

Perspective

Service and the Human Enterprise

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Prologue: This essay on “Service and the Human Enterprise” is a rather sweeping overview of human biological evolution and cultural elaboration, with some thoughts on the challenges these present to our species in living sustainably with the natural environment and with other humans, followed by comments on the potential role of service in addressing these challenges. These are big issues, necessarily oversimplified here. My purpose in writing this essay is to provide a broad context and set a direction for the research and information work of the Global Service Institute.¹

The Human Enterprise

The human enterprise, our collective endeavor on this planet, has been a decidedly mixed story. On one hand, we are the most successful of species, incredibly advanced in intelligence, knowledge, technology, culture, and material well being. On the other hand, we have plundered and despoiled much of the natural environment, rendered extinct millions of species of plants and animals, and murdered each other in vast numbers, usually under the banner of some nation or religion.

It is clear that the biological and cultural dominance of humans has not been accompanied by an equally well-developed sense of responsibility or capacity for management. From the viewpoint of many other species and the natural environment, the human enterprise has been a disaster, a train wreck with history. From the viewpoint of we humans, it has been a sometimes troubled but nonetheless exciting journey. We tend to be enthralled with ourselves for having come such a long way.

The future is uncertain. Will we manage to preserve enough of the natural environment to sustain life for other species and ourselves? Will we learn to manage our aggression against other human groups so that, with technological advancement, we avoid total annihilation? These are perhaps the two most basic questions facing the human enterprise on the earth. Let us look a little more closely at the human pathway and prospects in these two areas.

Relationship with the Natural Environment

Humans have always done pretty much what they wanted with and to the natural environment, taking advantage of natural resources and other species. Until quite recently, both technological advancement and human population size were so modest that environmental impact was not a limiting factor in human well-being or reproduction. For example, the first major human-caused environmental impact on human well-being may have been the elaborate irrigation channels of Mesopotamia beginning around 5,000 B.C. After a couple of thousand years, irrigation led to salination of the land and diminished agricultural production. Indeed, this may have been a chief reason for the decline and fading away of Sumer, the first great civilization. However, the time

¹The Global Service Institute (GSI) has been established with initial funding from the Ford Foundation to help build a knowledge base, increase global information flows, and promote policy and program development in service. For GSI, service is defined as *an organized period of substantial engagement and contribution to the local, national, or world community, recognized and valued by society, with minimal monetary compensation to the participant*. GSI is focused on civic service, which is not in any way to downplay the importance of military service, but to focus on non-military service because it has received far less academic and policy attention.

span is too short to have affected the human genetic endowment. Sumerians with genes for conservation did not evolve as a result of this experience. Generalizing from this example, there is probably no genetic basis whatsoever for environmental concern and protection. If anything, humans are programmed to take from the environment whatever they want, whenever they can get it, because this is how the species has prospered and reproduced.

Cultural practices are more mixed. To be sure, the majority of human cultures have not lived in perfect harmony with the environment, but some have done well for a very long time. Native Americans, for example, maintained grasslands and buffalo herds over thousands of years, with apparently no diminution of the land and animals around them, until Europeans arrived. Some native and traditional peoples have understandings that they are part of the natural order rather than a totally dominant species. Of course, this was definitely not the story that came from the potent mix of science, Christianity, and capitalism that led to the Industrial Revolution. In this cultural story, humans are superior. With the technological, economic, and military successes of the Western World in recent centuries, a culture of environmental domination has been promulgated far and wide. Nonetheless, other cultures and understanding have quietly survived, and they are a resource from which we can learn.

A little perspective may be useful. We did not do severe damage to the earth until quite recently. Humans have lived for millions of years, *Homo sapiens* left Africa perhaps 100,000 years ago, agriculture began about 10,000 years ago, the industrial revolution started about 250 years ago, but probably 98 percent of all environmental damage has occurred within the past 100 years. During this time both technology and human population have exploded and put pressure on natural resources and other species. With few exceptions, humans did not realize what they were doing to the environment, or its lasting consequences, until the twentieth century. It was not until the last 50 years that environmentalism was even a word, much less an issue for discussion. We can be heartened that so many people now take the environment so seriously. We have a long way to go, but the outlook may be promising for several reasons.²

First, as indicated above, understandings of environmental sustainability -- in living examples, texts, stories, rituals, and songs -- are cultural treasures from which people can learn. Second, environmental knowledge, debate, and protections are increasing over time. So far these protections have certainly not kept up with the rate of damage, but environmental politics now play a significant role in decision-making. For example, witness the impact of the Green Party on elections in Europe, and on the 2000 Presidential election in the United States; and witness the international outcry of President Bush's 2001 rejection of the Kyoto treaty for carbon emission controls. Third, the net effect of science and technology to date has been harmful to the environment, but with a different focus, science can be expected to create greater efficiencies and environmental protections in the future. Fourth, it is now apparent that human population is unlikely to increase indefinitely. The latest projections suggest that human population will grow to a peak of nine to eleven billion sometime after 2050 and then will begin to decline.

² There is an active debate regarding the trend in environmental damage. Some evidence in the United States points to a turn around in environmental damage, with cleaner lakes and rivers and more forested acres than a few decades ago. These conditions are positive and hopeful, but they are not a worldwide trend. It is too soon to conclude that global environmental problems are abating or likely to be resolved.

If humans can cease damaging the environment, much of it will recover within an amazingly short period of time, on the scale of centuries rather than millennia. Of course, some losses, especially of extinct species, are irreversible, and nuclear waste remains harmful for thousands or tens of thousands of years. But most things bounce back. Where there is asphalt today there can be forest in 100 years.

Altogether, we can be hopeful that humans may eventually live in greater harmony with the world around them. However, we have a long way to go down this road and it will not happen automatically. We need ways to learn. Fortunately, all is not left to the forces of biology and culture beyond our control. Humans can create ways to learn.

The challenge is to *expand opportunities for experience and education in values, knowledge, and practices regarding environmental sustainability*. One of the best ways to do this is to plan and structure experiences that actively introduce these issues, accompanied by systematic reflection.³

Relationships with Other Human Groups

Living with the group is fundamental to being human. Over millions of years of human evolution, group cooperation was biologically adaptive and, as a result, is now deeply embedded in our genes. Long before there was spoken language, our precursors and ancestors in the genus *Homo* worked together to hunt and to protect the group. The group was essential because humans were slow of foot, weak of limb, lacked natural weapons such as claws or long teeth, and lacked even the minimal protection of a thick skin. Humans were not well equipped to survive as lone individuals, and those who tried to do so were not very successful at reproduction. We have inherited a group nature. We are essentially social beings.

The group nature that we have inherited, however, is narrowly defined and tends to be exclusionary of other groups. In our evolutionary history, small bands of proto-humans and humans competed for habitat and resources. Fighting among groups was probably common, and indeed there is a growing archeological record of human cannibalism. On a larger scale, the evolutionary record is punctuated by species of *Homo* who did not survive, eliminated by or blended with a competing species. Only *Homo sapiens* has reached our era, still carrying a genetic endowment of strong in-group attachment, and strong out-group suspicion. These characteristics are expressed today in the form of ethnic, religious, and national identities, which have been the source of the greatest human tragedies.

The record is long and bloody. Looking at only a few examples from the past several hundred years, Europeans came to the New World and killed or subjugated tens of millions of native peoples, thinking of them as savages, less than human. In what is now the United States, this amounted to near total genocide.⁴ Europeans and Americans enslaved Africans for hundreds of

³ Readers will recognize this as a description of *service learning*. There is today considerable experience and an expanding knowledge base on how to do this successfully.

⁴ The near total elimination of native peoples in what is now the continental United States is one of the largest genocides in human history. No other nation in the Americas or perhaps the world is built upon the deaths of so

years, thinking of them as less than human.⁵ One African tribe enslaved another; some continue to do so. German and Japanese nationalism, based on exaggerated racial arrogance, was the root cause of World War II.⁶ During the past decade, ethnic massacres have occurred in Rwanda and Bosnia. As I write this, Palestinians and Israelis are killing each other, yet again.

More than biological evolution has been at work. From earliest human pre-history, the group allowed specialization of function. Some hunted, while others tended the fire. With specialization, intelligence and consciousness, the greatest of human assets, could be applied to the natural world to create new technologies. Stone tools became more sophisticated; pots were shaped from clay; fishhooks and needles were carved from bone. New technologies for hunting, gathering, storing, and creating led to greater abundance and better living conditions. Based on this abundance, people could live in larger groups and lead more secure and stable lives.

Eventually, some ten thousand years ago, *Homo sapiens* learned to domesticate food plants and animals and the Agricultural Revolution soon led to greatly increased wealth. For the first time, vast resources were available for religion, arts, and crafts. People could live in large, stable communities. Societies became more complex. Group cooperation was essential in these new conditions, not only for protection, but also for every aspect of social and economic life. As mentioned above, agriculture around the Tigris and Euphrates depended heavily on irrigation, and elaborate irrigation systems were eventually built and maintained. These were the first major public works, the first technological infrastructure. Ever greater abundance and specialization led to production, trade, and the development of economies. Formal agreements, recording, and accounting were necessary to manage and keep track of these interactions. In turn, these were associated with the first use of written language.

What we call civilization -- with complex social structure, formal governance, written language, elaborate art, large buildings, and mathematics -- first emerged in Mesopotamia in the third millennium BC. By this time, humans were already deeply embedded in a culture, society, economy, and polity that required and reinforced group cooperation in virtually all things. The story of recorded history is of ever more complex human groupings and arrangements. Settlements and city states eventually were organized into sprawling Kingdoms in ancient Egypt, Greece, and Rome. Other civilizations emerged in East Asia and the New World, perhaps independently, but along similar patterns. Following the Dark Ages in Europe, modern states took shape, with ever greater authority, and were continually reshaped by conflict and catastrophe, plunder and prosperity. In sum, humans are group animals not only by biological

many native people. This stark fact has been almost totally ignored in the United States, but events so large cannot be permanently swept under the rug.

⁵ Those of us who think of ourselves as scientific researchers will do well to remember that science has for the most part played along with common viewpoints about racial superiority. We may like to imagine that science today is different, but very likely we too are applying cultural perspectives and interpreting phenomenon in skewed ways that we are incapable of recognizing in our time. Only much later will our biases be apparent to others.

⁶ The depth of self-delusion regarding in-group and out-group can be extreme. To take a current example, the Japanese were harsh in their treatment of other peoples during World War II, and many nations in East and Southeast Asia remain leery. But more than half a century later, the Japanese have great difficulty acknowledging basic facts in the historical record and accepting responsibility. They write textbooks that gloss over their aggression, and other nations protest.

evolution, but also through tens of thousands of years of cultural elaboration. As a result, humans have a propensity, of both biological and cultural origins, to identify with the in-group and be hostile to out-groups. This is one of the primary characteristics of humans. The record of cross-group interaction is marked by competition and conflict.

However, there is at least one very bright spot in this picture. It is that the *nature, type, size, and location of the in-group do not seem to have any fixed limits*. People can identify with nations, with religions, with political parties or ideologies, with small groups or large groups, with local groups or far-flung groups. Different identifications can occur among different people in a given society. This extraordinary flexibility suggests that people can (and often do) learn to redefine the in-group during their lifetimes.

The challenge is apparent. Humans should work to *extend the identified group* so that it reaches beyond ethnicity, country, and religion.⁷ We should aim to expand the understanding of in-group for as many people as possible. How to do this? By providing larger, more diverse, and more encompassing opportunities for people from different groups to share the same experiences, identification, and meaning.⁸

Consistent with human nature as described above, and as many political rulers have figured out, a key to unified action among diverse peoples is identification of an external “enemy.” In our era this is usually applied within nation-states, mobilizing a nation for war or some other national struggle. But this same concept can operate on a more abstract level, and on a larger scale. A goal of the human enterprise should be to identify “enemies” that everyone can “fight” together. The possibilities are many. They include illiteracy, the worldwide load of carbon emissions, the challenge of HIV/AIDS, and the digital divide. In identifying “enemies” that are not other humans, the in-group/out-group nature of humanity can be harnessed toward common endeavor.

Surveying the past century, there is reason to believe this is possible. We can look to achievements such as the worldwide eradication of smallpox and polio, the creation of the United Nations and its many programs for peace and social development, international treaties on environmental degradation, multi-national cooperation on large science and technology projects such as space exploration, and rudimentary international legal authority over genocide and crimes against humanity. While none of these examples is perfect, each represents a huge advance over the in-group/out-group conflict patterns that are embedded in human nature and cultural history. These examples confirm that humans can and do purposefully create new social institutions that can hold at bay our lesser angels.

Service As a Social Innovation

Service can be defined as *an organized period of substantial engagement and contribution to the local, national, or world community, recognized and valued by society, with minimal monetary compensation to the participant*. Examples of service in the United States include the Civilian

⁸ The intellectual foundations for such work are available in social psychology. For example, there may be potential in the Intergroup Contact Theory of Thomas Pettigrew (see *Annual Review of Psychology*, 49, 1998: 65-85).

Conservation Corps of the 1930s, and the current AmeriCorps, Peace Corps, and Experience Corps for elders. Many nations have some type of civic service program. Such programs are becoming more common and are expanding as we begin the twenty-first century.⁹

What does service have to do with the very big issues described above? Surely service by itself cannot meet these enormous challenges. Many social innovations will be required if humans are eventually to live responsibly, sustainably, and peacefully on the earth.

I emphasize *social* innovations because we cannot put nearly as much hope in biological or technological innovations. As pointed out above, biological evolution is too slow to change human genes on a time scale that will matter. Perhaps humans will one day seek to intervene in this process via biogenetics (can there be a gene for environmental protection?), but this is very problematic and uncertain. In the meantime, we are what we are. Human nature as we see it today is what we have to work with.

Turning to technology, we can be encouraged by technological innovations that increase efficiencies and protect the environment, but on the whole technology has been more negative than positive for the environment. Technology has certainly extended human life and population size, but it has also produced trash, toxins, and weapons of mass destruction. In any event, what happens with new technological innovations will depend on human decisions and institutions.

As described above, humans are fundamentally social beings and social innovations hold the most promise in lifting the chin of humanity so that we can see further ahead than our plodding footsteps, and in so doing, we can learn to walk with greater purpose and care. On this score, there is reason for hope. Humans have been remarkably inventive in creating social institutions for a vast range of purposes, including governance, religion, economic exchange, education, inquiry, association, charity, protection, and justice. Together, these social innovations are more fundamental, and of greater consequence, than all of what we call science and technology. Indeed, *effective social institutions underlie all knowledge accumulation, technological advancement, and economic growth*. In many areas, the academic community is just beginning to focus on the scope and nature of these social achievements.¹⁰

Returning to the very big questions raised above – sustaining the natural world and ourselves -- we are in need of social innovations that increase vision, awareness, engagement, and cooperation. *Service* is one such innovation. Certainly it is not a panacea for every challenge facing humankind, but it is a step in the right direction.

⁹ The history of service is largely positive, however examples such as the Hitler Youth in Germany during the 1930s and the Red Guard in China during the 1960s remind us that service can sometimes be turned to evil purposes of the state. Negative examples of service must not be forgotten, but they are historically uncommon. The danger arises primarily in national youth service that is created and controlled by an authoritarian state.

¹⁰ An example of greater academic attention to institutions is “the New Institutional Economics” for which Douglass North won a Nobel Prize in 1993. North suggests that economic growth over time depends on effective institutions for the protection of property rights and enforcement of contracts. See *Institutions, Institutional Change, and Economic Performance* (Cambridge University Press, 1990).

Nation-States and the Era of Military Service

By the time the Industrial Revolution arrived in Europe in the 1700s, nation-states had become the dominant form of social organization. Through European expansion, colonization, and eventual independence, nation-states were to take over almost the entire planet (only Antarctica has escaped). Nation-states are today the building blocks of the world, perhaps weakening as we enter a period of “globalization,” but still by far the strongest political, economic, and social units.

Nation-states have needed armies for protection and “service” has historically meant military service, dating at least from ancient Rome. This has remained essentially unchanged for two thousand years. When I was growing up in a small town in Kansas during the mid-twentieth century, being “in the service” meant military service, language that is still widely used today.¹¹

However, as technology advances, there is less need for large armies. In recent decades there has assuredly been a decline in military conscription worldwide and also a decline in numbers of people serving in armies.¹² For example, in Israel, which is perhaps the most militarized nation on the planet, the army does not need all of the young people who are conscripted; and indeed, about 60 percent of Israeli young people, for one reason or another, do not serve. The challenge for Israel and many other nations is to move from a “people’s army” to a “smart army.” Similarly, France has recently abolished military conscription; China has reduced the size of its army; and there are many other examples.

Despite the declining demand for military national service, attitudes about serving the nation remain strong and are nearly universal. One reason for this is that military service has traditionally served more than defense purposes. Important secondary purposes of the military include non-military projects (e.g., disaster relief, building infrastructure), citizenship training and fulfillment of citizenship obligations, and integration of diverse populations by class, race, and religion (sometimes called nation building). These secondary purposes of military service can be very important, but the military is not the only way, nor necessarily the best way, to accomplish them.

Toward Civic Service

A civilian or civic service can probably accomplish non-military objectives of service better than the army. For example, in Israel the likely alternative to military service is not the absence of service, but some form of civic service. This discussion, while tentative, has already begun. Other nations are also looking for ways for young adults to work on large projects, serve the country, and get to know one another, even though there is a declining demand for soldiers.

¹¹ Regarding meanings of phrases, “doing service” typically means participating in some form of civic service. Although not yet widely in use, this phrase might one day become as common and generally understood as “in the service.”

¹² Good quantitative research on the global decline in military conscription and size of armies, and accompanying rise of civilian or civic service, in the late twentieth century is not yet available. This study should be a high priority in research on service.

Service is breaking out of its national service origins. Within nations, we see more and more service opportunities at the state and local level, and organized by non-governmental organizations. Indeed, AmeriCorps in the United States is not a national service program at all, but rather a loose affiliation of a tremendous range of service programs sponsored by state governments, local governments, and non-profit organizations. All AmeriCorps participants wear an insignia, but their primary identification is with programs like the Washington State Conservation and Service Corps; a neighborhood clean-up and construction crew at Grace Hill Settlement House in St. Louis; the National Demonstration of Individual Development Accounts sponsored by the Corporation for Enterprise Development in Washington, DC; or some other program.

With increased globalization, we see increased cross-boarder awareness and action in all spheres. This is happening more rapidly in economic matters than in social and environmental affairs, but expanded cross-boarder cooperation in every arena are almost certain. Armies are not well suited for this. Armies, by definition, are designed to defend one group against attack from others. The primary assumption is conflict, not cooperation. Civic service, on the other hand, is very well suited to cooperative, cross-border endeavors. Indeed, civic service could become a vehicle for expression of a new global ethic and global citizenship. Programs like Canada World Youth and the Peace Corps in the United States may become more common. Preliminary planning for a North American Community Service program (among Mexico, the United States, and Canada) is underway. There is a preliminary proposal for an Arab-Israeli Youth Corps to work on regional projects such as a hiking trail that crosses borders in the Middle East between Arab nations and Israel. This proposal is going nowhere in the current hostile environment, but if peace is eventually to come to the region, it will be in part through such efforts.

The above patterns of national, sub-national, and supra-national service are occurring because the values of common cause, community building, and mutual endeavor have not diminished. With changes in technology, economies, work, and social organization, these values are finding new pathways for expression. In many countries, a majority of the population no longer lives in traditional rural communities or small towns where neighbors help neighbors. Nonetheless, people, by their nature and cultural traditions, are still looking for a way to be part of the community. Service is a likely pathway because it is extraordinarily flexible and can replace, in a satisfying and successful way, informal community ties that are not as strong as they once were.

There is growing realization that service can occur across the life span and should not be confined to a short period in early adulthood. In the United States and other countries there are increasing innovations in service for school age children, college students, young adults, adults, and the elderly. A growing discussion of “productive aging” for older adults and service innovations, such as the Experience Corps in the United State, hold considerable promise. As these innovations expand they will contribute not only to the availability of service roles, but also to a new mindset about service as a normal part of life at many different ages.

Unlike military service, civic service is a flexible social innovation that can be combined with other forms of voluntarism, with schooling, with paid employment, and with retirement in creative patterns that fit the interests and requirements of many different people and situations.

The Challenge Ahead

The twentieth century was a time of environmental degradation on a previously unimaginable scale, including depletion and pollution of groundwater supplies, loss of tropical forests, extinction of millions of species of plants and animals, and creation of radioactive disaster areas, dead zones in the ocean, and a huge hole in the atmospheric ozone layer. Also, the twentieth century was a time of human killing on a previously unimaginable scale, including world wars that took tens of millions of lives, mass starvations, the first use of atomic weapons, and horrific genocides. At this juncture of history, only a fool would conclude that we should carry on with business as usual.¹³

As described above, human nature and cultural heritage make us ill suited to sustaining the natural environment and getting along with each other. On this planet, we are the worst enemy of nearly everything, including ourselves. Yet at the end of the day, human intelligence, creativity, and willpower may prevail over human nature and heritage. If we decide that we should learn to take better care of the earth and one another, we can do better. This is a decision that the human enterprise collectively, through its created institutions, and in small increments and actions everywhere, will have to make. The future of the planet and our species will depend on this achievement.

If we are to succeed, governments at all levels will have to play a central role. Somewhat unfortunately, we live in a world where individualism and anti-government rhetoric are in the ascendancy. Nonetheless, government at its best embodies many of the greatest of human achievements: representative leadership, provision of public goods, organized collective endeavor, rule of law, protection of human rights, and counterbalance to arbitrary power and greed.¹⁴ Though today viewed as interfering with capitalism and economic growth, government in fact provides the institutional foundation for economic exchange and growth. The public sector has been and always will be essential. As in the past, social innovations will have to be consciously designed, implemented, nurtured, and expanded, very often with support and resources from the common endeavor of government. This does not necessarily mean that government should *do* things. Action is often better carried out in the non-profit and private sectors. But government must often provide the framework, resources, and oversight that make social innovations possible.

¹³ As Edward O. Wilson recently observed regarding the natural environment: “In the real, real world, governed by both the market and natural economies, all of life together is locked in a Cadmean struggle. Left unabated, the struggle will be lost, first by the biosphere, and then by us.” (*The Ecological Footprint: The Biosphere and Man, Vital Speeches of the Day*, Feb 15, 2001).

¹⁴ This comment on the achievements and necessity of government does not apply uniformly around the world. Some governments are ineffectual, some are corrupt, and some are evil. Limitations on the quality and capacity of government in some nations pose huge barriers to social and economic development of every kind, including the development of service.

As we begin the twenty-first century, the third millennium AD, we are about five thousand years from the beginning of human civilization and recorded “history.” This is a blink of time compared with the age of the earth (4 to 5 billion years), the presence of life on the earth (perhaps 3 billion years), the existence of our genus *Homo* (a couple of million years), and even the human use of language (perhaps 400,000 years). Yet so much has happened in the five thousand years of civilization. Most of it could not be foreseen. By way of illustration, what Sumerian could have imagined things that we take completely for granted today, such as a baby bottle, or a pair of eyeglasses? Now think for a moment what humans and our planet might be like in another five thousand years. Almost anything is possible. We humans could be long extinct, having obliterated ourselves with atomic weapons. Or we could be living technologically sophisticated, engaged, enlightened, and loving lives. Any utopia we can imagine today is possible, and indeed anything we can imagine will seem ridiculously unimaginative by the year 7,000 AD.

This future is ours to create. Over the past 500 years we have lived through a period of rapid development in science, technology, and economic growth. If we are to survive in the long run, the next great human achievements may be in social innovations that create sustainability. In this regard, purposeful institution building will be even more important in the years ahead than it has been in the past. Although it may seem odd to say this in our time, the social sciences, especially psychology, sociology, and political science, and the applied social sciences, especially policy innovation, management, and social work, could be the sources of the most fundamental achievements in the next 500 years.

Service offers considerable promise as an institution that can respond to the major challenges facing our species and our planet. As service develops, it will be of most substantial and enduring value if it takes into primary consideration the human relationship with the natural world and with other human groups.

As this occurs it should be accompanied by a strong research agenda. This agenda should be guided by two main propositions. The first is that experience and reflection on environmental projects leads to improved values, knowledge, and practices regarding environmental sustainability. The second is that experience and reflection with people from different backgrounds leads to broader interests and identification. These two propositions are likely to be generally true, but the research challenge for service is to specify this theory and state and test particular hypotheses that have *applied implications that are likely to be productive*. Of course, many other issues and questions can add to the knowledge base on service. However, the purpose of this essay is to say that the above two propositions are more fundamental than others (not everyone will agree with this, in which case this can be a beginning point for discussion about which research issues are most important). As knowledge begins to build, it should be shared as widely as possible, taking full advantage of the internet.

The possibilities for innovation are vast, limited only by the human imagination. Fortunately, regarding imagination, both biological evolution and cultural elaboration have given us remarkable tools and resources to work with. Humans have the ability to imagine and create institutions that foster awareness, learning, development, and stewardship. The possibilities for

research and information have never been as good. We have developed tools of inquiry that can help us ascertain whether or not social innovations are successful. We have extraordinary and rapidly expanding ability to share information quickly around the globe.

A wide range of innovations are possible. For example, what if every university in the world required six months or a year of service as a graduation requirement?¹⁵ What if an Elder Service Corps were created so that every older adult had an opportunity to contribute to a community of her or his choosing?¹⁶ What if every nation spent the equivalent of two percent of its defense budget for civic or international service? Five percent? Ten percent?¹⁷ These are not far-fetched ideas. With a clear eye and hard work, any one of these, or indeed all of them, could become reality within a few decades.

It is conceivable that our great great grandchildren, one hundred years from now, will look back at the twenty-first century and conclude that it was a turning point, a century when damage to the natural environment abated, when wars, genocides, and epidemics became less frequent.¹⁸ Of course, odds are against this, but it is within reach. If it is to occur, it will be because we set about early in the twenty-first century to generate the knowledge and create the social innovations to make it happen. Service can be part of this story.

¹⁵ Many universities in Latin America require a year of service for graduates, particularly in medicine, and a growing number of universities in the United States -- members of Campus Compact, founded by President Howard Swearer and Susan Stroud at Brown University -- promote and sometimes require a period of service.

¹⁶ In surveys, older adults say they are very interested in having such opportunities. Marc Freedman, who created the Experience Corps, has shown that such programs can be very successful.

¹⁷ The idea of using a percentage of defense spending for civic service is not original. It was proposed in US federal legislation by Representative Pete McCloskey in the early 1980s, and was proposed in 2001 by President Vicente Fox of Mexico.

¹⁸ Since I first drafted this essay, commercial airplanes were hijacked and crashed into the World Trade Center and Pentagon. Everyone is numb from the shock; we did not imagine that such actions were possible. But in fact, the world has seen vicious hostility toward an out-group many times before. The cultures of civilization keep most inter-group violence in check, but in some deeply flawed cultures hatred of the out-group is legitimized and nurtured. To be sure, service as a social innovation seems like a weak reed in the face of such hostility. But in the long run, if we do not reach across the boundaries of nations and religions to create more common experiences and meanings, we are likely to see more of the same.