Dearest Children,

What kind of a world will your children, my grandchildren, face?

That is perhaps the most fundamental question of your lives. Some of the forces shaping the answer are slow to take effect, often unperceived but almost as inexorable as an advancing glacier; others are rapid, dramatic but answerable to the actions of your generation. Understanding them is not easy but failure to do so will exact a heavy, perhaps even a fatal price. Since I have now reached an age in which I am no longer struggling with them, let me try to lay out what I perceive as a sort of road map for you.

To mark out that map, I pick what I imagine you would think of as your most desired objectives: security, freedom, health, prosperity, a livable world. Under each, I will attempt to show both the obstacles that can prevent you from reaching them and how I think you might advance toward the life you desire. First, security:

A *Security* has many aspects but by it I mean here quite simply your ability to live without violence.

Violence is of various kinds and it is as important to differentiate them as to differentiate various sorts of illness: the "medicine" that ameliorates or cures one kind does not work on another. So let me, rather sweepingly, put violence into four categories: inter-state war, violent political action, crime and pathology. First, war:

1) *War* is an act of policy and occurs among states. It usually results in the deaths of millions of people and the disruption of lives of many times as many more. Between the outbreak of the First World War in 1914 and the end of the 20th century, about 190 million people were killed or died from causes related to war. Whole nations were uprooted and countless lives were shortened, disrupted or blighted. Consequently, most thinking people pondered the causes and the suggested remedies. Analyses and prescriptions poured forth in profusion from scholars and statesmen, institutions like the League of Nations and the United Nations were created and great political movements were organized. Alas, despite all the effort, little real progress was made. A glance at any newspaper shows that actual war and the threat of war are still with us today. They probably will be during your lifetime. The reasons are many. Probably the most fundamental is that war is the accepted means nation-states have to change their relationships to one another when all else fails.

In my active years, some of us naively thought that if war became too horrible, as it certainly does with nuclear weapons, even the most stupid would find it unthinkable. That was the basis of the policy that became known as "mutual assured destruction." It was, as the acronym tells us, "mad" to make war. We, the Soviet Russians and a few other countries more or less agreed. We put the "*jinn*" of nuclear war in a bottle and,

while we certainly kept the jinn (that part of our industrial, military and academic establishments that dealt in nuclear affairs) well fed, we corked the bottle. Unfortunately, we didn't put the cork in very tightly; now it is lose and the jinn is almost out of the bottle.

We and the Russians were, or at least thought ourselves to be, "responsible." At that level of danger, we understood one another and the terrible power at our command. Responsible or not, we came close on several occasions, notably but not uniquely in the Cuban Missile Crisis, to actions that might have destroyed the world. But, since there were only two of us, we found means to contain the jinn in the bottle.

Now, the situation has grown far more perilous. However responsible we thought ourselves to be, others naturally did not wish to entrust the world to us. They read our analyses and agreed with our concept of "security." Then they took our conclusions and applied them to themselves: the result was that they too wanted the ultimate weapon. One after another, Britain, France, China, Israel, India and Pakistan began to build nuclear weapons; a few countries, notably South Africa and Canada, decided not to join the crowd, but "proliferation" is now a fact and it will create a more complex world during your lifetime since a number of other states that have not yet made bombs have acquired the means (fissionable materials, components and skills) that would enable them eventually to do so.

So, a perhaps vital question for your generation is: can the spread of nuclear weapons be reversed or at least stopped? If so, how?

Members of the "nuclear club" say, "let's keep the membership restricted to us." But they also say, "we are not going to give up our weapons while you have yours." And what individual countries end up meaning is "we are not going to stop acquiring them while you have *more* than we." Recognizing these things, we and the Russians worked long and hard on means to reduce the number of our weapons. But the best we could come up with was a formula that took us down from "superiority" (having more weapons than the other state) to "sufficiency." That is, we did not wish to consider having fewer bombs than would obliterate any and all possible opponents. The other members of "the nuclear club" find that translates into all-out programs designed to give each of them several hundred weapons of at least the size that obliterated Hiroshima.

Those outside "the nuclear club" are mostly trying to get in. The main restraint, the "lock on the door," is not policy but money. Acquiring weapons is costly, and most nations are poor. But few outsiders think it wrong to want bombs. Before India got them, the head of its nuclear program was frank: 'you cannot expect India to forego nuclear weapons when others have them.' So, no matter what the cost, India began to produce them.

What have we done about this spread of nuclear weapons? The record shows that we are prepared to admit to membership those who actually get bombs. We were not very happy in the late 1950s when Israel (with the help of South Africa and France) acquired them, but we made no effort to stop them; we were more unhappy when China got them in the 1960s, but once it did we accepted the fact. And while we told India and Pakistan we did not want them to build bomb factories, and after they went ahead anyway, we briefly imposed penalties ("sanctions") on them, we quickly accepted them as nuclear powers. This is because probably the only way we could make states give up their bombs would be to go to war. And that would be terribly dangerous against a country that has nuclear weapons. It is arguable that if the dictator of Iraq, Saddam Husain, had been smart enough to wait until he had a nuclear weapon, we would not have reacted so sharply to his invasion of Kuwait. To have attacked a nuclear bomb armed Iraq might have cost us and our allies hundreds of thousands of casualties. Does President Bush really contemplate attacking Iran or North Korea if we discover that they have nuclear weapons? It is hard to imagine.

So what does this mean for the future? The answer depends in part on the context: if we (particularly the United States and Russia) are moving toward some form of restraint, as we have been trying to do in recent years, I think some or perhaps all the non-and proto-nuclear states would at least move slowly and perhaps could be convinced that there are better ways to spend their money. If, on the other hand, the trend is toward acquiring or even threatening to use nuclear weapons, those who don't yet have them but who can get them will almost certainly try to do so.

What is happening today I find terribly alarming and you should too. The Bush Administration has announced that it is pulling back from half a century of efforts at restraint and is giving up various hard-won agreements. It has declared that it now intends to emphasize what it sees as our own national interest regardless of the consequences. This new policy includes what is now called "Starwars," the building of a new generation of "tactical" nuclear weapons and, most alarmingly, the decision to revoke our promise never to be the first to use a nuclear weapon. This Administration believes that such policies will enhance American "security," but as viewed by others, including the Russians, they are provocative. Why is this so and why is it important?

The simple answer is that each nation-state and each ruler views "security" from his own vantage point. What arguably could give America security could make another state profoundly, even desperately, insecure. Consider "starwars." It sounds great to have a big electronic shield up in the sky that could stop any missile fired at us by anyone. Why should anyone object? The Russians point out that if America could achieve an absolute protection against nuclear weapons, it might be tempted to make a first strike if Russia did something it did not like. This would precisely unbalance the stable relationship we and the Russians have spent half a century to achieve. So what will they do? The answer is simple, clear and dangerous: they will just build so many more missiles that even if we create an effective shield (which certainly will not be achieved during my lifetime and may not be achieved during your lifetime), it will not work. But it will destroy the elements of trust and understanding which have taken us and the Russians so long to achieve and will make us both more "trigger happy" than we have been for the last 50 years Another important aspect of the new, indeed revolutionary, policy now being discussed by the Administration is using nuclear weapons against "rogue" states. "Rogue" states are those whose policies we dislike or deplore but who do not yet have nuclear weapons. What will be the result of such threats? Everything I have ever learned convinces me that it is less likely to inhibit them (or as we see it, to "reform") than it is to frighten them into doing everything they possibly can to acquire nuclear weapons. As my grandfather James H. Polk would have said, the statements amount to pointing a gun at a man without killing him. They will want to make us sure that if we attack them, we will pay a heavy price. To put it baldly, if I were the ruler of one of the states on President Bush's "axis of evil" list, say Iran, I would right now be bending every effort to acquire one of those "trumps," a weapon that will (they hope) make us unlikely to attack them. Everything we have learned in the years of confrontation with the Soviet Union argues that they would be wise to follow this policy.

Could Iran do it? The short answer is 'yes.' There are no fundamental secrets about making nuclear weapons. Technical know-how, materials and components are now widely scattered among states. It was not difficult for India and Pakistan to acquire them. If India and Pakistan could, Iran certainly can. If Iran can, many other states can too. And, finally, even if making bombs is difficult, buying them can never be ruled out. Frankly, I am astonished that (our government believes) no country has yet bought bombs or fissionable materials. With the break-up of the Soviet Union, almost everything has been for sale. The Chinese have sold missiles to a number of countries. Russian and Chinese technicians are known to have worked in a number of countries interested in acquiring nuclear weapons. Is Pakistan likely to restrain itself under foreseeable conditions? Perhaps but far from certain. Thus, even if, which must be at least questioned, no bombs have vet been sold, is it likely that we will always be so lucky? I doubt it. And, if we proclaim our intention of ousting (that is killing) "rogue" leaders, they certainly can be expected to make the utmost effort to buy their "security." For a billion or five billion dollars, I am sure they will be able, eventually, to get at least one bomb. Thus, I fear that we have set foot on a path that will lead us, during your lifetime if not in mine, to terrible new dangers.

Quite apart from the nuclear issue, war among states can arise from other causes. In Western Europe and North America, I think, most issues that have caused wars in the past (mainly frontiers) have been resolved. In other areas, while potential causes of war among states may not have been resolved, we do seem to be in a period of diminished likelihood of "traditional" inter-state warfare. But, if America actually attacks the states President Bush has named, this period of relative peace among states may quickly and dramatically end. This is, of course, unpredictable. What is not only predictable but is already a clear and present danger, is the other major form of violence, political action.

2) Violent political action arises, I believe, because of the confluence of two trends: first, partly as a result of the spread of education, the rise of literacy and higher standards of living, larger proportions of populations than ever before are now "politicized." That is, they have assumed the right to decide *who they are*. Beginning roughly a hundred years ago, first in the Balkans and then elsewhere, groups who did not

feel "at home" in the states that controlled their lives began assert their national identity. Defining themselves in terms of religion, ethnicity, culture or geography, they proclaimed their separate nationhood.

Second, the states in which these groups lived as tolerated minorities regarded their action as treason, and usually set about trying to suppress them.

The world is full of such groups: In Europe, the Basques, the Irish, the Scots, the Corsicans, the Bosnians, the Croats, and others; in the former Soviet Union, scores of peoples of whom some have now acquired statehood while others (like the Çeçens) have not. India is made up of over 60 groups that differ from one another in language and other important ways. China grew out of hundreds of minorities. And, in Africa, the number is almost beyond counting. The United States is one of the few large countries that has, incompletely to be sure, managed to make different sorts of people feel at home. Elsewhere, minorities have often been incorporated by force. In broad terms, incompatibility of statehood and nationhood has resulted from imperialism. The uncomfortable present is the child of the powerful past.

The past is particularly evident in Africa. There, during the past two centuries, European imperialists redrew the map, dividing up the nations and tribes among themselves without regard for geography, language, religion or local preference. They then set about "remaking" the natives in something like their own image. In British areas, they taught English; in French areas, French, in German areas, German, in Belgium areas, Belgian French and in Portuguese areas, Portuguese. Soon members of the same people, then divided by a European-imposed frontier, found they could no long speak easily to one another. It wasn't just language, of course, but law, administration, the way land was owned, what one studied, in short a whole new way of life. The European rulers also suppressed local forms of government and administration so that, when they finally withdrew, mainly after the Second World War in the 1950s and 1960s, the natives had little experience in handling their own affairs. The Belgium-ruled Congo is perhaps the worst case, but even relatively sophisticated Algeria had almost no one who had ever even run as much as a laundry, much less a bus line, or was trained to be a doctor or engineer.

The turmoil, horrible wars, poverty, corruption and misery about which we read almost daily were predictable. The old ways had disappeared and most of the new was merely a collection of alien forms without roots in the land. Thus, as leaders came to the fore, often by violent or criminal means, they were virtually alone, unchecked by independent institutions. There was no free press, no independent judiciary, no grassroots political organization. In short, there was neither any structure nor any tradition of the give and take, the bargaining, the seeking of accommodation – what we call "politics," --that makes a society function peacefully. Only in one area were the states "modern," their armies. Soldiers had organization, mobility and guns. So state after state became a military dictatorship. The only groups that could challenge the soldiers were what were left of the traditional societies, tribes or "nations." That is why we have seen war after war in Africa as such groups as the Tutsi, Hutu, Nuer, Dinka, Ibo, Kikuyu and others struggle for power. Or just for survival. However much Africa differs from Ireland or Kurdistan and Kashmir, from the land of the Basques or Palestine and Tibet, many of the peoples share the feeling that they are strangers in their lands. However different their languages, cultures, religions, most seek what our President Woodrow Wilson, nearly a century ago, called "the selfdetermination of peoples." Thwarted in their quest, often by military suppression, they often form militant organizations and fight for what they believe to be their rights. This has been the cause of most of the nearly 300 wars that have raged around the world since the end of the Second World War. So what can be done about it?

Three policies have been tried: the first is suppression. State after state has beaten down its recalcitrant minorities. Even resorting to massacre, none has succeeded. Internal wars have gone on for generations and even with casualties reaching into the hundreds of thousands no "solution" was reached. Examples abound. One that is relatively little known but will shortly be back in the headlines is in the Philippines: there, just before the First World War, American troops under General Pershing fought the Muslims on Mindanao who wanted an independent state. About 200,000 Filipinos were killed. But, today, we are putting troops into the Philippines to fight the same war all over again. On the other side of the world, the Russians have been fighting the Çeçens for almost two centuries. In the 19th century, they killed or forced into exile almost half the Çeçen population, hundreds of thousands of people, but the war still goes on. Britain fought almost continuously against the Irish since the time of Queen Elizabeth in the 16th century until it gave up in the 20th century and recognized an Irish Republic. France invaded Algeria in 1831 and finally, after years of war, withdrew in 1962. Israel has been fighting the Palestinians since the 1920s and has failed to suppress them.

The second policy that has been tried is to avoid the political demand of the rebels but to try to win them over economically. "Fill a man's belly and he will be content" is, crudely put, the essence of this policy. To our consternation, we have often found that when the belly got full, the arm got stronger. Again, examples abound. Take one: in the Eisenhower Administration, we tried to create a labor shortage that would suck away the Palestinians from Palestine – "give them a job in another country and they would forget their homeland." It didn't work. Such attempts may seem to succeed for a time but fail in the long run because they do not address the issue seen by the participants, their desire to become a nation-state.

The third policy is the one advocated by President Wilson but rarely tried: allow the "unrequited nations" to express their will. When it is tried, it often works. After England finally allowed Ireland its political freedom and France allowed Algeria its political freedom, wars ended and the newly independent countries established cordial relations with the former imperial power. When not tried, the results are frequently continual unrest or even war. Having taken over Kashmir by a sort of political trick in 1947, India has refused to let the Kashmiris vote for half a century. And, despite a draconian suppression in which scores of thousands have died and many others languish in prison, it has not ended the war. More is involved, of course, that mere pig-headedness: the Indians (with the Kashmiris) like the Chinese (with the Tibetans and Uighurs) and the Russians (with the Çeçens and others) fear that if they allow these peoples to form separate nation-states, others will follow their lead and their empires will break up. Allowing self-determination is not a comfortable policy. The old rulers fear that hatreds and suspicions, born of decades or centuries of cruelty, will continue to distort even benign and generous efforts. The best that can be said of such a policy is that everything else is far worse. In my judgment, the sooner it is generally applied the more likely you are to live out your natural span in some degree of security.

3) *Crime* in various forms will probably always be a feature of your life. Asked why, the American journalist Lincoln Steffens long ago replied that it is all in the Bible: Adam said evil doing was not his fault, it was Eve's; Eve said it was the serpent's. The serpent said, "no, the cause is the apple." There is much truth in this. As long as there is disparity of wealth and universality of envy, people will steal and in stealing will sometimes use violence.

In our times, new causes have been added. Probably the most obvious cause results from drugs. Before his death, my old friend Enrique Peñalosa was the mayor of Bogotá. Frequently asked on television why Colombia did not stop the export of drugs to America, he usually replied that the best way to stop the supply was to stop the demand. As long as Americans would pay vast sums for them, Colombians or others would certainly find ways to supply them.

By making drugs illegal and expensive, we have unwittingly fostered crime. A high percentage of crimes committed in America are drug related. To get enough money for a "fix," junkies rob, assault and even kill. In response, we incarcerate more of our fellow citizens for drug-related offenses than any other society. But, just as suppression has not stopped nations from fighting for independence, suppression has not stopped people from buying, dealers from selling and farmers from producing drugs. Success is often proclaimed, but no one really believes that there is less drug use or less drug-related crime today.

Because we have not been able to deal with Peñalosa's challenge, we have declared "war" on drugs. We pay or force Latin Americans and others to defoliate large areas, to mount search and destroy military operations and to arrest and extradite dealers, but we have not won the "war" on drugs. What we *have done* is to make the drug dealers rich. Producing and selling drugs are convenient ways to gather vast wealth even in poor countries and also are means to pay for political support or to buy arms. It is there that *our* domestic crime and *their* politics overlap. Both criminals and "warlords" need money. Dealing in drugs is often the easiest or even the only way to acquire it.

Sometimes we even foster this marriage of crime and politics: in Vietnam, to take the most evident example, we helped (or got the Nationalist Chinese to help) "our" Vietnamese grow and sell opium. That way, we secured them to our side of the war. Not surprisingly, some saw the opportunity to import it into America, even in the corpses of dead American soldiers. So a United States-tolerated or -encouraged but essentially foreign action impacted with tragic effects on America.

What to do about all this? There is certainly no easy answer nor one that many Americans will find politically acceptable. The best of the unpalatable choices, I think, is a program that combines legalization with treatment. Without that you are going to live on unsafe streets in a world with violated frontiers and frequent wars.

4) Lastly, *pathology*. In every large assembly of human beings, some are going to be deviants. And among the deviants will be some who are driven to violence by their own private demons. Generally, we have been able to cope with them, but I find it disturbing that we are cutting back on various medical approaches to the problems of mental illness. In times of high unemployment, economic stress and declining benefits for the poor, weaker, more exposed people may be driven over the line into violence. You will never be free of this set of problems although you can hope to do much to diminish or contain it with wise and humane social policies. Just filling up the prisons is no long-term answer.

B *Freedom* is something most Americans take for granted. Few other people in the world do or can. Our freedom is the most precious of the attributes of our society. It did not come to us easily. We fought for it and must jealously guard it. Freedom is hard to get and easy to lose. History gives us example after example of people who got fat and lazy and lost the will to protect it. I believe that your most basic obligation as citizens is to guard it.

Saying this sounds like a Fourth of July speech, but it is a real challenge for you. The reason is that there is a trade-off between "security" and "freedom." To put it baldly, you can not be completely "secure" except in a cell: if you walk freely around even the safest city in the world, you run risks. So finding a reasonable balance between safety and freedom will be a major problem in your lives.

The challenge will grow if, as I think likely, our society comes under further attacks. It is hard for us to understand why other people would attack us since we are sure that we try to help other people and want simply to live our lives in peace. Alas, many people in the world do not accept our image of ourselves. They see us as a great power, occasionally as a great bully, that seems to stand in the way of what they desire or allies itself with those who suppress them. There are justifications for both our and their beliefs: other countries have always throughout history envied or hated the rich and powerful (Rome, Spain, France, Britain, Germany, Russia to name a few) and today America is the world's most powerful, richest state. Some of the policies we have promoted, like the Vietnam War, have caused others to fear us. And some of our allies do things that violate our own deepest beliefs. I fear that in our proclaimed "war on terrorism," we will gain many new enemies and, opportunistically, we will associate ourselves with allies who will sully our reputation and denigrate our most cherished beliefs. We will find many who will tell us that they are "on our side" by suppressing as "terrorists" Tibetans (as China does), Kashmiris (as India does), Cecens (as Russia does),

Palestinians (as Israel does) and eventually will make these and other peoples see us as their enemy.

Moreover, in this war, we will be often tempted, as we have already been, to get others to do what is illegal in America and immoral everywhere. A current example is to send suspected terrorists to countries that will torture them for us to obtain information. We believe that in this way, our hands are not dirtied, but of course they are. Shades of Pontius Pilate. The line separating legality from illegality, rights from wrongs, humane treatment from torture, once crossed, is very difficult to restore, but unless it is restored the world in which you will live will be very different from the world in which I have lived and in which I hope you can live in peace, security and happiness.

In short, you must consider very carefully the balance between security and freedom, between the preservation of our heritage and what appears to be a useful or even a necessary violation of it. Your quest for an answer will be unending and your struggle to protect or enforce your answer will be the final price of freedom.

C *Health*, like security, has several aspects. On the positive side, the technology of medicine is advancing almost miraculously. Interventions are possible today that were hardly even dreamed of in my youth. When I was at the University of Chicago, my friend and colleague, Dr. Joseph Evans, remarked how difficult it had been for him to be a neurosurgeon because through most of his career, he was able to save very few lives. He simply did not have the "tools." Among other things, antibiotics were created only when I became an adult. In area after area, treatments have been effective only in the last few years. But, as medicines have improved challenges have also risen.

Old diseases have not died out. Tuberculosis ("TB") remains perhaps the world's major killer. Bilharzia, a worm infection you can get in a polluted river, weakens and makes unproductive hundreds of millions of people in Africa and Asia, leaving them alive but unable to support themselves. Even those diseases that we believe we have conquered, like smallpox, could mutate and rise again in forms against which we have no immunities and against which our existing medicines may be ineffective. Among the new challenges is AIDs. About 25 million people have so far died of this disease and, probably, about twice that number are now infected with HIV. In less than a decade, China may have added 20 million new cases. AIDs is a disease against which you must be especially careful as it, so far, has no cure. Other as yet exotic diseases, like Ebola, loom ahead of us -- or at least ahead of you.

Ease and frequency of travel have added a new dimension. Or, to be historically accurate, not a completely new dimension. When the Mongols imposed their peace upon Asia in the 13th century, diseases flowed along the open highway from the Far East and Central Asia into Europe. The Black Death that killed about one out of every four of the then living Europeans was a result. In more recent times, after the First World War, when movement around the world became easier, influenza killed more than 20 million people. Today, despite our better medical and public health defenses, diseases can move from remote Chinese villages to New York or from Calcutta to London in a few days or

even in a few hours. When I was young, few people traveled and fewer of those traveled rapidly by air; today, as you see in any airport it seems as if the whole world is on the move. And moving with many of them are diseases.

The problem of health isn't just ease of movement and lack of effective treatment: cost is also a factor. Even when we know how to defeat, contain or at least ameliorate a disease, cost sometimes makes our medical knowledge irrelevant. AIDs is again a good example: treatment costs tens or even hundreds of times the average income of many of those who need it most. Effectively, that means that the millions of people in China who today need help can not hope to get it; as AIDs spreads, and it certainly will, the cost will multiply and scores of millions of people will be effectively condemned to early deaths.

And, what nature has done to us, we may do to one another. It is certainly unproven, but many believe that the 1986 Chernobyl explosion which released several times more radioactivity than the atomic bombs dropped on Hiroshima and Nagasaki, have caused a surge in the number of people afflicted with cancer. Other nuclear events have probably also played a deleterious role. Any use of nuclear weapons in the future, no matter where used, for what purpose or in what dimensions, will certainly endanger and probably shorten your lives. Do not be fooled about this. There is no reasonable way to use a nuclear weapon. Of this, I can speak with absolute certainty.

Almost as certainly, the huge (and accelerating) increase in pollution is causing and will cause vast increases of illness. This will happen not only directly as the air we breathe, the water we drink and the soil in which we grow our food are affected, but also more generally. As global warming increases, vast areas will become swamps in which pathogens will proliferate. Consider one area: within your lifetime, probably, much of Bangladesh's 55,000 square miles will be under water and many of its 130 or so million people will sicken, starve or move. Even in America, it is likely that "marginal" cities like New Orleans will suffer catastrophic floods. In Europe, Venice is already in danger of being swamped. Conversely, other areas will dry out as rainfall patterns change. So the world's population is likely, during your lifetime, to undergo drastic reorganization in the course of which no one can even imagine what will happen to public health.

Infinitely worse, if one can imagine it, is the potential horror of biological warfare. When I was in our government, I was briefed on what America was then doing in this field. Just the briefing was enough to make one ill. And that was nearly half a century ago. What is widely and cheaply available today is to the "weapons" we then had as cancer is to the common cold. Many governments -- ours, the Russians, most of the Europeans, the Arabs and Israelis, the Indians and Pakistanis, the Chinese and Japanese -- manufacture, store and have plans to use pathogens against which none of us has any immunity or any chance of antidote. Another of the great tasks for your generation will be to end this nightmare before it ends you.

D *Prosperity* has been a consuming goal of my generation. We, in the wealthy part of the world, have given or "lent" (with only a cosmetic difference between the two) roughly a trillion (that is, a thousand million) dollars to promote "development"

in the poor nations. The results, as you know, have been meager. It isn't only that much of the money and effort was wasted – or that some was simply stolen – but also that we didn't really know what we were doing. Development, we are beginning to learn, is not merely a matter of piling up bricks. It occurs in the brain or it does not occur.

Because of America's experience in the Great Depression of the 1930s, we thought that what was needed was to "prime the pump." That is, to pour in enough "water" to get the machine working. In Europe, under the Marshall Plan, this worked; so we thought it should work elsewhere. But we failed to take into account the fact that the Europeans *remembered* that, before the devastation of the war, they had been a developed society. In Africa and much of Asia, no such memory existed. So building a dam, a highway, or a factory usually made little impact. There was no machine to start.

Worse, what we gave in aid, we often took away in trade. The market priced what the poor nations could produce, "primary products," cheap and what we produced, dear. A farmer raising coffee in Africa was lucky to get a penny a pound whereas you pay a dollar or more for the ounce or two it takes to make a cup. And, in reverse, the farmer paid a high price for the fuel and the tractor he needed to grow his crop. Coffee, rice, sugar, etc. were incapable of stimulating already weak economies. Agriculture was clearly not the way for a backward economy to develop. So many tried to industrialize. When they tried, as Egypt and many other countries did, to create what they thought was our strength, industries, these proved to be burdens rather than supports. A steel mill used up foreign currency but its products were too expensive to earn its keep or to repay its investment. So the poor nations stayed poor. They will, I believe, remain so during your lifetime.

What to do about it? The most brutal answer is to live with it. That is, to do enough to prevent the worst or most evident misery. I think that has become an accepted policy for most of the rich nations. Few of us will admit it, but I think it will remain our policy.

So discouraged has the leadership of the World Bank become with what we have been doing that it has designed a radically different approach to development, that is, stimulating the growth of entrepreneurs who would put aid money to work in their communities. There is promise in this approach but only in selected environments where conditions favor such efforts and then only on a relatively small scale. In addition to these inhibitions, two other conditions work against it: population rise and imbalance of resources. If population rises, as it does in many countries, at 4% or 5% yearly, few countries can hope to make politically or socially significant improvements in their wellbeing. And, even if population increase could miraculously be stopped or dramatically curtailed, few nations have the cultural or natural resources that typified development in the West.

If we get uncomfortable leaving the poor to remain poor, we may opt for what is a possible variant but not a really different approach: stop pretending that we are lending money to help them live like us, but admit that we are just giving them a dole to ease

their pain. Helping the poor is an idea we find moral and decent. We can certainly afford it. But will we? The World Bank has suggested we ought to give about 1% of our income, certainly a very modest form of charity, but Americans have never approached even this modest dole.

Selfishly, we are fortunate that development efforts did not meet our hopes. If China burned fossil fuel at even a quarter the rate America does or had 10% as many cars and trucks or matched our use of chemical fertilizers, we would face today the ecological disaster we fear we will face a century from now.

Since we have largely failed and since even success might have been a disaster, one of the challenges you will face is to put these various trends and problems into quite a different "package." I certainly cannot hope to predict what that will be, but one aspect may be a change of emphasis away from growth toward tighter, more controlled, more diminished use of resources. Your children or grandchildren may look back to deplore the wastefulness of my generation. As astonishing as the idea seems, you may opt for or have forced upon you a decline in living standard as we now measure it.

E A liveable World may require such a readjustment of the pattern of your lives. My generation has been the most wasteful of any, I think, of history. New technologies and new sources of energy may prolong the possibility of waste, but sooner or later we are going to have to regard the economy of life and the finite nature of our little Earth. Your generation may be the one that will truly address these issues. We have talked about them, but, to be honest, have done very little. In 1932, if I remember correctly, Arthur Koestler wrote a play in which invaders from outer space challenged the inhabitants of the Earth: 'prove that you can be happy or we will destroy you.' Today, we might recast his doleful thought without its science fiction component to 'prove that you can respect the Earth, your only neighborhood, or you will die.' That is a challenge you must meet.

My love to you and good luck.

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