Great Transition Values

Present Attitudes, Future Changes

Robert Kates, Anthony Leiserowitz, and Thomas Parris

GTI Paper Series

Frontiers of a Great Transition

9

Tellus Institute
11 Arlington Street
Boston, MA 02116
Phone: 1 617 2665400
Email: info@tellus.org

Tellus Web: http://www.tellus.org
GTI Web: http://www.gtinitiative.org

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The Great Transition Initiative

GTI is a global network of engaged thinkers and thoughtful activists who are committed to rigorously assessing and creatively imagining a *great transition* to a future of enriched lives, human solidarity, and a healthy planet. GTI's message of hope aims to counter resignation and pessimism, and help spark a citizens movement for carrying the transition forward. This paper series elaborates the global challenge, future visions, and strategic directions.

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Authors

Robert Kates is a geographer, independent scholar, and University Professor (Emeritus) at Brown University. His recent work includes serving as Co-chair of U.S. National Academies study, *Our Common Journey: A Transition Toward Sustainability*, Co-Convenor of the international Initiative for Science and Technology for Sustainability, Executive Editor of Environment magazine, and Visiting Scholar at the Center for International Development, Kennedy School of Government, Harvard University. Dr. Kates' more recent books include the co-editorship or authorship of *Hunger in History: Food Shortage, Poverty, and Deprivation* (1989), *The Earth as Transformed by Human Action* (1990), a 2nd edition of *The Environment as Hazard* (1993), *Population Growth and Agricultural Change in Africa* (1993), and *Global Change in Local Places* (2003).

Anthony Leiserowitz is a research scientist at Decision Research, Inc., and a principal investigator at the Center for Research on Environmental Decisions at Columbia University. His research includes public risk perception, decision-making, and behavior and the human dimensions of global environmental change. He has conducted empirical studies at the local, state, national (US), and international levels to investigate the role of knowledge, affect, imagery, values, experience, politics, and other factors in public climate change risk perceptions, policy preferences, and behaviors. He also serves as a scientific advisor to the Global Roundtable on Climate Change at the Earth Institute (Columbia University). Leiserowitz holds a Ph.D. in Environmental Science, Studies and Policy from the University of Oregon

Thomas Parris is a research scientist and director of sustainability programs at ISciences, LLC. Previously, he was a software engineer for large-scale remote sensing and geographic information systems applications for the Environmental Research Institute of Michigan, an environmental information policy analyst at the Consortium for International Earth Science Information Network, and environmental librarian for Harvard University. His current research focuses on sustainable development, vulnerability analysis, and environmental information policy. He also works with several global corporations and the socially responsible investment community to define and assess measures of corporate sustainability. He is contributing editor and author of a regular column for Environment magazine. Parris holds a post-graduate degree in public policy from Harvard University.

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Great Transition Values:
Present Attitudes, Future Changes

Introduction

Values are both the ends and the means of the *Great Transition*. The ends of the *Great Transition* are to seek:

> …a world where the quality of human knowledge, creativity, and self-realization, not the quantity of goods and services, signals development. It embraces equality, empowerment, and deep respect for the intrinsic values of nature. It recognizes plural paths to modernity, and welcomes regional diversity in expressing such core values as freedom, equity, democracy, and sustainability. (GTI, 2006)

Towards these ends the *Great Transition Initiative* (GTI) was formed as a global network for elaborating visions and strategies for a future of enriched lives, human solidarity, and a healthy planet (see www.GTInitiative.org). The preferred means of the *Great Transition* Initiative are to promote values-based movements and organizations working for social change beyond the limits of markets and government towards sustainable lifestyles of health, family, work, learning and leisure.

An essay summarizing the *Great Transition* vision—written from the perspective of 2084—argues that:

> The emergence of a new suite of values is [now] the foundation of the entire edifice of our planetary society. Consumerism, individualism, and domination of nature—the dominant values of yesteryear—have given way to a new triad: quality of life, human solidarity, and ecological sensibility. (Raskin, 2006)

The essay goes on to explain that by 2084 material requirements of well-being have been met and quality of life is now determined by fulfillment, not wealth. Human beings connect in solidarity with the needs, hopes and aspirations of those who live in distant places or will live in the distant future. Nature is a source of all that supports life for humans and other living things as well as a source of endless wonder and enjoyment.

Since majorities of people everywhere in 2084 are expected to hold these values, they should affect the regions of Agoria, Ecodemia, and Arcadia with their distinctive worldviews (see Box). Thus each region emphasizes different aspects of *Great Transition* values. In Agoria, a replacement of wealth by fulfillment is a major value change for places where consumer patterns, lifestyles, and institutions continue to reflect the market-based past. The quest for fulfillment now drives the policies and regulations required to align corporate behavior with social goals, stimulate sustainable technology, and encourage moderate consumption patterns. Ecodemia emphasizes solidarity both in the workplace and marketplace, while the emphasis on equity has largely erased the distinction between owners and workers. In Arcadia, ecological sensibility pervades all human activities.

Regions in a *Great Transition* World*

The fabric of planetary society is woven with hundreds of regions which are astonishingly diverse in character and size. Some correspond to the national boundaries of a century ago and others are federations of earlier states. Still others are parts of former states, forging a common identity around the boundaries of river basins and other ecosystems (so-called "bio-regions"), urban centers, and cultural traditions. Nevertheless, most regions can be clustered crudely into one of three major types, called *Agoria*, *Ecodemia*, and *Arcadia*, although few regions are pure cases.

Agoria

These regions would be most recognizable to a visitor from the year 2000. Some critics call *Agoria* "Sweden Supreme", with its more conventional consumer patterns, lifestyles and institutions. Its economies remain dominated by large shareholder corporations. However, when compared to even the most outstanding examples of social democratic models of the last century, the commitment to social equality, the environment, and democratic engagement from the level of the firm to the globe is of a different order. The key is a vast array of policies and regulations, supported by popular values, that align corporate behavior with social goals, stimulate sustainable technology, and moderate material consumption in order to maintain highly equitable, responsible, and environmental societies.

Ecodemia

The distinguishing feature of *Ecodemia* is its fundamental departure from the capitalist economic system. The new system, often referred to as "economic democracy", banishes the capitalist from two key arenas of economic life. First, the model of the firm as comprised of private owners and hired workers has been replaced by worker ownership in large-scale enterprises, complemented by non-profits and highly regulated small businesses. Second, private capitalist markets have given way to socialized investment processes. Worker ownership and workplace democracy has reduced the expansionary tendency of the traditional capitalist firm. Now the focus is on profit per worker (rather than absolute profit) and the popular goal of "time affluence", which shortens work weeks. Publicly controlled regional and community investment banks, supported by participatory regulatory processes, re-cycle social savings and tax-generated capital funds. Their mandate is to ensure that successful applications from capital-seeking entrepreneurs satisfy social and environmental criteria, as well as traditional financial criteria.

Arcadia

Relative to other regions, the bias in *Arcadia* is toward self-reliant economies, small enterprises, face-to-face democracy (at least in cyberspace), community engagement, and love of nature. Lifestyles tend to emphasize material sufficiency, folk crafts, and reverence for tradition. While the local is emphasized, most people are highly connected with cosmopolitan culture and world affairs through advanced communication technology and transportation systems. *Arcadia* has centers of innovation in some technologies (organic agriculture, modular solar devices, human-scale transport devices, etc.) and arts (new music, craft products, etc.). Exports of these products and services, along with eco-tourism, supports the modest trade requirements of these relatively time-rich and slow-moving societies.

This discussion of differences should be balanced by a reminder that the regions also have much in common. Relative to the nations of a century ago, contemporary regions enjoy a high degree of political participation, healthy environments, universal education and healthcare, high social cohesion, no absolute poverty, and more fulfilling lives. Finally, people the world over share the historically novel attribute of citizenship in a world community.

* Summarized from Raskin (2006).

This essay, and our research that supports it, was inspired originally by the *Great Transition* scenario for sustainable development in which significant value change makes a sustainability transition possible (Raskin et al., 2002). Thus over the last three years, we have been studying values that seem to support or impede a sustainability transition (Leiserowitz et al., 2005a; 2005b; 2006; Kates et al., 2005). Early in our efforts, we considered the many ways the term "values" is used. As a working definition that we use in this essay, values are expressions of, or beliefs in, the worth of objects, qualities, or behaviors. They are typically expressed in terms of goodness or desirability, or

conversely in terms of badness or avoidance. They often invoke feeling, define or direct us to goals, frame our attitudes, and provide standards against which the behaviors of individuals and societies can be judged.

As active researchers, we tend to be empiricists, so we searched for major expressions of values as the ends and means of sustainable development in three sets of data: documentary, indicators, and attitudinal surveys. For documentary sources, we focused on efforts by UN General Assembly (United Nations Dept. of Public Information, 2000), the Earth Charter Movement (Earth Charter International Secretariat, 2004), the World Summit on Sustainable Development (Johannesburg Declaration on Sustainable Development, 2002), and the Global Scenario Group (Raskin et al., 2002). The key documents of all these groups strongly express values related to a sustainability transition, but only one, the UN general assembly, actually labels it values as such and we reproduce its list of values in the box below.

Values underlying The Millennium Declaration

The Millennium Declaration—which outlines sixty goals for peace; development; the environment; human rights; the vulnerable, hungry, and poor; Africa; and the United Nations—is founded on a core set of values:

"We consider certain fundamental values to be essential to international relations in the twenty-first century. These include:

Freedom. Men and women have the right to live their lives and raise their children in dignity, free from hunger and from the fear of violence, oppression, or injustice. Democratic and participatory governance based on the will of the people best assures these rights.

Equality. No individual and no nation must be denied the opportunity to benefit from development. The equal rights and opportunities of women and men must be assured.

Solidarity. Global challenges must be managed in a way that distributes the costs and burdens fairly in accordance with basic principles of equity and social justice. Those who suffer or who benefit least deserve help from those who benefit most.

Tolerance. Human beings must respect one other, in all their diversity of belief, culture, and language. Differences within and between societies should be neither feared nor repressed, but cherished as a precious asset of humanity. A culture of peace and dialogue among all civilizations should be actively promoted.

Respect for nature. Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants. The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants.

Shared responsibility. Responsibility for managing worldwide economic and social development, as well as threats to international peace and security, must be shared among the nations of the world and should be exercised multilaterally. As the most universal and most representative organization in the world, the United Nations must play the central role." (United Nations Dept. of Public Information, 2000)

When we examined indicators of sustainability, we found that the selection of indicators was often an expression of the values of the indicator creators, especially when done through participatory efforts with many stakeholders (Parris and Kates, 2003). But beyond documents of global organizations and the various indicator exercises, we wondered about which values related to sustainability are widely held by ordinary citizens. Partly encouraged by the World Values Survey (Inglehart et al., 2002), we

turned to the significant but limited set of multinational surveys described in the box below.

Thus this essay explores the utopian visions and values of the *Great Transition* taking as a given the proposed values of quality of life, solidarity, and ecological sensibility. We do this in three ways. First, we ask: What do we currently know about present attitudes—what people say and do regarding these *Great Transition* values? Second, we consider how these might change in the future by considering how five major driving forces might affect and be affected by the anticipated value change of the *Great Transition*. Finally, we conclude with some thoughts as to how the *Great Transition* might be encouraged by building upon current knowledge and understanding of long-term driving forces. But with one exception, which we discuss in our conclusion—we do not critique the given values, or offer alternatives. We are content first, in examining the values of quality of life, solidarity, and ecological sensibility in what people currently say and do about them and then consider how these values might change, perhaps in surprising ways, as major driving forces evolve over time.

Great Transition Values Today: What People Say and Do

What do we know today about public attitudes towards the three core values of the *Great Transition*? Eight multi-national and quasi-global scale surveys are the closest thing we have to measures of "worldwide opinion" (see Box below). While these surveys rarely address directly the core values of a *Great Transition*, we have identified attitude data related to each. These provide some measure of the distance between current global values and those of a *Great Transition* future.

Multi-National Studies of Values, Attitudes, and Behavior

This essay draws upon data from the multi-national and quasi-global scale surveys that are listed below. For simplicity, the words "global" and "worldwide" are used throughout this article to refer to survey results. There has never been, however, a truly representative global survey with either representative samples from every country in the world or in which all human beings worldwide had an equal probability of being selected. Additionally, while results from some developing countries are nationally representative, others are from predominantly urban samples. Each of these surveys measured a different part of the "sustainability elephant" and none had sustainability as their primary research focus. Much work remains to be done, at multiple scales and using multiple methodologies, to identify and understand the key relationships between sustainability values, attitudes, and behaviors, and to further apply that knowledge in the effort to "bend the trends" and accelerate the transition toward sustainability.

One-time surveys		
Name	Year(s)	Number of countries
Pew Global Attitudes Project	2002	43
Eurobarometer	2002	15
International Social Science Program	2000	25
Health of the Planet	1992	24
Repeated surveys		
GlobeScan International Environmental Monitor	1997-2003	34
World Values Survey	1981-2002	79
Demographic and Health Surveys	1986-	17

Quality of Life

The first core value, "quality of life" is poorly defined in the *Great Transition* and is almost never used in assessing international public opinion. The *Great Transition* does plot a movement from the current era of economic necessity to a time where "fulfillment, not wealth, has become the primary measure of success and source of well-being". Current attitudes tell us that wealth in the form of economic prosperity is highly valued worldwide, while capitalism, free market economies, and competition are preferred as the primary means to achieve it. While economic prosperity does lead to greater perceived happiness as countries make the transition from subsistence to advanced industrial economies, above a certain level of GNP per capita (approximately $14,000) the relationship between income level and perceived happiness disappears. Countries with per capita incomes more than double that level evidence no greater level of happiness. Indeed, despite the remarkable increases in human well-being since the Second World War (child survival, life expectancy, education, as well as income), there appears to be a globally pervasive sense that human well-being has more recently been deteriorating. In 2002, large majorities worldwide said that a variety of conditions had worsened over the previous five years, including the availability of good paying jobs, working conditions, the spread of diseases, the affordability of health care, and the ability of people to care for themselves in old age.

The *Great Transition* also promotes a shift away from consumerism, yet today consumerism is widely embraced with two thirds of respondents worldwide (and even more in developing countries), saying that the spending of money on themselves and their family represents one of life's greatest pleasures. Yet despite the pleasures of spending money, majorities around the world also agree that, at the societal level, money, material, and status consumption are threats to human cultures and the environment. Further, large majorities agree that gaining more time for leisure activities or family life is one of their biggest goals in life.

Quality of life is also conditioned by the ability to live in a free society with participatory governance. Freedom, as expressed by desires for freedom of speech, free elections, and freedom of the press and religion, is overwhelmingly approved worldwide. At the turn of the millennium, the great majority of respondents worldwide agreed that, "Democracy may have problems, but it's better than any other form of government". On the other hand, although large majorities think highly of democratic systems of government, the world public is evenly split when asked, "If you had to choose between a good democracy or a strong economy, which would you say is more important?" Democratic ideals and institutions are the preferred form of political organization and decision-making, but are still weakly rooted in a number of newly democratic societies, including the former Soviet bloc, and are potentially fragile in a number of societies where corruption, unemployment, and civil strife are common. Further, while large majorities prefer democracy as an abstract ideal, many are also dissatisfied with democratic development in their countries and electoral participation in many of the stable democracies is decreasing. Indeed, the period of transition from autocratic to democratic forms of governance is associated with greatly increased risk of politically motivated violence and internal warfare.

Human Solidarity

The second core value of the *Great Transition* is solidarity, in which people connect with the needs, hopes, and aspirations of those who live in distant places or will live in the distant future. The *Great Transition* sees in solidarity the human capacity for reciprocity and empathy, the "golden rule" of many religious traditions, and the great social struggles for tolerance, respect, equality, and human rights. Indeed solidarity is a core value of The Millennium Declaration as adopted by the United Nations in 2000 (see Box above). While we found no international survey data on public attitudes towards solidarity per se, there are data on the related issues of caring for others, poverty, tolerance and respect for others, and concerns about globalization.

While large majorities are concerned about the living conditions of children, the elderly, the sick and disabled, there is mixed concern about poverty. Worldwide majorities believe the gap between rich and poor is growing in their country and that their own governments are failing to help people in poverty. Nonetheless, despite public perceptions of growing economic inequality, many accept it as an important incentive in a more individualistic and competitive economic system. There are also striking regional differences in explanations for the root causes of poverty. Worldwide majorities attribute poverty to unfair treatment by society, but large majorities in Pacific Rim countries (including the U.S. and China) blame poverty instead on the laziness and lack of willpower of the poor themselves.

Beyond the borders of one's own country, human solidarity is expressed today by strong support for extending help to poorer countries and people, either through national governments or non-governmental organizations and charities. Large majorities worldwide say they would pay one percent more in taxes to help the world's poor. This strong popular support, however, is not matched by national government development assistance to poor countries. Thus far, only five small countries have achieved the modest United Nations annual target of 0.7 percent of Gross National Income dedicated to development assistance.

Another major dimension of solidarity is how we treat others that differ. The Millennium Declaration (see Box above) identifies tolerance as a major value. In the abstract, it commands large majority approval in all countries. But more than a third of the same respondents, asked whether there were any groups of people they would not like to have as neighbors, rejected homosexuals, Gypsies, and people with AIDS. Smaller numbers rejected Muslims, Jews, immigrants, and people of another race.

Human solidarity is also increasingly embedded in the processes of globalization. In its most general sense, globalization widens, deepens, and hastens global interconnectedness. It encourages solidarity by bringing knowledge of the lives and livelihoods of those who live in distant places closer. It allows direct people-to-people aid and remittances, and can mobilize millions to protest human rights violations, call for fair trade, save species, or end hunger. But globalization also creates victims of lost jobs, new diseases, environmental degradation, and financial crises. Popular opinion reflects this dual nature. While the global public generally views both past and current globalization as a good thing, they are much more skeptical about its potential future impacts on unique cultures, the environment, peace, economic equality, employment, and global poverty.

Ecological Sensibility

The *Great Transition* envisions a shift from the domination of nature to a new ecological sensibility. While the domination of nature may characterize much of human activity, it does not characterize existing values and attitudes. Limited data suggest that large majorities worldwide reject a domination ethic as the basis of the human-nature relationship, at least at an abstract level. Large majorities are also very concerned about environmental problems, ranging from local problems, like water and air pollution, to global problems, like ozone depletion and climate change. Global majorities also favor environmental protection over economic growth and support stronger government policies, including those that encourage smaller populations. Pluralities practice a range of environmentally supportive individual and household behaviors, but relatively few are active in environmental organizations or politics. On the other hand, the mass consumption of materials and energy continues to grow despite these levels of environmental concern.

Despite the common perception that developed countries are more concerned about the environment than developing countries, respondents from developing countries actually demonstrate greater concern for a variety of environmental problems. The high levels of environmental concern in developing countries often reflect local realities, for example, the lack of clean drinking water or rampant air pollution. Other important differences between global North and South emerge regarding science and technology. While large majorities worldwide believe that the benefits of modern technologies outweigh their risks, support for technology in general and belief in technology as the primary solution for environmental problems are much higher in developing countries. This is also reflected in attitudes toward specific technologies such as the agricultural use of chemical pesticides and biotechnology, where developing country publics generally favor them while industrialized country publics do not.

Sustainable Development Values

These values of the *Great Transition* partly replace and partly elaborate the current values of sustainable development that emerged from the Johannesburg World Summit in Sustainable Development. The Johannesburg Declaration created:

> a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development, and environmental protection—at local, national, regional, and global levels. (Johannesburg Declaration on Sustainable Development, 2002)

In so doing, the World Summit acknowledged the need to broaden sustainable development beyond the values of environmental protection and economic development. The meaning of social development, however, remains ambiguous. In practice, the term "social development" has been used in a variety of ways, including as a simple contrast with economic development, a synonym for human development (also ambiguous), or the specific values of equity and social justice.

Using the same multi-national data, what are current public attitudes to the three pillars of sustainable development—economic development, social development, and environmental protection? For economic development, public attitudes and modest actions express support for economic growth and improved technology. But there are

some contradictions in both thought and action. For example, regarding economic development, despite the remarkable increases in human well-being over the past fifty years there is a recent global perception that human well-being, including such economic dimensions as employment opportunity, is diminishing.

Regarding social development, there is global concern about poverty and most think more should be done to alleviate it, but important regions of the world think the poor themselves are to blame. Assistance to poor countries is strongly supported, yet the levels of development assistance are consistently overestimated, the use of such aid is misunderstood, and national governments lag behind public opinion. Inequity, as measured by large and growing gaps between rich and poor, appears widely accepted (or at least tolerated) and thought by many to be an important incentive for growth.

Environmentally, while most people value the environment both for its intrinsic nature and for its utility, most major biomes continue to experience significant degradation, fragmentation, and loss of resilience. While most people favor smaller families, family planning, and contraception, access to these products and services is limited and a fifth to a quarter of children born are not desired. Renewable energy, while widely supported, still accounts for only a tiny fraction of global energy production.

These contradictions are measures of the distance between current values and the values of the *Great Transition*. As noted, while the *Great Transition* advocates a fundamental shift in priority from economic development to quality of life, the limited survey data available suggests this shift remains a conflicted goal. For while most people say their family is a priority, they desire more time for leisure, and they think that less emphasis on material possessions would be a good thing, at the same time most agree that buying things for their families is one of life's greatest pleasures.

Driving Forces and Value Change

Value change is uncertain and marked by surprise. Who would have forecast in 1945 the great value changes to come: environmentalism, feminism, human rights, and the rejection of communism? But value change also takes place within the context of other material, social, and demographic changes. These too may lead to surprise, but many of these changes constitute long-term forces likely to continue in the future. We select five such long-term driving forces: population, climate, technology, globalization, and surprise itself, that will strongly influence the next seventy-eight years. For each, we ask how these might affect and be affected by value change and how these might differ in each of the archetypes of *Great Transition* regional diversity.

Population: The new aunts and uncles

The *Great Transition* aims for a world population in 2084 of eight billion, less than the UN's most likely medium projection of 9.2 billion. To reach that goal population must fall well below replacement levels, and the world of 2084, while not an exclusively one-child family world, is a world with many more childless men and women and one-child families. Large parts of the world, perhaps with the exception of Africa, would experience a shrinking of the nuclear and extended family, with fewer brother, sisters, cousins, aunts, and uncles. Further, parents and grandparents would live longer, but with less familial support. Given the key role of reproduction in evolution, social organization,

and value formation, one can anticipate some major shifts in values previously premised on large nuclear or extended families. How might such shifts affect the *Great Transition*?

Currently, familial solidarity is the most important expression of solidarity, especially across generations. But with smaller families, it is possible that more time and resources will be available for the extension of solidarity to others in local communities as well as to those distant in time and space. On the other hand, smaller families might also encourage further individualism and self-seeking behavior. In Agoria, where these trends might be most manifest, there will likely be an increased demand for "super-Sweden" to provide new social structures at both ends of the life cycle. As the dependent population grows and familial support diminishes, new social structures would be needed to provide care in the extended life span. And as societies worry about loss of population and their very existence, new social arrangements would be needed to encourage childbearing and caring. These new structures might allow women to experience alternative forms of fulfillment in place of having children. And the more crowded world of eight billion, as well as the necessary experiments in other forms of family organization, would probably encourage more Arcadian settlement. Thus these major population changes, on balance, might encourage *Great Transition* values overall, and especially in some regions.

Climate: The new warmer, wetter, dryer world

By 2084, humankind will probably be in the midst of the most profound change in its environment since its emergence. The world of climate change—warmer in most places, wetter and dryer in others—will be evident everywhere, even if the *Great Transition* succeeds in its optimistic limits of 400ppm carbon equivalent and 2°C average warming. The recognition of these profound changes will heighten the sense of a common shared planet and the need for globally-collective responses— forces that can heighten *Great Transition* values. Ecological sensibility could be enhanced by the global effort to limit greenhouse gas emissions and solidarity could be encouraged as the places, peoples, and species particularly vulnerable to adverse impacts became well known. But the impacts of climate change and some of the responses to it can also adversely affect *Great Transition* Values.

Climate change will surely increase global inequity. Vulnerability to climate change will be greatest overall in developing countries, with their lesser capacity to adapt to such change. Ecological sensibility could also diminish. Familiar ecosystems will undergo major change and large-scale adaptation by both people and species will occur. Expectations of what is "natural" will be radically altered. In the course of adaptation to changing landscapes, some ecological sensibility may be lost, e.g., the wisdom accumulated from generations spent living in place might be made increasingly irrelevant. At the same time, some Arcadian settlements may become more valued for their efforts to preserve familiar landscapes in temperate climes and to migrate northward with shifting biomes. Many simultaneous adverse impacts affecting people and places both immediate and distant could decrease solidarity as communities struggle to adapt to local conditions and compete with one another for suitable places to live. The disparate behavior of some industrialized developing countries in reducing their consumption of fossil fuel energy can diminish solidarity both in the North and the South. Thus perhaps, counter-intuitively, the inequity of climate change may increase disparities in *Great Transition* values.

Technology: The new industrial scientific revolution

By 2084 major sources of oil will probably have been exhausted and the remaining supplies will be priced to allow only the most essential uses. The burning of natural gas and coal will also be limited by the need to restrict global warming to 2°C, unless low-cost carbon sequestration becomes a reality. By 2084, the end of fossil fuels will have triggered a new industrial and technological revolution in alternative sources of energy. As with technology today, however, these new technologies will strengthen some values and conflict with others. The decentralization of energy production may enable lifestyle alternatives not dependent on high-consumption modes and facilitate the development of Ecodemia and Arcadia. Ecodemia, in particular, could find new opportunities in the inventive and craft phases of its technological experimentation and development. Developing countries of the South may use these energy and emissions needs to leapfrog to more advanced technologies, including major sources of hydrogen converted to fuel through solar power. Yet the current greater faith in technology in developing countries may also lead to real conflicts over the meaning of ecological sensibility, as is the case with biotechnology and genetically modified plants. Or for another example, it is not surprising that the two countries actually working on new pebble bed nuclear reactors are China and South Africa, while many developed countries continue to reject nuclear power as an ecological alternative to fossil fuels.

Globalization: The new geography

By 2084, world geography may be very different than today—more connected, more urban, yet more natural, more regional, and more virtual. Globalization, with its broadening, deepening, and speeding up of global connectedness will tie places and peoples together long separated by the tyranny of distance. By 2084, most of the world's population will be living in cities compared to the barely half today. Indeed the Agorias and Ecodemias of the world may take form in a resurgence of city states as national power diminishes and large metropolitan areas, the size of many nations, better fit a global economy with local initiative. At the same time, the world of 2084 may be more natural, with a third of the land area and coastal margins in a combination of biospheric reserves or carefully managed agroforestry and grasslands. As national power shifts downwards into city states, it may also move upwards into several regional federations, as Southeast Asia follows the European Union. In 2084, a virtual world with wireless Internet, phone, and television may be almost universally available and increasingly used to substitute for more limited air travel.

Today, as well as tomorrow, globalization, in all its complexity, strengthens some values and weakens many others. Quality of life and ecological sensibility values are threatened by the acceleration of consumption that globalization encourages and makes possible. Globalization encourages economic development as a goal to be pursued, the ideas and images of Northern material standards of living as ideals to be attained, and desires for low-cost consumer goods based on low-wage production in developing countries and a competitive downward race in industrialized countries. For ecological sensibility, globalization may increase the gap between values and behavior. Today, many ecologically concerned consumers nonetheless buy low-cost, environmentally degrading, and resource-depleting products that are attractively priced, with the effects of their production or consumption often shifted to distant lands. At the same time

globalization will continue to spread the ideas and values of ecological sensibility, scientific environmental knowledge, social movements, and corporate behavior dedicated to these values. On balance, globalization currently weakens quality of life and ecological sensibility values while increasing solidarity with the growth of movements characterized as globalization from below. By 2084, however, the new geography—more connected, more urban, more natural, more regional, and more virtual—may strengthen all three values of the *Great Transition*, as well as all three of the regional expressions of these values.

Surprise: The constant persistence

In many ways the most important force for the future is the persistence of surprise. Imagine projecting the future in 1928, the distance in years from today as we today are from 2084. A long list of the many surprises yet to come would begin with the Great Depression in the following year, followed by the rise of fascism and the Holocaust, WWII, antibiotics, nuclear weapons, the United Nations, the population explosion, the end of European imperialism, the computer, the Internet, human dominance over nature, environmentalism, feminism, human rights, the withering of the Soviet Union, and the rise of religious fundamentalism. Perhaps not all of these were true surprises. Some were predictable in abstract terms, e.g., the historical collapse of all previous empires could have suggested the end of European imperialism. Nonetheless, many of these surprises clearly led to emergence of the four great values of the post-WWII world—peace, freedom, development, and environment. One potentially ominous lesson from history is that rapid value changes often coincide with episodes of conflict that confer power upon the victors. Looking to the future, the speed, timing, and specific nature of events, technologies, and social movements will continue to surprise us, thus we should not be surprised if the values to which we aspire are either accelerated or are in retreat many times into the future.

From Here to There: the Value Struggle for the *Great Transition*

In the first section of this essay, we reviewed the current state of global values, attitudes, and behavior related to the three *Great Transition* values of quality of life, solidarity, and ecological sensibility. From the limited data available we concluded that there is already widespread support for the values of solidarity and ecological sensibility, although these are not necessarily reflected in either individual behavior or in that of nations and societies. Thus we argue that for these two values, the primary goal should be to bridge the attitude-behavior gap, not demand profound value change. Regarding quality of life values, however, the limited data suggests that much more fundamental value change is required.

The future history of *Great Transition* Initiative states:

> That the enhancement of the "quality of life" should be the basis for development is now so self-evident, it must be remembered that, over the eons, the problem of scarcity and survival—what Keynes called the "economic problem"—dominated existence. Then, the industrial cornucopia, while unleashing an orgy of consumption among the privileged and desperation among the excluded, opened the historical possibility for our post-scarcity

> planetary civilization. People are as ambitious as ever. But fulfillment, not wealth, has become the primary measure of success and source of well-being. (Raskin, 2006)

Unfortunately, fulfillment and the "quality of life" as the basis for development is not self-evident today. A third of humanity continues to struggle with mere survival and extreme scarcity while another third is just beginning to aspire to an "orgy of consumption". Indeed the greatest challenge of the next seventy-eight years might be to create the material conditions that allow for the emergence of values of fulfillment and not wealth as the definition of well-being, without doing irreparable harm to the biosphere or cohesive societies. Thus we would argue that meeting both basic human needs and some level of human wants should be a prominent value of the *Great Transition*. It should not be glossed over or assumed to have happened early in the future history of the *Great Transition.*

That the challenge may be great also emerges from the second section of our essay, which finds that the powerful currents and long-term forces of the future do not necessarily strengthen the desired values of the *Great Transition*, but may result in value change in surprising and counter-productive ways. We do believe that there are great trends that auger well for the long-term future, including improved well-being; increased human connectivity, rights, and solidarity; greater productivity and decreasing scarcity; environmental management and stewardship; and decreasing warfare. But these trends are punctuated by periods and places of retreat and loss which are made more threatening by the increase in catastrophic potential made possible by modern technology and global connectivity. Genocide, pandemic, warfare, famine, environmental collapse, ethnic or religious hatred, and societal failure, while perhaps less common, nonetheless loom large in catastrophic potential. Thus the value perhaps most needed for a *Great Transition* may be that of the World Social Forum—a belief that "another world is possible".

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