question of time unless there is a revolution in how we organize our economy and daily lives.

And even the most optimistic of scenarios about the theoretical potential of renewable energy does little to address biodiversity loss, chemical contamination, and many other of the most serious threats facing the biosphere.

The technological optimists are usefully reminding us we can save the biosphere, that the technical means do exist to preserve life for future generations. But their predictions that we will automatically do so fast enough to save the biosphere should not be taken any more seriously than the notion that the League of Nations would usher in an era of peaceful world government, or that the invention of nuclear weapons would mean that conventional war would be abolished.

THE PASSION GAP

In the early 1980s I was a technological optimist myself, helping author Governor Jerry Brown's State of the State technology initiatives, and a major speech entitled "Growth in an Era of Limits". The speech argued that the Information Revolution offered the promise of economic growth without having to rely on every-greater inputs of natural resources. these predictions have proven to be true, particularly with the birth of the Internet and its incredible potential for spurring resource-efficient growth.

And yet, despite the Information Revolution, despite the Internet, the irreducible fact remains: the biosphere is continuing to be degraded at a steadily accelerating rate.

I finally understood why at a briefing conducted by the Worldwatch institute's John Tuxhill, where he described the implications of the unbelievable assertion that we are presently living through the greatest mass extinction of species in 36 million years.

What about the biotechnology revolution?, he was asked. Couldn't the genetic revolution create the new medicines, the new agricultural advances, even if biodiversity continued to be lost?

I'll never forget his sad smile, or his answer to the question. "you can't have a genetic revolution without genes," he responded. "if the gene pool continues to be degraded, biotechnology will hardly be able to solve our problems."

Something disturbed me at the briefing, and it took me a while to put my finger on it. Finally, I was able to ask my question. "John," I said, "you're telling us that we are living through the greatest mass extinction since the time of the dinosaurs, one that will have incalculable effects on the lives of future generations. But your tone is so calm, so matter of fact. It's like you were saying there's going to be rain next weekend. There's so little passion. If experts like you who understand the situation aren't freaking out, why would the rest of us feel any deep concern? Where's the passion?"

"Well," he smiled gently, "I wrote this report."

Later on, I realized the exquisiteness of our present dilemma. The only ones who understand what is really happening to the biosphere are our scientists, who are by nature low-keyed, dispassionate, objective. We histrionic types tend to go into the arts, politics, journalism, activism, and other disreputable callings. Our scientists, moreover, are expected to be dispassionate. Passion, commitment, emotion, is considered inappropriate for a scientist - both within the profession and without. The International Panel on Climate Control, for example, prides itself on not advocating specific action by individuals or governments. It is expected to simply present "the facts," on global warming so that policy-makers can then decide what to do.

Those who know, in short, don't feel - or at least don't feel in public. And those who feel tend not to know. Nothing threatens the future of the species more than the "passion gap" between what is known and what is felt about the threat to future generations.

A NEW POLITICS

"If the world is to be saved, it will be saved by the spirit. Politicians, or bankers, or soldiers, or businessmen, or even authors and artists are not the essential people. We need saints. Mother Theresa, who sees Christ in the dying people of Calcutta, or the Dalai Lama, who bears his people's suffering with serene spiritual tranquility, represent the

possibility of survival. Humanity is unlikely to survive the 21st century with 20th-century attitudes. If spiritual grace is real and is given to human beings, the possibility of a completely different and higher consciousness does at least exist. A world guided by saints and the spirit would not only be better but also far safer into a much longer future."

--Lord William Rees-Mogg, The Independent, December 21, 1992.

"Think of somebody whose main activity of life is to act out his attachments and aversions. Such a person may become very powerful, very famous, he can even go down in history. But such a person has merely attained his name's going down in history. He has not become happy, he is dead. So if we spend our life practising delusions, no matter how wealthy and powerful we become, this will not bring us happiness."

-- The Dalai Lama

Given the threat to the biosphere, the transformation required to save it, and the inadequacy of our present politics, is there any hope? There is, but only if we can create a very new psychologically and spiritually-based politics that can connect us to our deepest desires to transcend our creature-deaths and connect with our highest selves. The division between left and right of the past hundred years will need to be transcended by a new spiritual struggle between "long-termists" and "short-termists" - with proponents for future generations likely to be found in both today's liberal and conservative communities.

Such a politics will not be primarily based on ethical and moral appeals. While important, morality cannot mobilize sufficient public concern to save the biosphere for future generations. Church campaigns to build support in the U.S. for saving the Third World from global warming, for example, have had relatively little political impact.

A politics capable of saving the species will rather need to base itself in the evolutionary, psychological and spiritual insights of figures

like Teilhard De Chardin, Ernest Becker, Abraham Maslow, Robert Jay Lifton and the Dalai Lama. Underlying their thinking is a realization that humans have a "selfish" as well as "moral" interest in such transcendent behaviors as seeking to protect future generations. A new politics that speaks directly to people's concerns for finding individual meaning beyond death may well be the key to saving the biosphere for future generations.

The existentialists note that yes, we are driven by short-term desires like greed, acquisition, and power. But we also are impelled by what Becker called "immortality projects," a desire to somehow survive our creature-deaths. Such immortality projects can be relatively benign - children, creative work for the ages, religions based on a authentic spiritual experience, bequeathing money for worthy goals. Or they can be malign - seeking to create 1000-year Reichs, or waging ethnic or religious wars to valid one's immortality belief-system. In either case, however, they reveal the power of our desire to connect with future generations. Lifton goes so far as to suggest that our desire for "symbolic immortality" does in fact offer transcendence over death, and Maslow that such drives are as real as those to avert hunger or thirst.

Many students of evolution, beginning with de Chardin, suggest that successful evolution has required behaviors that promote community, self-sacrifice for the good of the larger group, and long-term concern as well as drives for short-term survival. Even E.O. Wilson is not convinced that our evolutionary destiny is sealed. Parents and grandparents, after all, do not seek to maximize their personal "GNPs" at the expense of their children and grandchildren. On the contrary. They devote enormous sums of money and time to their offsprings' wellbeing. Few who can afford to do so buy secondhand clothing or put their children on half-rations to save a few thousand dollars a year. It is not too much to suggest that, once they understand the threat to future generations, that they would be willing to pay higher energy taxes or drive electric cars for both their grandchildren and even their grandkids' grandkids.

And, underlying the teachings of such spiritual leaders as the Dalai Lama is an acceptance of the legitimacy of people's desires for individual happiness. Unlike traditional religions which rely on guilt or fear to motivate ethical behavior, they urge people to pursue their own "selfish" happiness through authentic spiritual experience. Connecting to future generations is seen as a natural result of spiritual realization.

There are a number of indications that it may be possible to construct a new psychologically and spiritually-based politics capable of saving the biosphere for future generations.

The fact that many of the most committed activists in both the nuclear freeze and environmental movements arrived at their positions through spiritual breakthroughs indicates the potential power of a spiritual politics to motivate action on behalf of the planet. Although environmental leaders downplay spiritual for material concerns in their public postures, many of their followers today continue to be motivated by insights gained from spiritual experiences

Another indication is the surprising success of our political system in reducing the budget deficit. The conventional wisdom held in the 1980s that the U.S. would never reduce its annual deficits because they served the political interests of both parties. The general good from reducing the deficit, it was held, was far weaker than the stakes a wide variety of special interests - from corporations to teacher unions - had in increasing it.

A wide variety of forces, however, felt a genuine concern about passing on a mounting debt to future generations, from the Concord Coalition led by Paul Tsongas, Warren Rudman and Pete Peterson, to Ross Perot's Reform Party, to politicians ranging from Republican John Kasich to a variety Democratic neoliberals. Their concern for future generations played a major role in successful efforts to reduce the debt.

The communications/online revolution is also a reason for hope. As Seattle demonstrated, the Internet can help accelerate the kind of grassroots action needed to save the biosphere. The issue of whether

we are capable of caring for future generations, however, goes far deeper than the creation of new tools for organizing. For saving the biosphere will require a massive shift in consciousness exceeding even that of the Industrial Revolution which created the threat. We have the tools now, even without the Internet. what we lack is the capacity to see the threat we pose to our descendants.

While there is reason to hope that a new politics can be created based on people's desire to achieve transcendent meaning in the face of their own deaths and growing interest in spiritual experience, therefore, we will not know how the public will respond to major appeals to protect the biosphere in the names of our grandchildren and future generations until it is tried. And the effort will only be made if growing numbers of people have personal experiences that lead them to feel a growing concern for our descendants.

The aging of the Baby Boom population may provide such an opening.

THE GENERATION GAP

I am in touch with that part of me that deeply cares about future generations. And I am also keenly aware of the part that doesn't really give a damn, that feels neither connected to those who came before me or those who will follow. I have spent much of the past two years on a project devoted to protecting future generations. And I bought an eight-cylinder used car last week without even finding out about its gas mileage.

Where does this feeling of discontinuity come from? Is it because I am the son of immigrants, and know virtually nothing about my great-grandparents? Is it because I grew up in the shadow of the H-bomb or that I don't myself have children? Is it my because my desire to buy things I like is far stronger than my concern for those I will never see?

I suspect it is all of these things, and perhaps something more. There gradually dawned upon many of us during the Vietnam war, a bit sooner for anti-war protestors, a bit later for those who went to fight,

that there was something fundamentally flawed in how our parents' generation saw us. The fact is that some part of us realized, often unconsciously, that our elders were willing to see us die in Vietnam.

I believe my generation was forever shaped by this fact, in ways we still do not understand. the combination of growing up believing in America in the aftermath of world war II in a way that few before us had, and then subconsciously experiencing a deep sense of generational betrayal, has thrown us into a moral abyss from which we have yet to emerge. It is no coincidence that the leaders of the '60s were, almost to the person, flawed narcissists; that the major baby-boomer politicians produced by our generation to date have been Bill Clinton and Newt Gingrich, themselves walking moral abysses; and that they have been succeeded by two new generational leaders - Al Gore and George W. Bush - who have yet to separate from their parents and individuate, and are thus unable to offer authentic moral or psychological leadership.

It is perhaps no coincidence that we are the first generation in all human history to send our older parents en masse to nursing homes rather than caring for them at home, that never before has one generation tried so hard to perpetuate youth and delay aging, and that our children in turn so often express the same sense of generational betrayal as do we.

But if Vietnam threw us into a moral abyss, it also created the fuel that may one day allow us to climb out of it. The anger at our betrayal by our parents also unleashed vast energies that, for example, allowed us to bring sex out of the closet. Perhaps it will now serve to bring death out of the shadows.

WHEN BABY-BOOMERS FACE DEATH: THE OPENING FOR A NEW POLITICS

"When the century began, neither human numbers nor technology had the power radically to alter planetary systems. As the century closes (they) do ... We borrow

environmental capital from future generations because we can get away with it: future generations do not vote."
-- Our Common Future, The U.N. Brundtland Commission

How 77 million American baby-boomers respond to their growing awareness that they will die may well be key to how future generations will live. Baby-boomers - who will increasingly control world culture, economics and war-making in coming decades - were among the most idealistic and socially aware of generations during their youth. Their idealism largely resulted from America's ascendancy in the post-war period. It was shattered through their first direct encounter with death - as the first generation to grow up in the shadow of the H-bomb and their realization that their elders were willing to see their sons die in what many regarded as an unjust and/or unwinnable war in Vietnam. This sense of betrayal fueled the cultural and political explosion known as "The Sixties". As the war wound down and they entered their 30s, however, Boomers entered a period of more personal concerns with raising families and building careers.

But now boomers have already begun to face a second major encounter with death - that of their parents. And, soon enough, they will face their own mortality. With children mostly grown and careers mostly built, each baby boomer, finally the older generation in his or her family, will face a fateful question in the next decade or two: how do I wish to live in the face of my impending death? If the prospect of personal death creates a new social and spiritual explosion, propelling large numbers of boomers to seek transcendent meaning rather than simply enjoy their retirement, there will be hope for saving the biosphere.

The issue will not solely be decided by the American baby boom generation, of course. Europeans are presently leading the way in fighting global warming and other environmental hazards. And today's seniors, Generation Xers and their younger siblings will have an important say as well. But given the commanding role that U.S. baby-boomers will play in the world in the next few decades - at the precise period when many of these biospheric threats must be reversed if they are to be met - the question is fundamental: will the generation that

brought sex out of the closet do so with death? And will their encounter with their own mortality spur them to leave behind a decent biosphere and society for their descendants?

A NEW POLITICS: PRINCIPLES

If Boomers do seek transcendent meaning through a new spiritual politics capable of saving the biosphere, there will be 4 major differences between the new and old politics:

(1) The short vs. long-term - The new politics will measure time in decades, even centuries. Authentic spiritual experience does not operate in linear time. To the extent it is concerned with time, it tends to measure it in decades, centuries or millennia rather than days, weeks, months or years. When we touch our spiritual selves we are as concerned with people who will live a century from now, for example, as those who are alive today.

U.S. electoral politics, by contrast, has become so short-term that time is often measured in "news cycles" not even days. The longest operative time horizon is generally the next election. In addition, U.S. politicians represent the living, not those yet to be born. And they depend for their election on campaign contributions from business and labor interests who are often even more short-term oriented than, say, a Senator whose election is six years hence.

Nothing illustrates the short-term horizons of American politics more than the shocking behavior of the present Congress. Upon taking office in January 1998, both Republicans and Democrats immediately began waging a campaign for control of the next Congress to take office in January 2000. Both sides admit that little substantive legislation can be passed in such an environment.

(2) Connection vs. Separation - The new politics will emphasize what unifies rather than what divides us. Gregory Bateson noted that information is "the perception of difference" and knowledge "the pattern that connects". Authentic spirituality may be defined as the experience of connection, with other human beings, with

animals, with all life itself. Genuine spiritual experience is in the first instance non-verbal and non-conceptual. It is thus similar for Jews and Moslems, Americans and East Timorese, Serbs and Albanians. When we experience our spiritual selves, therefore, we tend naturally to look more for what we have in common with others than what divides us. Such an experience leads naturally to a search for common ground domestically, and a feeling of connection with fellow human beings in every corner of the globe.

American politics, by contrast, is built around not only the perception of difference, but magnifying it to the maximum extent possible. Thus Democrats and Republicans will accuse each other of trying to "raid Social Security", rather than reaching the bipartisan solutions necessary to save it. Thus politicians running for office will run "attack ads" accusing each other of sins that neither has actually committed. Thus Republicans and Democrats introduce bills designed to embarrass the other party rather than uniting to solve urgent national problems.

(3) Inner Experience vs. Outer Success - The new politics will focus on inner authenticity. Authentic spirituality leads its practioners toward accessing their inner life, including their deepest feelings and highest aspirations. Extended spiritual practice often results in feelings of deep inner peace coupled with aliveness. Validation from outside sources tends to become less important. Practioners often report increased feelings of compassion and lovingkindness, and a reduction in hatred and other negative emotions.

Politics in America today is not only almost entirely based on the pursuit of outer success, but tends to devalue inner experience. Politicians, who often partly enter the profession in the first place because of a narcissistic need for approval, find their success depends upon their willingness to constantly seek money from strangers and generate publicity.

Driven by frantic schedules they are not in a position to take the time necessary to surface and work with their feelings, even in the unlikely even they were inclined to do so. It is considered out of the

question for a politician to seek psychological counseling, meditate, or engage in other spiritual practices such as visualization - note the experience of Hillary Clinton after it was revealed that she had visualized Eleanor Roosevelt in an exercise conducted by Jean Houston - designed to access feelings and quiet the mind. It is, of course, considered desirable for a politician to practice organized religion. Most of those who do so, however, practice a form of religion that divides rather than unites.

(4) Spiritual vs. Material Values - The new politics will focus on Spirit. Authentic spiritual experience tends to value spiritual attainment and social justice over material wealth. Not only have such religious leaders as Christ and the Buddha eschewed material goods and focused on social justice, but so too have many of our most admired political and spiritual leaders this century - Mahatma Gandhi, Martin Luther King, Cesar Chavez, Vaclav Havel, Mother Theresa, Nelson Mandela. Authentic spiritual experience measures riches in terms of deep expressions of eternal spirit.

It goes without saying that a political system which requires campaign contributions from corporate interests for success inevitably focuses on material values. And the business of American politics is primarily concerns dividing up the pie. The wonder is not that a focus on social justice has now almost disappeared from our post-war political system, but that it was ever there in the first place.

It seems clear from this brief survey that the reason that our current American politics does so much to contribute to the destruction of the biosphere for future generations is not primarily due to the failures of individual politicians, however easy it is to blame them. Rather it results from the very short-term, divisive, externally-driven and materialistic nature of the political system itself.

And it seems equally clearly that only a new politics that elevates the long over the short run, connection over separateness, inner experience over outer success, and the spiritual over the

material, is capable of restoring meaning to our lives by ensuring that future generations will bless rather than curse us.

We may call a new politics a "spiritual politics", one that emphasizes our spiritual connection to all life that has preceded and will follow us.

SPIRITUAL POLITICS - PROGRAM

"Under a 15 percent reduction in developed country (greenhouse gas) emissions by 2010, with smaller reductions in developing nations, an estimated 700,000 deaths per year could be avoided by 2020."

-- World Resources 1998, World Resources Institute, p. 140

Were a genuine spiritual politics capable of either replacing or reshaping the major political parties to develop over the next 10-20 years, it would of course develop a wide-ranging political program - including domestic policies to promote social justice and thoroughgoing campaign, health, and education reform.

At this point, however, perhaps the highest priority for a spiritual politics is to work on issues that are not being effectively addressed by our present political system.

Four issues stand out above all: (1) prioritizing saving the biosphere and managing biotechnology; (2) shifting from a national to global identity; (3) reshaping our institutions to protect future generations; and (4) promoting peace through prevention.

(1) Prioritizing Preserving The Biosphere For Future Generations

"Some 34 percent of all fish species may be at risk from human activities ... Water availability is likely to become one of the most pressing resource issues of the 21st century."

-- World Resources 1998, World Resources Institute, p. 140

The first goal of a spiritual politics for the new millennium would be to make public concern for the biosphere for future generations our first priority as a nation and species. This would require going far beyond the present environmental movement, which is closer to its origins aimed at conserving local natural regions than to the requirements of a new millennium: aggressive action to reduce systemic threats to the entire biosphere.

Biospheric action would become the key criteria for voters, not a second or third tier issue as it is today. Voters would rank politicians first and foremost by their record on acting to reduce global warming, promote biodiversity, reduce chemical contamination, clean up the oceans, reduce depletion of water aquifers and fisheries, and prevent deforestation and desertification.

It is particularly important to take steps to stop private ownership of genes, increase labelling of genetically-altered food, and ensure proper scientific standards before any further gene-alterations are approved.

(2) Shifting From National To Global Identity

"The glory of the nation-state as every national community's highest early value - the only one, in fact, in the name of which it is permissible to kill, or for which people have been expected to die - has already passed its peak. Human beings are more important than the state.

"Clearly, a blind love for one's country has necessarily become a dangerous anachronism, a source of conflict and, in extreme cases of immense human suffering. In the next century I believe that most states will begin to change from cultlike entities into less powerful and more rational administrative units that will represent only one of the many complex and multileveled ways in which our planetary society is organized."

--Vaclav Havel, N.Y. Review of Books, 6/10/99

"Nationalism is the measles of mankind.

--Albert Einstein_I

Daniel Bell's dictum is correct: the problem with the world today is that it's organized around the nation-state, which is too big for the small problems of life, and too small for the big ones. And as Vaclav Havel has indicated the solution is to create a new multi-faceted world order, in which power over issues like education and healthcare is devolved downward to regions, localities and individuals, and global problems like saving the biosphere are tackled through multilateral and global institutions.

The biosphere cannot be saved on a national basis. Global agreements like the Kyoto Protocol are needed. So too are a wide variety of other global initiatives which the U.S. has also not formally endorsed, from signing the Comprehensive Test Ban Treaty, to endorsing the treaties to ban landmines and protect the rights of children, to preserving the world's oceans and fisheries, to reducing Third World debt, to dozens of new global initiatives that will be needed in the 21st century.

A necessary condition for such global action is promoting a shift in identity from the nation-state to humanity as a whole. When the U.S. was founded, most people primarily identified with their state, seeing themselves as "Virginians" or "Vermonters" more than "Americans". It took nearly a century and the Civil War for Americans to identify themselves primarily with the nation as a whole.

Today, saving the biosphere and preventing genocide and other crimes against humanity requires that we shift our primary identity from that of the nation-state - or our race, religion, or gender - to humanity as a whole. A new spiritual politics would need to undertake a long-term, sustained educational and political campaign to help people understand that in today's interconnected world the interests of our own society are best served by thinking of ourselves first and foremost as global citizens.

(3) An Institutional Revolution To Protect Future Generations

***"Since its inception the Environmental Protection Agency (EPA) - like the nation - has focused its environmental attention almost exclusively on the present and the past."
--Beyond the Horizon, The EPA Science Advisory Board***

Our power to destroy the the lives of billions of our descendants has come upon us so suddenly that our politics, economics, social policy and legal system have yet to catch up. Restructuring our legal, political and economic institutions so that they are no longer biases against our descendants would amount to an institutional revolution.

The Supreme Court of the Philippines is the first national court in history to grant legal standing to future generations, who were represented by an environmental organization. In the landmark *I_Oposa v. Factoran* (1991),_I the Supreme Court stopped the cutting down of trees specifically to prevent harm to future generations.

The U.S. Supreme Court led by Justice Scalia, by contrast, has been steadily reducing legal standing over the past decade. Legal scholars believe that following the Phillipines precedent giving legal standing to represenatives of future generations would require a shift in U.S. Supreme Court thinking of historic proportions. Such an effort would need to be undertaken if future generations are to be protected.

The U.S. Attorney General, State Attorney Generals, and environmental and other public interest organizations need to bring lawsuits to create a new "future generations law" similar to the landmark legal efforts that have created existing environmental law over the past 30 years. We need also to amend the National Environmental Policy Act (NEPA)

It is particularly important to create Public Advocates for Future Generations at the national, state and local levels, similar to the highly effective N.Y. City Public Advocate and former Public

Intervenor for the State of Wisconsin. Such advocates would have the right to intervene with public agencies, bring legal action in the court system, and assemble information to help educate the media and public about the need to protect future generations.

Similar reforms need to be made in all other institutions of society, including political and economic institutions. Public financing of elections for the President and Congress is the necessary precondition for creating a political system that represents future generations.

Similar reforms are needed in economic assessments of the future, which are presently biased against future generations through the practice of "discounting" the future. And steps would need to be taken to encourage business to think more long-term, including measures to reduce the focus on next quarter's profits.

(4) Peace Through Prevention

"The public cannot tell whether a large majority of the (2,971) highest-use chemicals in the United States (whose use exceeds one million pounds annually) pose health hazards or not -- much less how serious the risks might be, or whether these chemicals are actually under control."
--Toxic Ignorance, The Environmental Defense Fund, p. 1

Proactive conflict prevention is both a critical imperative of its own for the 21st century, and central to saving the biosphere. The two issues are linked. Humanity is unlikely to shift to mobilize resources for a long-term effort to preserve the biosphere if its politics and resources are being diverted into short-term war-making. And, increasingly, war-making in the 21st century is likely to have increasingly serious consequences for the environment.

Throughout the last millennium, war-making was not only thinkable but one of humanity's major pursuits. And although the H-bomb made nuclear war unthinkable in the latter half of the 20th

century, there have been dozens of conventional wars since the end of World War II.

What is most striking about war-making at the dawn of the new millennium, however, is the post-Cold War opportunity that has arisen for proactive conflict prevention. For the first time it is possible to conceive of significant efforts to prevent wars before they happen rather than clean up their consequences afterwards. As the leading world power, the United States could potentially play a major role in developing a system to prevent future conflicts.

The war in Kosovo has laid the basis for developing such a conflict prevention system. For the first time, the major nations of the world declared that international humanitarian law trumped national law, a major cornerstone for preventing future conflicts.

U.S. leadership is needed now to establish a system for preventing future wars so that military action is not needed.

The first step is to establish a U.S. government-wide task force, led by new Undersecretaries of State and Defense for Conflict Prevention, to develop a coordinated strategy. This would require State, Defense, the CIA, DIA, USAID, Treasury and all other relevant government agencies to set in place strategies for preventive action. Such strategies would include early monitoring to identify potential areas of conflict, and giving responsibility to relevant agencies to develop diplomatic, economic, political and military strategies to prevent them. It is particularly important that the Department of State change its culture so as to reward local embassies and foreign service officers for preventing conflict rather than supporting the dictators who so often foment it.

The second is to give far greater priority and funding to Non-governmental Organizations (NGOs) like Search for Common Ground and the International Crisis Group to engage in on-the-ground programs that actively work to head off crisis.

The third is to develop a multilateral strategy that sees the U.S. work with the United Nations and regional organizations like the OECD or NATO to create an international system for preventing conflict. These efforts should include consideration of creating a standing multinational military force tasked with intervening in nations like Rwanda or East Timor to head off genocide and other crimes against humanity before they occur.

IF WE COULD BUT SEE

"A society's conversation defines and forms much of an individual's understanding of the world. Just as people today accept that the earth revolves around the sun, and once accepted that the sun revolves around the earth, so too many people accepted culturally ubiquitous images of Jews. An individual learns the cognitive models of his culture, like grammar, surely and effortlessly. Within a society, the most important bearers of the general conversations are its institutions, including crucially the family."

--Hitler's Willing Executioners, Daniel Goldenhagen, p. 46

Whatever one may think of his thesis of the German people's guilt, Daniel Goldenhagen's Hitler's Willing Executioners is noteworthy for another reason. Its first few hundred pages present a compelling description of one of the most important phenomena in all human history: the power of what he calls a "conceptual framework."

Reality is far too complex, chaotic, and random for any individual or society to comprehend. We must develop conceptual frameworks or cognitive models to structure our reality in order to function. A conceptual framework that conforms to reality improves our lives; one that distorts it can lead us to ruin. In the case of the Germans, for example, a conceptual framework developed over centuries that saw Jews as a biological source of all evil eventually destroyed their own society along with 6 million Jews and 50 million others.

What is most incredible about our conceptual frameworks is their power to distort reality. It really is possible for a whole nation to believe that a relatively tiny Jewish minority controlled their lives, and that they could control the world by destroying this minority. It really is possible for a whole people to believe they are a "super-race" who have an obligation to enslave or destroy inferior races, their mad leader a superman, their sick nation the site of a 1000-year world empire.

And today, as the birth of a new millennium, it really is possible for the human species to have a conceptual framework that ignores the single greatest challenge facing it.

But just as an incorrect conceptual framework can lead a whole people to ruin, seeing the truth can lead to a renaissance. As the species was able over time to shift to a belief that the earth moves around the sun and thus explore outer space, we may soon wake up to the new reality of the threat we pose to our own flesh and blood who will follow us. And if so, we may well be willing to make the sacrifices necessary to protect them. For as we approach our deaths, the past will seem far less important than the future. Our grandchildren's wellbeing will play a far greater role in our psyches, and thus in our politics, than it has to date.

EPILOGUE: BEYOND HOPE

As I look back on the last two years of our "Protecting Future Generations" project, there were two high points, two experiences above all which energized me.

I do not say they gave me "hope". I have found myself reacting negatively to the idea of hope in recent years, and wishing to move beyond it. I here is a dark side to the experience of "hope". If we say we need hope to do what Gaia wants, then what do we do if there is little objective reason for hope? Do we stop, give up, move on? If we need hope to inspire us, what happens when we feel hopeless?

Personally, I do not feel the evidence warrants hopefulness at this point that the species can be saved from slow ecological suicide. The overall weight of the evidence seems to indicate that E.O. Wilson's pessimistic views may be proven right, that we as a species are incapable of caring for future generations sufficient to do what is necessary to save them.

If the species is to be saved, it seems, we must move to another, deeper, realm of feeling that can energize us despite the lack of a rational reason for hope.

I first touched that zone at Kyoto in December 1997 when the world actually ratified an agreement to limit its Carbon Dioxide emissions for the first time in all human history. The facts revealed that it was at best a baby step. But being in the Great Hall when the treaty was ratified was an experience beyond logic. One felt for a moment a consciousness and emotional intelligence that transcended conventional logic. The fact that so many nations representing so many differing interests could accept the IPCC report saying that global warming was occurring and was human-caused, and come up with a plan to reduce emissions, was deeply energizing. At that moment, one felt that anything was possible.

The second experience was even more powerful.

I found myself one day in a taxi cab, heading for the airport. I noticed that the driver looked like he was in his 70s and wondered why he was driving a cab. How many hours a week did he work, I asked. 50-60 he responded. Why did he work so hard, I asked, did he need the money to live?

"Oh, no" he responded, "I'm doing it for my granddaughter," explaining that she was now 19 and attending a community college.

Why did he need to work so many hours for her, I asked?

I was amazed by the look of love and joy that came over his face in the rearview mirror, as he responded by explaining that he had just

bought her a new computer that he had saved up for over many months. "She's a good kid," he smiled, "she deserves it." He then talked for 15 minutes about how much he loved his granddaughter, about all the other ways he helped her.

He did not philosophize about future generations. He was neither environmentally conscious nor politically involved. His feelings for his granddaughter went far deeper than politics or philosophy.

There is no question that if understood the threat posed to his grandchild's environment, he would be willing to spend the kind of money he spent on a computer on a fuel-efficient car, and to support politicians willing to take the bold steps necessary to protect the biosphere not only for herself but for her grandchildren.

For many of us the sun these days is far more orange, rich and deep than it has ever been. But it is also lower in the sky. And as our sun continues to set, we may well find its light illumining portions of our psyche and soul that we never before knew existed. If we discover the part deep within that cares about our grandchildren, and our grandchildren's grandchildren, future generations can still be saved. If we are the single biggest threat facing our descendants, we are also their potential salvation.

Future generations can be saved if we can but see.

If we can but see.