

The Contemporary Industrial Crisis and the Limits-to-Growth Controversy

Western civilization is a man running with increasing speed through an air-sealed tunnel in search of additional oxygen. You can quite reasonably tell him he will survive longer if he slows down but he is not likely to do it.

—Philip Slater¹

To punish mortals the gods grant their wishes. But whether seen as nemesis or not, the vision evoked by this interpretation of events is a frightening one: that of Western civilisation, the civilisation of the Enlightenment, the civilisation of Science, a civilisation born of high hopes and auspicious heralding . . . being piped gaily to the brink of the abyss. And all that yet might stay the fatal plunge lying in the mud, discarded and in decay.

—E. J. Mishan²

More than any time in history mankind faces a crossroads. One path leads to despair and utter hopelessness, the other to total extinction. Let us pray that we have the wisdom to choose correctly.

—Woody Allen³

Several years ago I began an article on the political consequences of the limits to economic growth as follows:

That current thought in the West had become pessimistic is not to be doubted and does not require discussion. Whether one consults the scholarly literature of the social and natural sciences, surveys of public opinion or the popular media, it becomes clear that the optimism which characterized industrial civilization not too long ago has been transformed into a deep-seated apprehension about our society's very survival. How one dates this dramatic shift in outlook: with the publication and worldwide reaction to the first Club of Rome Report; or in 1973 with the OPEC embargo, quadrupling of the price of oil, increasing inflation and unemployment, and devaluating the dollar; or some previous year and event, does not matter.⁴

Naturally, I was quite surprised when this assumption of mine concerning the recent pessimism in Western thought was challenged by an anonymous reviewer who demanded an accompanying discussion setting forth supporting evidence for what I took to be obvious. Rather than taking as a given the general recognition of a crisis within advanced industrial society and proceeding to attempt an explanation of this crisis, as I did in my previous briefer work, I would like to begin this discussion instead by confronting the reviewer's objection directly: What is the nature of and evidence for this supposed dramatic change in perspective toward pessimism within contemporary, advanced industrial society? (I shall use the term "advanced industrial society" with such examples as the United States, Japan, and West Germany, and for terminological variety "contemporary industrial society" and "postindustrial" will be used synonymously with it.) What factors are responsible for this turn toward discontent within the richest societies in the world?

Answering these questions will accomplish several goals. First, I will reply to any skeptical readers who, like the reviewer, doubt whether the alleged crisis and accompanying changes in outlook in advanced industrial thought and society have actually occurred. Second, since these statements are about industrial thought and civilization on the broadest level, encompassing the institutions and the underlying social values of our culture, they must be abstract and complex (owing to the complex nature of this type of society). Therefore, several different conceptions and interpretations of post-industrial institutions and values are possible.

Third, the explicit examination of the nature of the crisis within industrialism will define my understanding of the nature of the challenges to our institutions and values as we find ourselves in the last decade of the twentieth century. Also, the nature of this postindustrial type of social order and its impact upon the planet as a whole pose serious threats to its survival. These dangers provide not only the urgent issues I shall address in this volume, but are crucial to all humankind, including the approximately three billion people yet to be integrated fully into the industrial way of life.

Fourth, if we are to address the essential questions of the consequences of the industrial crisis and what, if anything, can be done about them, an examination of the nature of industrial society seems to be required. In social theory, as in medicine, an accurate case history and diagnosis must precede prescription as to the proper mode of treatment.

Therefore, this chapter will be devoted to a brief presentation of the current crisis in advanced industrial society: its nature, consequences and implications. My purpose is to lay the groundwork for the substance of this book, reflecting upon: advanced industrial society's crisis and its eventual demise; what type of social order should take its place; and, how the process of replacing the postindustrial social order may occur.

Indications of the Industrial Crisis in Brief and Introduction
to the Limits-to-Growth Controversy

The manifestations of the crisis within advanced industrial society are everywhere. A content analysis of scholarly volumes published in the last twenty years reveals a significant number of titles published in various disciplines, from different conceptual approaches, whose theme is this crisis.⁵ I shall not rehash the burgeoning industrial crisis literature or what critics have termed the “doomsday” or “doom and gloom” or “neo-Malthusian” literature,⁶ nor engage in a scientific dispute (which is beyond my competence) over the precise ecological state of our world and its future. Instead, I think the best strategy of exposition is to refer to a comprehensive list drawn up by Kirkpatrick Sale of the crises we face in advanced industrial society. (These crises when considered together will be called the “crisis” of our society.)

An imperilled ecology, irremediable pollution of atmosphere and oceans, overpopulation, world hunger and starvation, the depletion of resources, environmental diseases, the vanishing wilderness, uncontrolled technologies, chemical toxins in water, air, and foods, and endangered species on land and sea.

A deepening suspicion of authority, distrust of established institutions, breakdown of family ties, decline of community, erosion of religious commitment, contempt for law, disregard for tradition, ethical and moral confusion, cultural ignorance, artistic chaos, and aesthetic uncertainty.

Deteriorating cities, megalopolitan sprawls, stifling ghettos, overcrowding, traffic congestion, untreated wastes, smog and soot, budget insolvency, inadequate schools, mounting illiteracy, declining university standards, dehumanizing welfare systems, police brutality, overcrowded hospitals, clogged court calendars, inhuman prisons, racial injustice, sex discrimination, poverty, crime and vandalism, and fear.

The growth of loneliness, powerlessness, insecurity, anxiety, anomie, boredom, bewilderment, alienation, rudeness, suicide, mental illness, alcoholism, drug usage, divorce, violence, and sexual dysfunction.

Political alienation and discontent, bureaucratic rigidification, administrative inefficiency, legislative ineptitude, judicial inequity, bribery and corruption, the use of repressive machinery, abuses of power, ineradicable national debt, collapse of the two-party system, defense overspending, nuclear proliferation, the arms race and arms sales, and the threat of nuclear annihilation.

Economic uncertainty, unemployment, inflation, devaluation and displacement of the dollar, capital shortages, the energy crisis, absenteeism, employee sabotage and theft, corporate mismanagement, industrial espionage, business payoffs and bribes, white-collar criminality, shoddy goods, waste and inefficiency, planned obsolescence, fraudulent and incessant advertising, mounting personal debt, and maldistribution of wealth.

International instability, worldwide inflation, national and civil warfare, arms buildups, nuclear reactors, plutonium stockpiles, disputes over laws of the sea, inadequate international law, the failure of the United Nations, multinational exploitation, Third World poverty and unrepayable debt, and the end of the American imperial arrangement.⁷

This lengthy list of advanced industrial crises (published in 1982) omits the current health crisis revolving around Acquired Immune Deficiency Syndrome (AIDS), and the specific detailing of the ecological aspects of the industrial crisis, some of which were just recently detected: stratospheric ozone depletion, acid rain, deforestation, and the carbon dioxide "greenhouse effect" or global warming.

Of course, such a mere listing of the multiple crises and problems within industrial culture is open to misinterpretation and objection without the necessary clarifying elaboration and supporting evidence. However, if only *half* of these claimed crises were, in fact, present in such important areas of industrial life there would be cause for concern that advanced industrial society is at a critical juncture in its history (affecting nonindustrial society as well because of its global impact). Pessimism about our ability to cope with these numerous and grave problems lead appropriately to doubts about this social order's very survival.

Indeed, such pessimism abounds today not only among the scholarly contributors to the industrial crisis literature but among the average contemporary industrial citizens as well, revealed by extensive public opinion poll results. Even that great optimist and critic of the limits-to-growth position, Herman Kahn, takes note of a Louis Harris survey entitled, "Majority Pessimistic on Reaching Ideal," and concludes that "two-thirds of the American people have been strongly influenced by the neo-Malthusian view and share many of its tenets."⁸ (Although many of the references in this chapter and throughout the entire volume will be to American society, I think it should be clear that I am referring to the entire advanced industrialized world. The United States is taken as merely illustrative—even if an extreme case—of other industrialized societies. The United States is conspicuous in both its advanced state of industrial development and severity of crises and therefore has been selected for emphasis. This point is needed in

order to respond to the charge of parochialism levelled against American researchers relying mainly upon American sources.⁹ While the specific institutional manifestations of advanced industrial society will vary from nation-state to nation-state, my main interest in this political theoretical discussion is the deep underlying values of industrial civilization as a whole which are internationally uniform on this level of analyses.)

We even have had the rare spectacle of an American president reporting to the American public and the world via national television that America faced a:

crisis of confidence... a crisis that strikes at the very heart and soul and spirit of our national will; [and, furthermore, that] the symptoms of this crisis of the American spirit are all around us. For the first time in the history of our country a majority of our people believe that the next five years will be worse than that [sic] past five years.¹⁰

If this view of Jimmy Carter's in 1979 might be considered as some misreading of the social conditions by an isolated, unperceptive American president who was eventually defeated, it should be noted that at the time "an astonishing 77 percent in the TIMES-CBS poll and 79 percent in the AP-NBC poll agreed that, yes, 'there is a moral and spiritual crisis, that is, a crisis of confidence, in the country today.'" ¹¹

Carter's somber remarks, even if true at the time, are vulnerable to the charge of becoming outdated by the changes in policy and successes of his opponent in 1980, Ronald Reagan, and the so-called "Reagan Revolution." I shall have more to say later about the possible criticism that indeed it was Carter's "doom and gloom" misinterpretation of the social situation in America that produced his landslide defeat at the hands of Ronald Reagan, just a little more than one year after he delivered his nationwide speech on July 15, 1979—a defeat all the more stunning considering that Carter was an incumbent. Critics of Carter's social diagnosis could contend that what was possibly true at the time was no longer so because of the change in administrations and policies begun with the first Reagan administration in 1981. This criticism raises the broader issue of whether Ronald Reagan's two enormous electoral victories in 1980 and 1984 (followed by the resounding electoral success of his vice-president, George Bush in 1988), and his administrations' exuberant endorsement of proeconomic growth policies further indicate the obsolete or erroneous nature of Carter's claim of a social crisis as well as the misconceived nature of the industrial crisis, limits-to-growth position as a whole.

At this early point in our discussion I shall state merely that one view of the Reagan-dominated 1980s and his administrations' attempt to recapture the lost optimism and glory of the America of the past is that it is the begin-

ning of the end for such a proeconomic growth perspective and all that it entails; a “last hurrah” that reflected the American people’s rejection of Carter’s message of crisis because they preferred Ronald Reagan’s denial of danger and embraced his “city on a hill” and “morning in America” as symbols of a more confident and once again predominant America. By electing Reagan in 1980, one could say that the American voters chose to avoid the more sobering and painful implications of Carter’s assessment of the “crisis of the American spirit.” However, the victorious 1988 Presidential campaign of Reagan’s vice president, George Bush, nonetheless, did not reflect the exuberance and optimism of his predecessor. Bush appeared more impressed and humbled by the actual consequences, and not the mere rhetoric, of the two Reagan administrations’ policies.

That the Reagan era of the 1980s may be considered merely a hiatus based on collective wishful thinking and fundamental policy errors is confirmed with the benefit of the hindsight available at the end of Mr. Reagan’s term in office. As an economist wrote in an article entitled, “We’re Running Out of Gimmicks to Sustain Our Prosperity: Decline Began in 1973, But We Have Concealed It”: “In 1984 [presidential election] we still believed that the 1980s could be like the 1950s and ’60s economically. Now we are not so sure.”¹²

The pessimism of investment banker and social commentator Felix Rohatyn, contained in an article entitled, “On the Brink,” and written four months *before* the October 1987 worldwide stock market crash is relevant here and reflects the discontent and foreboding characteristic of the end of the Reagan era in marked contrast with its beginning:

The United States today is headed for a financial and economic crisis. What appeared to be only a possibility five or six years ago became a probability more recently, and has now become a virtual certainty. The only real questions are when and how.¹³

The world’s inhabitants must contemplate a post-Reagan America laboring under the legacies of the Reagan Administrations’ social values and goals—most prominent of which was unlimited economic growth—and their policies to implement them that have brought us to “the brink of the abyss” (to use Mishan’s apocalyptic language cited in the epigraph to this chapter)—and not only financially! Do not Jimmy Carter’s words: “a crisis that strikes at the heart and soul and spirit of our national will” ring true now when we look at our inner cities, hospitals, schools, prisons, environment, and economy? Even the most optimistic analysts are predicting a very difficult post-Reagan period in our attempt to get out from under the huge

domestic and international debt, and other disabling Reaganite policies with their adverse consequences.

The essence of the reply to those cheerful throngs of Reagan supporters of 1981 could begin by quoting Levy again:

For the past decade and longer, Americans have been living an illusion of increasing prosperity—but in fact, we have been living on borrowed money and borrowed optimism. As a result, we are digging ourselves into a deep hole.¹⁴

Clearly, the optimism and high spirits associated with the beginning of the first Reagan Administration are over. Perhaps the national diagnosis of the crisis of the 1970s (reflected in Jimmy Carter's 1979 speech) can be understood and accepted by the American public in the 1990s now that our Reaganite "escapism" has ended? Certainly, few people today are prepared to argue that, economics aside, the moral and spiritual environment has been substantially improved upon or that we can optimistically look forward to the decade of the 1990s and the ensuing twenty-first century. President Bush's rhetoric and proposals both seem to reflect a much more sober view of the state of the American union as befits the chief executive responsible for alleviating the problems left by the Reagan policies, actions, and inactions, perhaps best symbolized by the Savings and Loan financial debacle likely to cost the American public upwards of \$200 billion.

Not only is the supporting evidence for the industrial crisis and its accompanying despondency within the industrial public forthcoming from natural and social scientists, but students of industrial popular culture such as Kurt Vonnegut, Jr. have also observed its presence as well. Vonnegut, writing a review of the works of the science fiction writer Stanislaw Lem, calls him "one of the most popular science-fiction writers in the world [and] a master of utterly terminal pessimism appalled by all that an insane humanity may yet survive to do."¹⁵ Vonnegut himself expresses this "utterly terminal pessimism" of contemporary industrial thought when he quotes a letter from his son, a medical student, about how:

it is a bad time for anybody's writing just now, that the spirit in the air is this: "We're destroying the planet. There's not a damn thing that can be done about it. It's going to be very slow, drawn-out and ugly, or so fast it doesn't make any difference."¹⁶

Of course, the Chernobyl nuclear accident of April 1986 needs to be mentioned in this regard adding to the current pessimism. To realize that what

critics of our reliance upon nuclear-generated energy have feared about the dangers of such energy could actually happen with the predicted global effects is both frightening and disheartening. Furthermore, it demonstrates one of the main themes of the environment and limits-to-growth movements: the interdependency of all life on earth. One expert writes:

The Chernobyl accident was by any measure the most serious nuclear accident the world has ever suffered. . . . The Chernobyl nuclear cloud showed graphically—and tragically—that we all share the global environment.¹⁷

In addition to the statements and the passages cited in the epigraph to this chapter, the following passages are, I think, a representative sample of the apocalyptic nature of the industrial crisis literature. From the pen of a student of international politics:

There is a spectre haunting the world of politics, economics, and public affairs. It knows no boundaries, it ignores the old rules of international intercourse, pays no respect to the wealthy traditions of the past, and barely acknowledges the ruling tenets of international order and the norms and values that helped shape it. It cares not to emulate the past because it cannot control the future. It is the awesome ghost of a waning century, the ghost of scarcity.¹⁸

In their Letter of Transmittal accompanying *The Global 2000 Report To The President*—the most extensive study of current and future environmental conditions conducted by the American government—an Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, and the Chairman of The Council on Environmental Quality wrote the following to President Carter:

Our conclusions, summarized in the pages that follow, are disturbing. They indicate the potential for global problems of alarming proportions by the year 2000. Environmental, resource, and population stresses are intensifying and will increasingly determine the quality of human life on our planet. These stresses are already severe enough to deny many millions of people basic needs for food, shelter, health, and jobs, or any hope for betterment. At the same time, the earth's carrying capacity—the ability of biological systems to provide resources for human needs—is eroding. The trends reflected in the *Global 2000* study suggest strongly a progressive degradation and impoverishment of the earth's natural resource base.¹⁹

It was this same paragraph that the pro-growth and crisis-denying critics of the *Global 2000 Report*, Julian Simon and Herman Kahn, chose to attack and radically rewrite in order to show their vehement opposition to this report, its methods and conclusions.²⁰

Perhaps the last word of despair should go to the economist Robert Heilbroner, who writes:

The outlook for man, I believe, is painful, difficult, perhaps desperate, and the hope that can be held out for his future prospect seems to be very slim indeed. Thus, to anticipate the conclusions of our inquiry, the answer to whether we can conceive of the future other than as a continuation of the darkness, cruelty, and disorder of the past seems to me to be no; and to the question whether worse impends, yes.²¹

Clearly, we seem to be in what even the critic of the industrial crisis literature, Herman Kahn, was forced to admit is “L’époque de Malaise” (The Era of Malaise); a period of malaise that Kahn describes present within the American, Canadian, European—West and East—and Soviet societies.²² (The universality of the value of unlimited economic growth independent of whether capitalist or socialist social orders and its harmful consequences will be discussed later.) Perhaps it was this pervasive malaise that Ronald Reagan and his image-makers sought to take us away from. It worked for a while, but now that the illusions are destroyed the lost time and additional damage must be made up, repaired (where possible), and recognized for the dangerous fantasies that they were.

The claim of the crisis of advanced industrial society and the melancholy reaction it engendered appears to be once again, in the post-Reagan era, both intellectually fashionable and part of the contemporary popular culture (see public and media reactions to severe ecological phenomena during 1988). Nonetheless, these developments might inspire the following question: could they be taken as indications of the superficiality, exaggeration, or even complete wrongheadedness on the part of these purveyors of societal doom and gloom associated with the limits-to-growth position particularly given the faddism that characterizes industrial culture? Might not all this talk of impending disaster constitute a “doomsday syndrome” or “myth” as opponents charge,²³ or merely another popular fashion that will fade with time and change in social mood—with another Ronald Reagan type—and therefore have little lasting social significance? Are the industrial crisis view and limits-to-growth critique like horror movies portraying natural disasters that are periodically popular? And, finally, the question may be posed by someone like the skeptical reviewer of my earlier work:

are not those who claim a crisis within industrial civilization suffering from various errors in their thinking?

Let us note here, in an attempt to examine the possible replies to these questions, one important component of the limits-to-growth controversy: the essential characteristic of the progrowth argument and defenders of the status quo of their denial of the existence of a crisis within industrial culture and who, furthermore, support the existing policy of making continuous and unlimited economic growth one of the most important industrial social values and objectives.²⁴ Since these critics of the limits-to-growth position cannot reasonably deny many of the environmental and social problems claimed by the industrial crisis, limits-to-growth advocates (although some do in the scientific controversy regarding the biophysical or environmental limits to growth best exemplified by the Simon and Kahn volume), they are forced to make their counterattack upon this limits-to-growth critique of industrial civilization in an *ad hominem* manner. Examples of this *ad hominem* response by defenders of the progrowth status quo may be seen in several critical discussions of the claimed industrial crisis and limits to growth.

Ad hominem arguments are a main element in prominent rebuttals to the environmentally based critique of industrial society and should be useful as a means of examining the nature of the limits-to-growth debate. Perhaps the most extensive use of such fallacious tactics occurs in Wilfred Beckerman's *Two Cheers for the Affluent Society*. His view may be summarized as follows:

How the growth of the economy is to be used, therefore, is too serious a problem to be taken over by extremists of any kind, or to become a form of psychotherapy for those more affluent members of society who want to work off their guilt complexes in a manner which, they can be sure, will never actually have any effect on their relative affluence.²⁵

This single sentence combines three main countercharges by the defenders of the industrial value system and used against their opponents in the limits-to-growth debate: (1) extremism; (2) some psychological problem (usually guilt at their relative wealth); and, of most theoretical importance, (3) deceptive self-interested practices to protect their alleged comparative material advantages.

Beckerman proceeds to argue for the collective guilt of various advocates of the antigrowth position, such as:

[scientists] The scientific community probably has a sort of collective guilt complex concerning certain scientific developments over the last

two or three decades, notably the atom bomb and also the increasing knowledge of even more destructive ways of wiping out mankind as a result of “progress” in biological and botanical sciences. . . .

[middle classes] . . . the middle classes today feel more guilty about their relative affluence than has been the case in the past . . . Furthermore, it is likely that the middle class opposition to growth reflects partly their sense that economic growth also brings a loss of various privileges.²⁶

Another progrowth advocate, Herman Kahn, speaks of what he terms the “Anti-Growth Triad” composed of: “affluent radicals and reformers; Thorstein Veblen’s “leisure class”; and a subgroup of upper-middle class intellectuals we refer to as neoliberal members of the New Class.”²⁷ He further claims that this Anti-Growth Triad has adopted fourteen “new” emphases (or values)²⁸ and most, if not all, of his critical remarks about these purported antigrowth values will fit into the standard, tripartite progrowth set of responses to the antigrowth challenge: extremism, psychopathology, and disguised self-service for the elite. Under the rubric of “extremism” (although these classifications of mine are not exhaustive) are Kahn’s attributed values to the limits-to-growth position of: “selective risk avoidance, comfort, safety, health, happiness and hedonism;” under “psychopathology”: “loss of nerve, will, optimism, confidence and morale;” and under “classist self-service”: “localism, protection of the environment and ecology.”²⁹

Although specific value changes emphasized by the limits-to-growth critics of industrial society selected for counterattack by the defenders of growth may vary, we find that these three components usually characterize the defense offered by those who deny that industrial civilization is faltering as a result of its commitment to limitless economic growth. (I shall address shortly the important countercharge of elitism against the limits-to-growth detractors of industrialism by the proponents of unlimited economic growth and the industrial social order founded upon it.)

The Limits-to-Growth Formulation of the Industrial Crisis and Its Nonapocalyptic Possibilities

The controversy over the existence of limits to economic growth and the resulting challenge to the feasibility of unlimited economic growth as an industrial social value raise the following question: Are those who claim the existence of the industrial crisis and base their attack upon unlimited economic growth as a fundamental industrial social value indeed extreme and mistaken (because of psychopathologies and/or self-interest), as their oppo-

nents would have us believe? In order to answer this key question to the limits-to-growth debate we must examine in more detail the nature of the alleged crisis according to these critics of industrial growth.

First, we should observe the importance of how the nature of the crisis of industrial society was formulated. Immanuel Wallerstein, who accepts the existence of “the crisis of the demise of the capitalist world economy,” nevertheless goes on to warn that, “most discussions of the crisis are too cataclysmic in tone [and] analyses of the crisis are too full of illusion and hence inevitably breed disillusion”³⁰ Some of the industrial critics’ “doom and gloom” analyses—even if correct—can result in paralyzing despair and produce “utterly terminal pessimism” which will only hasten the day of disaster because of the failure to take corrective action. Relevant to this point about social paralysis and terminal pessimism, I would like to note that the law of diminishing returns may be applied to the apocalyptic descriptions typically provided by the limits-to-growth literature. In referring to apocalyptic accounts of nuclear war by antinuclear advocates, a commentator writes:

But there are limitations to this approach. The law of diminishing returns applies even to repeated presentations of the apocalypse. Ground Zero Day can be celebrated, as it were, once or perhaps twice, but it soon begins to lose its effectiveness. The numbing effect of detail, as well as the simple inability of any movement to sustain indefinitely a sense of crisis and imminent calamity, has led to the current decline in popularity of the pragmatic antinuclear case.³¹

Without going into the merits of Krauthammer’s claims regarding the anti-nuclear war movement, surely his point here can be applied to repeated versions of humanity’s (and the whole earth’s) demise forecast by the limits-to-growth advocates, especially those who follow the biophysical approach from The first Club of Rome report on *The Limits to Growth*. Supporters of this view should take heed!

A critic of industrial values and an advocate of a new world order, Richard Falk, notes that such terminal pessimism might lead to a social paralysis and an inability to take the necessary social action resulting in the freezing of the *status quo*, particularly with regard to the profoundly political issue of the redistribution of wealth.³²

It is important to note here that the limits-to-growth critique of industrial civilization does not logically require a freezing of the status quo to the benefit of the current rich only. Indeed, a quite often overlooked aspect of the influential first report to the Club of Rome specifically rejects this conservative bias as I shall show.

We must be careful not to have the limits-to-growth critiques of industrial values exist in isolation with their fearful and depressing message only. They must be combined with discussions of alternative social orders and proposals for the design and transformation processes by which these alternative societies might be realized; in short, an account of how social transformation of advanced industrial society may occur. I shall attempt to begin to do this in part 4 and thereby provide insight to and appreciation of the following crucial encouraging fact: *the end of the industrial civilization does not necessarily mean the end of human civilization in toto.*

The concern by supporters that the limits-to-growth attack might be viewed so cataclysmically as to induce inaction either because of shock or despair is illustrated by a story told by William Sloane Coffin about a Harvard scientist flying over the lake country in northern Alabama using technical instruments in an experiment measuring fish population. When the scientist discovered two fishermen out on the lake that he had just determined had no fish, he thought he would inform them of his recent finding as a friendly gesture.

They were outraged, instantly, and told the scientist in rich Southern expletives where he could take his plane and his instruments and what he could do with them, whereupon they baited their lines once again and kept on fishing. The scientist flew off, much puzzled. "I expected their disappointment," he said later, "but not their anger."³³

Similarly, as students of industrial society knowledgeable of the requirements for social action and change, we need to be cognizant of the possible reactions of both the public and policymakers in advanced industrial societies, no matter how accurate we consider the claims about the crisis of industrial culture to be; as Krauthammer noted, the law of diminishing returns applied to repeated apocalyptic accounts might set in.

Happily, this will not mean ignoring aspects of the crisis for fear of such overkill. There is a socially significant, encouraging element to the most gloomy analysis of the threats to postindustrial society in the recognition that the death of industrial civilization need not mean the end of the world. Formulations of the industrial crisis should be as accurate as possible and should reflect the social implications and consequences of this crisis. If these goals are accomplished, along with the realization that such a treatment of the crisis need not mean a catastrophe for humanity as a whole but may actually bring about positive results through its stimulus for social action to transform advanced industrial civilization, it is unlikely that social theorists asserting the severity of the crisis will end up as Coffin's thoughtful scientist: ignored or angrily dismissed by his or her intended audience, yet puzzled by their reaction.

New Elements in the Limits-to-Growth Critique of Industrialism

The survival of industrial society, the merits of unlimited economic growth as a central component within the industrial worldview, and the acceptability of the underlying values of industrial society as a whole are not new issues. Two classical economists, Smith and Malthus, concerned themselves with the feasibility of limitless economic growth: both agreed, for different reasons, that it was not feasible.³⁴ Also, such nineteenth- and twentieth-century economists as J. C. L. Simonde de Sismondi, John Ruskin, John A. Hobson, and Richard H. Tawney all challenged the desirability of economic growth and the industrial civilization that was based on this belief.³⁵ And, of course, there were the cultural critics of industrialism such as Charles Dickens, Matthew Arnold and Ruskin.³⁶ Given this rich history of criticism of industrial values in general, and the central place among these values of economic growth in particular, what is new and significant about the recent version of the attack on industrial civilization singling out the limits to economic growth begun sometime in the late 1960s and early 1970s?

First, as one would expect of a civilization-wide analysis, the conception of the contemporary industrial crisis and the critique of industrialism are culturally pervasive. Both affect all aspects of industrial social life to some degree but the political, economic, psychological, and ecological manifestations of this crisis are especially important. The last aspect—the ecological dimension of the industrial crisis—is new in the use of rigorous scientific methods, updated scientific knowledge, and the latest technologies unavailable to earlier industrial social critics. Contained within this ecological component of the limits-to-growth critique of postindustrial society and its alleged crisis is the reappearance of Malthus's conjecture about the finiteness of the earth restricting population growth applied to other environmental concerns such as types of environmental pollution endangering all forms of life and the availability of renewable and nonrenewable natural resources; hence, the labelling of this limits-to-growth viewpoint as “neo-Malthusian.”

The best-selling and widely quoted Club of Rome report, *The Limits to Growth*, might be considered the founding document of the contemporary industrial crisis and its public and scholarly awareness. Since the time of its first publication in 1972, it has been translated into many languages and has sold millions of copies. The great influence of this report could be attributed, partially anyway, to the fact that “15,000 copies [had] been dispatched to political and social leaders throughout the world.”³⁷

One profound element of this important document was the report's authors' strong emphasis upon the interaction between various claimed

crises. This interaction constituted the multifaceted crisis of industrial society, called by the Club members "world problematique," leading to the title of their first project: "The Predicament of Mankind."³⁸ The Club's emphasis upon the claim that the varied problems facing advanced industrial societies formed a complex whole requiring consideration and corrective action on the holistic or global level of analysis led the report's authors to rely upon the global models of systems engineer Jar Forrester.³⁹ This global level of inquiry has characterized several subsequent Club of Rome reports.⁴⁰

The Club of Rome's strong contention that the challenges confronting industrial culture are interrelated synergistically and therefore must be studied in the aggregate on the global level has been an important contribution to the contemporary industrial crisis literature. While individual subgroups of humans have confronted and been annihilated by environmental threats of all types (including being destroyed by fellow humans), the current crisis is striking in the global scope of the threats and the resulting endangerment of the entire human species and possibly the totality of the Earth's living organisms. Here the earlier point about the interrelatedness and interdependence of all earthly life graphically symbolized by the Chernobyl nuclear cloud is apt. What the industrial crisis claimants fear is not just a local disaster like that produced by an earthquake but the devastation of the entire planet's living population as a product of the all-encompassing nature of the industrial crises illustrated, in part, by the list referred to previously.

The new planetary dimensions of these crises and their probable synergistic interrelationships demand much more of our cognitive skills and creativity in sorting out and treating such an interactive complex of phenomena. These two characteristics of global scope and synergism attributed to the contemporary world problematique have caused even the critics of the limits-to-growth position to appreciate the uniqueness and severity of the current industrial crisis. Opponents such as Beckerman admit that "the case against economic growth has become one of the most widely publicized—and widely accepted—of all indictments of modern society"⁴¹ Even Kahn recognizes:

Challenges to the concept of progress are not new. What is new is the effectiveness of today's challenge and its broad support by the upper-middle class and professional elites...In the past, challenges to modernity have come from romantics, reactionaries, aristocrats, aesthetes, and various religious and ideological groups. Many of these people, too, have jumped on the Club of Rome bandwagon. However, the basic impetus for the campaign against economic growth still

comes from “modern,” “progressive,” and “enlightened,” individuals and groups with much greater than average education and affluence . . . As a result, during the last decade the antigrowth syndrome has become dominant among intellectuals and educated elites all over the world, especially in the Affluent countries.⁴²

Finally, referring to social issues, pro-growth economist Henry C. Wallich observes, “Except for the preservation of peace, none goes deeper than the limits-to-growth controversy.”⁴³ Jay Forrester sums up the point clearly: “The limits-to-growth debate deals with the most important issue of our time.”⁴⁴

In light of Forrester’s statement, Wallich’s supposed separation and subordination of the limits-to-growth issue to world peace is misleading since even (or should I say “especially”?) world peace is one social goal threatened by interrelated global challenges to industrial civilization; for example, consider possible military conflicts over the control of vital natural resources such as crude oil from the Middle East and the military activities by advanced industrial nations in the Persian Gulf during the recent Iraq-Iran War protecting oil tankers as being the most recent manifestation of this possibility.

Another fundamental and unprecedented characteristic of the industrial crisis is the claim by some of its advocates that the problems of advanced industrial society are caused by this social order’s very own successes rather than an inherent deficiency or some external factor. The authors of the second report to the Club of Rome, Mesarovic and Pestel, argue:

The most important factor, however, that separates the current series of crises from the crises of the past is the character of their causes. In the past, major crises had *negative* origins: they were caused by the evil intentions of aggressive rulers or governments, or by natural disasters regarded as evil according to human values—plagues, floods, earthquakes, and so on. In contrast, many of the crises of the present have *positive* origins: they are the consequences of actions that were, at their genesis, stimulated by man’s best intentions.⁴⁵

Two contributors to a volume devoted to discussions of the alternatives to growth explain the idea of the undesirable consequences of industrial society’s “success” even more cogently for supporters of the limits-to-growth when they write:

In contrast to other crises in history, which have been caused by visibly negative factors—such as plague and drought—the “cause” of the

current crisis—material growth—is generally considered “good.” It is obviously difficult to obtain the same cooperation and commitment in fighting something “good.”⁴⁶

Other than Marx’s emphasis upon the internal contradictions of capitalism, one of the most well-known formulations of the internally caused crisis of industrial (capitalist) society is Joseph Schumpeter’s conclusion regarding capitalism’s eventual demise because of its successes:

...the actual and prospective performance of the capitalist system is such as to negative [sic] the idea of its breaking down under the weight of economic failure, but that its very success undermines the social institutions which protect it, and “inevitably” creates conditions in which it will not be able to live...⁴⁷

This “self-destructive” thesis of Schumpeter’s was ignored by economists and economic growth-based political thinkers during the years between its first publication in 1942 and the 1970s because of the sustained economic growth and prosperity that marked the post-World War II period in the West.⁴⁸ The great confidence—even boastfulness—about the economic future during the high-flying years of the 1960s is reflected in the following statements. The first is by President Lyndon Johnson:

No longer do we view our economic life as a relentless tide of ups and downs. No longer do we fear that automation and technical progress will rob workers of jobs rather than help us to achieve greater abundance. No longer do we consider poverty and unemployment landmarks in our economic scene.⁴⁹

The second statement is one by Max Ways about “the great rediscovery of the postwar period” that

capitalism is *not* subject to a ceiling of diminishing returns; innovation is *not* a self-exhausting process; the era of radical change we now experience is *not* headed toward a new “point of rest”; all the buffalo on the plains of progress have *not* been shot—indeed, they are breeding faster and faster.⁵⁰

We should note the stark contrast between the progrowth optimism of the early 1960s within postindustrial thought and the current pessimism. This is true because the enthusiasm and confidence of the early 1960s evaporated as economic historian Hirschman informs us:

But the sense of pervasive crisis which has characterized the 1930s and 1940s reappeared in the 1970s, in part as an aftereffect of the still poorly understood mass movements of the late 1960s and in part as an immediate reaction to the contemporary shocks and disarray.⁵¹

Whether the self-destructive orientation of industrial capitalism is based upon its harming the very values it requires to exist, as Schumpeter and other social theorists argue,⁵² or upon the unanticipated bad outcomes of good intentions such as increased life span creating an overpopulation problem with all of its ecological consequences, as Pirages and Ehrlich assert,⁵³ is less important than one other vital point: each of these diverse self-destructive theses refers to what were once heralded as the “strengths” of the industrial social order and will therefore incur substantial resistance to both their criticism and proposals for their revision.

One of the distinguishing aspects of the current industrial crisis is its involvement of the very values and institutions realized so successfully by the industrial revolution and its ensuing culture. For the moment, we need not examine in detail the various analyses of the self-destruction of the industrial society and its ultimate replacement. *What I wish to emphasize here is the unique normative aspect of the contemporary crisis as the product of previously accepted—and in some instances, like economic growth, largely still adhered to—values gone sour.*

In conclusion, the thesis of the self-destructive nature of industrial society, if accurate, makes analysis of the crisis difficult and its remedies complicated because of its challenge to industrial civilization’s fundamental values and the relationship between the value basis of the crisis and the current distribution of industrial societal power. The crucial social importance of industrial values and the challenge to them by the limits-to-growth advocates will be a major theme in this work.

By now, it should be clear that whether motivated by the concern for the environment, the scarcity of material resources, or from other factors deriving from the “success” of industrial civilization in generating unprecedented material wealth (and waste products to match), the basic values of industrial civilization are at stake in the limits-to-growth controversy. The profound relevance of political philosophical analyses which encompass the examination and assessment of social values should be evident to this debate over industrial values. Yet, surprisingly and disappointingly, there have been few political philosophical treatments of the limits-to-growth attack upon the industrial way of life and thought. I strongly believe that the absence of such analyses creates a serious obstacle to progress in the debate over economic growth and the future of postindustrial society. In my earlier work I wrote:

Examining these discussions, [of the economic growth controversy] one is struck *inter alia* by the absence of political scientists' contributions and of politically sophisticated presentations of the LTG [limits-to-growth] position. Analysis of economic growth—its nature, consequences, advantages, and disadvantages—has been left to members of other disciplines. Economists, systems engineers, and environmentally concerned natural scientists such as ecologists, physicists, demographers, and geologists, dominate the LTG presentations.⁵⁴

With precious few exceptions during the intervening years since their publication, these observations regarding the general neglect of the limits-to-growth controversy and the profound politically relevant issues it raises, by students of politics—especially political philosophers—unfortunately, remain true. One goal of this book is to begin to correct this serious gap by stimulating my fellow students of politics—particularly those of political values—to address the crucial issues, including matters of species life and death, raised within our domain by the industrial crisis. Thoreau perceptively remarked, “There are a thousand hacking at the branches of evil to one who is striking at the root.”⁵⁵ Pertaining to the study of advanced industrial society, as I shall try to show in the following discussion, there are many scholars “hacking at the branches of evil” instead of at its normative root.

The Political Nature of the Industrial Crisis

Within the study of the scientific method, problem formulation holds a centrally important place. The full understanding of the nature and precise formulation of any problem to be addressed by scientists is essential to the several methodological judgments that the scientist must make throughout the scientific research project. Furthermore, the propriety of subsequent judgments is determined relative to their suitability to the original problem definition. Decisions otherwise acceptable by themselves may be erroneous or disadvantageous if they are inappropriate to the problem raised as it is specifically defined.⁵⁶ If human rationality as a whole is problem-based, as the philosopher Karl R. Popper has emphasized in his philosophy of science and theory of knowledge,⁵⁷ it is difficult to overstate the importance of carefully attending to the formulation and understanding of the set of problems constituting the crisis characterizing contemporary industrial civilization.

I think it is agreed by most social commentators that the apparent origin and driving force for the current industrial crisis was ecological. The

“energy crisis” in 1973 made the scarcity of cheap petroleum for an oil-dependent advanced industrial society obvious to both its public and policy-makers. Environmentally devastating oil spills were highly publicized, most recently the *Exxon Valdez*, Alaskan oil spill of March 1989 and the beach pollution on the Atlantic coast beaches during the summer of 1988. All of these graphically demonstrated the human-caused pollution of our natural environment. Such ecological crises have forced many citizens and leaders of advanced industrial societies to question their post-World War II growth-fed optimism about the future of their culture as well as the premise of unlimited economic growth and the continued economic “progress” implied by the industrial worldview and value system.⁵⁸

It is because of dramatic ecological events that most analysts consider the crisis of industrialism to have begun in the late 1960s or early 1970s. In addition to the general political turmoil of this period associated with the war in Vietnam, critical reactions to it, and worldwide student protests on this and other issues, the environmental movement and greater public consciousness of the importance of ecology to the survival of the human species began to surface. Of course, the shock of the quadrupling of the price of oil by the OPEC nations in 1973 and its global ramifications served as reinforcement of the previous few years’ heightened ecological sensitivity and concern.⁵⁹ Also, the immense significance of the publication of *The Limits to Growth* must be mentioned here as well.

Many of the policymakers and citizens who were roused from their ecological ignorance by the calamitous events of this period came to appreciate both the scope and severity of these ecological threats. The effects of the newly comprehended ecological problems were interpreted as touching all aspects of the industrial way of life and threatening its very foundation to the extent that the future of the entire human species, nay, the entire planet’s survival, was considered jeopardized. A definitive history of the rise of the recent environmental consciousness and its movement within advanced industrial societies has yet to be written and, furthermore, this movement remains ongoing and perhaps even more intensified as threats such as global warming or the depletion of stratospheric ozone worsen. Nonetheless, the nature and the role of contemporary public concern over ecological issues and threats within the broader context of the crisis of the industrial social order should be examined. In so doing, the essential political nature of the current industrial crisis will be clarified.

One of the most important contributions made by biologist Garrett Hardin in his influential and widely reprinted article, “The Tragedy of the Commons,”⁶⁰ is his emphasis upon understanding the human population problem which is just one component of the complex set of ecological problems confronting us today. Hardin refers to two students of the nuclear