All in the name of progress
An essay-review of Paul R. Josephson’s INDUSTRIALIZED NATURE

Robert H. Nelson, Ph.D.
School of Public Policy
University of Maryland
College Park, MD 20742
nelsonr@umd.edu

The war, it is said, was a struggle between communism and capitalism. In the end, as the story goes, capitalism triumphed through economic superiority. The history of the twentieth century was in general dominated by conflicts among competing economic systems. Besides capitalism and communism, the leading intellectuals of the century debated — and politicians occasionally waged wars over — the merits of socialism, the free market, the welfare state, the “Asian model,” and other ways of organizing the economic affairs of a nation. Taken for granted in all this was that the winning economic system would produce the highest rate of growth, the largest gross national product, and the most to improve economic welfare.

Paul Josephson sees the world through a reversed lens, as shown by Industrialized Nature: Brute Force Technology and the Transformation of the Natural World.¹ Both communism and capitalism, he says, were similarly and gravely flawed. Both made economic progress their ultimate value. Indeed, they were opposite sides of the same sloppily struck economic coin. Josephson is hardly the first person to present such views, but his book usefully illustrates how the old ways of thinking are losing influence, how “left versus right” controversies are becoming less and less important, how the public dialogue of the twenty-first century will track new disagreements along new lines with new language.

Modern science and economics have given us the capacity to alter nature in fundamental respects — to “play God.” Is this good, or is it bad? The leading public ideologies of the twentieth century all assumed it was good. Today, however, many people want to renounce the human capacity to change nature. Even many who accept the inevitability of a nature-altering role do not concede its desirability. Industrialized Nature cannot, of course, resolve this tension for us. But it can and does make a case for new thinking by reviewing a case against the old thinking as manifested by an epic twentieth-century ideal: the “management” of nature.

“Brute force technology”

The great failure of the twentieth century, Josephson says, was its devotion to “brute force technology” — the means by which “the corridors of modernization” were spread over most of the earth. Some of the main products of modern technology were “roads, highways, power lines, and railroads”; others were “power generators — dams, boilers, reactors”; still others were “processing plants — the industrial farms, forests, stockyards, and animal cages,” and one should not leave out “the iron, copper, and aluminum factories.” Whether “within [a] socialist or capitalist system” made little difference; in either case there was a technological imperative at work that sought — and frequently achieved — “the transformation of nature.” Of no great significance was that in capitalism the justification was “the pursuit of profit” while in communism it was “the glorification of the state (or the proletariat).” Public decision-makers everywhere agreed that “nature is something that can, even must, be exploited, and that we will find solutions for the unanticipated costs of that exploitation.” (pp. 255, 256)

The result, as Josephson believes, was an assault on nature throughout the developed parts of the world, justified “in the name of civilization” and “in the name of progress.” If a person sought to resist the workings of progress, that person — in capitalist and socialist states alike — would be labeled as “obstinate, self-interested,
unpatriotic.” People in the less developed parts of the world who resisted the introduction of the modern management of nature were “considered backward, illiterate, ignorant.” (p. 257) The leading advocates of “progress” everywhere were economists, planners, and engineers.

In looking back on the history of the twentieth century, Josephson says, “there is little difference between the claims of the engineers on planning boards in Washington State,” who promoted the Grand Coulee dam project, and the “engineers from Brazil’s state electrification company, Electrobas,” who sought to develop the Amazon basin, and “the Soviet nature planners,” who sought massive dams and other projects to transform the Volga, Ob, Enisei, and other river basins. All these professionals were motivated by an identification of progress and [economic] plenty with their work.” Because progress was the highest value of all, “they refuse[d] to go slow when promoting geo-engineering projects” using the most powerful technologies of their time. (p. 257).

The fiercest assaults on nature, officially justified in such terms, were found in the Soviet Union. In 1948, the communist party released the “Stalinist Plan for the Transformation of Nature.” As Josephson explains, this Plan “involved geological engineering to maximize productive capabilities on a scale never before imagined. Visionaries proposed turning nature itself, its lakes, ponds, rivers, forests, and plains, into a giant factory.” The ability to transform nature advantageously, it was believed, would prove pivotal in the struggle between communism and capitalism. As one Soviet defender of the system argued, “complete mastery of nature was simply impossible under capitalism. A socialist order was required to ensure ‘complex rational utilization of resources.’” (pp. 28, 64)

Capitalist countries, the Soviets contended, faced two obstacles. First, capitalism had an “anarchic distribution of property and monopolies,” while in the Soviet Union, central planners could efficiently coordinate the use of state resources. Second, capitalist countries often had democratic political systems, while the most intensive use of nature often required large displacements of people. In building the Kuibyshev project on the Volga River, for example, around 500,000 people were relocated. Soviet engineers and planners were freer than their democratic counterparts to ignore complaints from “losers” in such projects. Soviet authorities, as Josephson observes, “viewed public involvement in decisions about whether to proceed with the diffusion of a new technology as at best a necessary evil; as for the environment, it was simply something to be managed.” (pp. 31, 64, 65)

In a capitalist system, economic feasibility might also restrict the application of brute-force technology. As Josephson writes, if the government did not provide subsidies, “market forces . . . might have damned fiscally and environmentally expensive projects.” For the Soviets, however, ordinary economics imposed few limitations — partly because the transformation of nature had itself become a symbol of the triumph of socialism. As Josephson notes, Lenin had “embraced electricity . . . as a panacea for the country’s backwardness.” A hydropower station would then become one of “Stalin’s icons.” In his later years, Stalin sought to build a wide range of dams and other public-works projects that were “tangible concrete temples attesting to the glory of his leadership.” Soviet leaders after Stalin would compete to surpass his accomplishments in these regards, seeking to affirm that the “creation of the material basis for communist society” was occurring under their guidance. From Stalin to Khrushchev to Brezhnev, “the engineering organizations responsible for water melioration projects in the USSR seemed only to gain in hubris. In each year of Soviet power, the quantity of manipulated water increased, from 70 billion m³ in 1937 to 125 billion in 1957 and to 450 billion by 1967.” (19, 31, 33, 65)

In such attitudes towards the application of science to control nature, the United States followed a similar path. The progressive era, Josephson writes, introduced the conceptual schemes for the “scientific management” of American society — once again in the name of modern progress. Under the banner of progressive ideas, professional classes of economists, engineers, and planners in the United States likewise played an increasing leadership role. Resistance to growth of the federal government subsided during the severe economic depression of the 1930s, opening the way for the scientific design for progress.

In 1935, for example, the first concrete was poured in the construction of the Grand Coulee Dam, designed to supply vast amounts of power and to irrigate more than a million acres of farmland in Washington State. As Josephson explains, it was motivated by a vision of “the transformation of the Pacific Northwest into
a utopia of economic growth and American democratic ideals ... tied to technological advance." The goal was to "improve on nature" and thus encourage the spread of thriving "economic activities" throughout the region. Josephson sees close parallels to the efforts of the Soviet dam builders. "As in Soviet Russia, advocates of progress became convinced that electricity, more than the railroad, was the key to further economic development" of the Pacific Northwest. The construction of dams to produce electricity became more than a practical device. Indeed, American engineers, like their Soviet counterparts, "spoke about the human dams in unbounded metaphor." The Grand Coulee became a great cathedral to the American religion of progress. Visitors streamed to the site to witness a glorious triumph of modern engineering skills, experiencing a feeling of deep national pride and even religious awe in the presence of the new human ability to control nature for human benefit — and thereby to lay the basis for "a new civilization of mankind" based on electricity." As they would later compete in space travel, Americans competed to build the largest dams as part of "an ideological contest with the USSR" to demonstrate which economic system could more rapidly advance. (pp. 44, 45, 46)

Russians for centuries saw Moscow as the "Third Rome"; from the first years of Puritan Massachusetts, Americans saw themselves as building a "city on the hill," offering a beacon for all mankind to follow. In the twentieth century, the worship of economic progress took the place of Christianity in the affairs of state. As the Soviet Union and the United States became superpowers matched in a cold war, longstanding aspirations took on a new meaning: competition among alternative "religions" of progress. This competition, however poorly understood, was of great importance to the whole world.

Towards heaven on earth

A religion of progress in one or another form indeed held sway in most of the nations of the world over the course of the twentieth century. Josephson examines a number of national applications of this religion in Industrialized Nature, including the efforts of the Brazilian government to develop the Amazon basin and efforts of the Norwegian government to manage ocean fisheries. While successfully explaining such consequences on the ground, Industrialized Nature less successfully explains the underlying theology or why a belief in economic progress became such a powerful faith for so many people in the twentieth century.

Josephson has little to say about the assumptions and reasoning that lay beneath what was in all but name an actual theology. Inevitably, then, his modern economists and engineers often come across as caricatures of a befuddled and sometimes evil group whose operatives seemingly enjoy committing grave sins against the natural world. More accurately, if less conventionally, they were zealots of a new fundamentalist faith. Human beings cannot live without religion, apparently, but sometimes they can hardly live with it.

Marxism in the old Soviet Union, it helps to understand, was not only a religion but a direct offshoot of Judeo-Christian religion. As a leading University of Chicago theologian once declared, Marxism was a "Judeo-Christian heresy." Although Marx had famously declared that religion was the opiate of the masses, "the appeal of Marxism lay in its affirmation of certain prophetic emphases of the biblical tradition." As in the Bible, the end of history would be marked by a great apocalypse. Following the triumph of the proletariat, no longer would class warfare be waged, government be needed, or property be private. It would be the end of evil in the world, the arrival of a new heaven on earth, as foretold by the latest of the great prophets of history, Karl Marx.

For Marx, as for many other leading thinkers of the modern era, the source of evil in the world was material scarcity. The Bible was wrong; the true source of "original sin" lay in economic circumstances. Forced to struggle for scarce resources, human beings learned to lie, cheat, and steal. In Marxist religion, human beings thus were "alienated" from their existence by the workings of the class struggle, the economic force that had shaped everything in history and took God's place as prime mover. In the future, however, matters would be different. Modern science and economic progress had for the first time ever made possible the abolishment of material scarcity. In a world of complete abundance, no longer would any material basis for sin persist. Heaven would finally have arrived on earth.

Not only Marxists believed in the power of economic progress to save the world. A leading American progressive, Gifford Pinchot, declared that he had been motivated to enter public service by the desire "to help
in bringing the Kingdom of God on earth. 

Progressivism has been described by historians as "the gospel of efficiency"; it showed all the qualities of a "secular Great Awakening." The social-gospel movement provided much of the moral energy for progressive causes. As one scholar describes this movement, it sought the "social salvation" of mankind and hoped to achieve "the coming to earth of the kingdom of heaven."

Such zeal for progress underlay the fervent dedication to the transformation of nature seen during much of the twentieth century. Josephson often seems to suggest that economists and other professionals were merely pursuing greater bureaucratic control or were seeking personal benefits: wealth and status. Such behaviors were no doubt often observed. What is understated in his account, however, is a full awareness that principal economists, engineers, and planners were crusaders, in a literal sense in some instances. As in earlier Christian times, there would now even be martyrs.

The price of progress

By the end of the twentieth century, economic hopes for a new heaven on earth had largely been dashed. Germany had been among the most advanced nations economically and scientifically, and yet a holocaust took place in that nation and in territories it conquered. Human beings lived longer and healthier lives, but no wholesale transformation in the degree of happiness or spiritual contentment was apparent. Indeed, some people argued that the material wealth of modern life was increasing alienation. By the end of the twentieth century, new forms of religious fundamentalism were arising, partly reflecting a turn away from the communist, socialist, and other modern denominations of progress.

As long as progress had a transcendent purpose, the burdens of economic growth and development could be ignored. They would, for one thing, be temporary. In the middle ages, theologians had similarly argued that to enjoy a few fleeting moments of sinful pleasure in this life would be folly if eternity in hell was the consequence. Members of the economics profession — the chief priesthood of the religion of progress — similarly emphasized that the long run was all that counted and that short-run sacrifices were merely "the price of progress." This tenet of faith was expressed symbolically in the technical development of economic models. Neoclassical economists focussed on a world in which perfect competition, perfect knowledge, and perfect equilibrium were assumed. Any transitional costs of economic adjustment simply did not figure in such a world. It was the economists' way of saying metaphorically that these transition costs did not count.

If no heaven has yet come to earth, however, the economic system must have a more prosaic purpose: to produce goods and services to maximize "welfare." An honest accounting, however, would have to include any transitional adjustments as real costs. It would have to include the negative effects on the environment that diminish the welfare of the people who live in that environment. It would no longer be possible to ignore peoples displaced for the longer-run salvation of the world. As Josephson explains, "the true costs of the well-intended efforts to understand nature and to transform it into readily available commodities, and to force nature to become more machine-like, more predictable, and a human construct more readily recognizable, are difficult to establish." For example, "to quantify the costs to local fishing communities of their loss of livelihood to modern technology, which harvests cod, haddock, and the like so much more efficiently" is difficult. Also difficult to quantify are "justice, beauty, morality and ethics," and, so, they also have often fallen "outside the scope of consideration" in the thinking of modern economists and planners.

For example, Grand Coulee, along with other dams in the Pacific Northwest, devastated the salmon populations of that region. In the old Soviet Union, the sturgeon of the Caspian Sea were reduced to a tiny faction of their former populations in part by damming the Volga River. Not only were fish products lost; the "material basis of society" did not depend on individual fisheries. But salmon and sturgeon were part of the cultural identity of their regions. Incorporating this identity into economic models — giving it a dollar value — is hard, yet, in a broad understanding of "welfare," the loss of salmon and the loss of sturgeon imposed large human costs; people really felt badly, suffering a large real loss of "utility." Yet, progressive economists and planners had effectively discounted any such feelings to zero. While it might have made a certain
sense when the future attainment of a heaven on earth was at stake, by the end of the twentieth century many critics recognized this discounting as an moral offense against nature.

As Josephson reviews the applications of progressive religion, some of the biggest losers were the indigenous peoples of Siberia who were subject to “a program of forced assimilation.” The Soviet government sought to educate the Nenets, Khanty, Mansi, and other Eskimo peoples in “the glories of the Communist Party.” The “new enlighteners were radicals fully steeped in Marxist-Leninist values, which they intended to instill in the ignorant masses.” Consistent with the tenets of their faith, these enlighteners professed that the salvation of indigenous groups would result from economic changes. Indigenous peoples “would be civilized through material change — through the building of apartment houses, roads, and schools and more generally through Moscow-derived public health programs, economic development and educational programs.” The goal was “to modernize — that is, change forever — the culture of indigenous peoples.” Such policy reflected “an ideology of progress. . . .[in which] the indigenous peoples were seen as backward and uncivilized, if not innately hostile to Soviet power.” They would have to abandon their old ways of thinking and living to adapt to a world of “central industrial planning,” and they would have to abandon their old beliefs in favor of Marxist “atheism.” (pp. 174, 175, 176)

Not only indigenous Siberians would have to improve in these prescribed ways. Millions of political prisoners from European Russia were sent to the GULAG in Siberia. Indeed, the Soviet Union was willing to sacrifice almost any of its citizens for the greater glories of economic progress. Dams, nuclear stations, and brand new cities were rushed to construction in Siberia. As Josephson reports, “whatever the climate, whatever the design of the station, the steepness of the valleys, or the difficulty of building the foundation, the political indoctrinators were more concerned with progress at any cost than with safety.” In the calculations of Soviet planners and engineers, “the workers, no less than the lands, were peripheral.” The ordinary workers were required to labor “without hard hats, without safety ropes, without any safety culture whatsoever, at high spots hooking wires, at low spots near rushing water pouring concrete and setting charges.” All this was necessary for the realization of the overarching goal: “to transform rivers, taiga, and tundra and to enter the earth’s crust in search of fossil fuels and mineral ores” across Siberia. (p. 185)

There was a similar indifference to human costs in the development of the Amazon basin. Indeed, as Josephson argues, “we must understand that the Stalinist plan for nature transformation was under way for much of the twentieth century, and not only in the USSR but also in Brazil, in China, in Norway, and above all in the United States.” (p. 12) Indifference to the transitional burdens of progress was worldwide over the course of the past century. As Josephson summarizes:

Nation-states became major actors in forcing the pace of resource development in the twentieth century. Whether essentially capitalist or socialist, the governments of those states supported the costly diffusion of large scale technologies to provide access to extensive resources in previously inaccessible or inhospitable regions. The highways, railroads, hydropower stations, smelters, and combines brought much of the world’s forest and its core into the hands of processing industries. But as the cases of Amazonia and Siberia show, significant social and environmental changes, some of them highly destructive, accompanied the expansion of civilization into the rain forest and taiga. The forests have disappeared hectare by hectare, and with them have gone endemic species and indigenous people. The earth has been scarred by mining and oil extraction. Hazardous wastes associated with industrial manufacturing now fill soils, lakes, rivers and valleys, even in the center of “undeveloped” regions. (pp. 194–195)

A main contribution of Josephson’s book is to show how these outcomes were not merely random acts of selfish or evil individuals. To the contrary, the economists, planners, and engineers here were working for an ultimate cause. Many were willing to inflict pain and suffering on fellow citizens but could justify this in the name of service to the highest of purposes. If nature suffered severe assaults, these were the temporary costs that served a great long-run goal. If many workers suffered and died, the same could be said.

Restraints on the exercise of religious zeal were greater in the United States, where realities of the private market limited some of the grander designs and where the presence of a political democracy inhibited the power of government to ignore the short-run
All in the name of progress

welfare of citizens. In the Soviet Union, successor state
to long traditions of autocracy and serfdom, few
restraints obtained, and willingness to sacrifice the
present for the future reached its apogee. As Josephson
reports, “what the Soviet Union lacked in technological
sophistication its engineers and policy makers made
up for in unbridled enthusiasm” for the salvation of
the world. (p. 180)

Has progress been worth it?

Josephson, as have other writers, makes a persuasive
case that the pursuit of economic progress failed to
account for large costs that were being imposed on
many victims — human and nonhuman alike. The
question, however, remains whether modern progress
has been worth it. Perhaps, when all the warts and
blemishes, all the miscalculations, have been accounted
for, the benefits of progress have been greater than the
costs. Certainly, for many human beings, it would seem
that the benefits must be greater. Until the modern age,
the population of the world was a few hundred million
people. Absent the products of modern science and
economics, most people on earth today would not
be present at all. If the world were to revert to pre-
modern conditions, most of current humanity might
soon expire.

In the summer of 2003, I spent five weeks in
Moscow. I was surprised to find that Stalin was still
held in rather high regard by many Russians. One town
was proposing to restore an old statue of Stalin to its
former place of honor. I encountered businessmen and
other worldly Russians who described an admiration
for Stalin. He ranks highly today in polls of great
Russian figures of history. Of course, he did make
enormous “mistakes,” it is said. But Stalin, as many
Russians seem to believe, and even if he used brutal
methods, was successful in his efforts to force-march
a backward, semi-feudal society into the modern age.
At the end of communism in 1991, the average Russian
lived much better than his or her counterpart 100 years
earlier, although conditions did worsen considerably
for the majority in the 1990s.

In the United States, a middle class person today lives
in matters of health, food, transportation, and commun-
ications better than a king or queen of three hundred
years ago. If original sin had material causes, existence
in the United States by now would be getting close to
heavenly. Apparently, life amounts to more than
economic growth and development can provide.
Nevertheless, few Americans seem willing to give up
on economic growth. Politicians still compete on the
basis of their ability to devise public policies that will
spur growth. The fate of the world aside, many
Americans would like a new 45-inch plasma television
set or would like to spend another week in Cancun
during the winter. And seemingly violating the eco-
nomic law of diminishing returns, Americans work
harder than Europeans, even though Americans are,
by standard measures, richer than Europeans.

Josephson has raised, even as he does not answer,
profound questions — what is the purpose of our
economic activity, and how does that purpose affect the
way we organize the economy? Until nearly the end of
the twentieth century, the answer was clear for the
intellectual leadership of most modern nations: they
hoped to save the world by economic means. The
economics profession symbolically reinforced this
conviction with formal economic models that ignored
the burdens of progress: the many “losers” in economic
growth and development. Economists provided a moral
blessing for “efficient” economic systems — capitalist
and socialist alike. Now that progress no longer seems
to have a religious blessing, however, economists are
as confused as anyone as to the ultimate purpose of
the economic system.

Clearly, the losers in progress can no longer be
ignored. To impose large sacrifices on people and the
environment in the name of a great religious cause is
one thing; to impose such sacrifices in the name of
a larger television set is quite another. Yet, if the losers
in the workings of the economy must be compensated
for their loses, the vaunted efficiency of the market —
and of other economic systems as well — would
disappear. Contrary to the claims of many economists,
the success of the market is not primarily due to its
technical workings. The market succeeds because it
incorporates a strong moral judgment: no one can be
allowed to stand in the way of progress as the market
transforms society according to the workings of
competition. As a leading American economist, Charles
Schultze, once declared, the greatest “advantage of the
market as a means of social organization is its ‘devil
take the hindmost’ approach to questions of individual
equity.” If a philosophy of “do no direct harm” to
anyone — as often found in “politics” — prevailed,
many of the most efficient actions in both the market and government would be frustrated.  

If each loser in the market could file, say, a “nuisance” claim for damages by a more successful competitor, the market would soon grind to a halt. Yet, to ignore the costs of losers is a social decision. No divine command — and no religion of progress — requires a market system as the means of organizing society. Herein lies a dilemma current economists cannot cleanly solve. One solution might be to justify the market in terms of the preservation of individual freedom; that would be the libertarian solution. But current members of the economics profession, by contrast, assign the highest ultimate value to economic efficiency. Efficiency — not the maximization of liberty, nor the preservation of any other good or value — is for them the lone self-justifying goal of economic activity.

**Nature as the highest value**

As times, Josephson — like many other contemporary observers — seems to suggest that the preservation of nature should now become the highest value. If libertarians seek to protect individual human beings from any coercive impositions by others, environmentalists often take a similar view with respect to “coercive” actions against nature. In the modern world, as Josephson writes, “we have come to rely increasingly on science and technology to modify nature.” Yet, there are large “dangers in this approach.” It will be necessary instead “to adopt sustainable approaches . . . that maintain biodiversity.” A decision to alter nature should, if at all possible, be made in such a way as to “ensure reversibility of transformative projects.” The progressive assumption in favor of changing nature, unless damage can be shown, should be reversed. Advocates of changes in the natural world should be required to show “that we can alter the face of nature substantially in once place without incurring substantial costs elsewhere.” (p. 11)

In the modern age, humans came to see themselves as having the ability to step outside nature. Unlike any other creatures of the earth, they could deliberately remake nature on their own terms for their own benefit. This false separation from nature, Josephson argues, now must be repaired. As he states, “we humans always have been a part of nature and always will be.” (p. 11) Many of our attempts to use nature for human purposes have produced harmful consequences that were altogether unexpected and, in retrospect, should never have been attempted. The development of nuclear power is commonly cited as one such attempt.

Yet, despite his many useful observations, Josephson’s treatment of nature ultimately is confused, though not uniquely so.  

Josephson seeks to protect and to restore nature. He tells use that we should not abuse nature, should not assault nature, should not change nature without compelling grounds for doing so. Yet, this is not “nature” in any biological or other scientific sense. Only God might have the power to repeal the laws of physics and chemistry. Whatever human beings do to the world, “nature” will always be available for exploration. Josephson really has in mind a specific end for nature. The world must protect and try to rediscover nature as it existed before modernity. His vision is actually similar to a biblical creationism; God created the earth and human beings should not tamper with His Creation.

But even ancient nature changed — constantly. For thousands of years, native peoples were often agents of great changes in the natural world through the manipulation of fire; many of the forests in the western United States were shaped by Indians through the setting of forest fires. In the modern age, human beings have accelerated the pace of change but have not altered the fact of human change of nature. Rather than simply opposing the existence of change, Josephson is actually opposing a specific kind of change. His real great concern — what really offends him — is human beings “playing God” with nature.

Yet, there is confusion here as well. No lion has ever protected an impala out of moral pity or concern for the preservation of a fellow species. Josephson wants human beings to be “part of nature.” As such, however, they would feel no moral obligation for the protection of nature. It is only as creatures made “in the image of God” that human beings might be made to feel a special imperative to preserve the plants and animals and other elements of the natural world. Unless there is some element of divine reason and consciousness in the very essence of a human being, people will be concerned only for their own and their progeny’s survival. From the perspective of biological evolution alone, neither the future survival of humanity nor of any other creature of nature is a matter of any great issue.

Josephson is implicitly addressing an age-old question of theology. How can human beings be made...
"in the image of God" and yet avoid the temptation to try to "be God." As in his treatment of "economic theology," Josephson covers theological terrain nearly unawares. His is a metaphorical rather than an explicit exploration of profound questions of religion that have occupied great thinkers for at least two thousand years. In this respect, though, he typifies much of modern scholarship.

Conclusion

Industrialized Nature follows a path blazed over forty years ago by Rachel Carson in Silent Spring. Josephson's is a story of the unexpected consequences, many of them harmful, of the modern pursuit of scientific and economic progress. By now, a voluminous literature of this kind is available. Much of it blames capitalism specifically. Josephson makes a novel comparative contribution by showing that offenses against nature were worldwide, though most extreme in the Soviet Union and other communist countries. While the most important discoveries were made in the West, the worship of progress was most extreme, and the application of science least relenting, in the East, where actual physical damage to the environment was greatest.

For Josephson, both communism and capitalism — along with all other forms of "economic theology" — are fatally flawed. They competed, successfully or unsuccessfully, according to their ability to serve ultimate criteria of growth and efficiency. But needed instead is a new ultimate criterion: as envisioned by Josephson, the preservation of nature. Yet, his calls for greater respect for nature really amount to a call for greater respect for God. Human beings came to believe that they could take the place of God. If they continue in this illusion, as Josephson suggests, they will suffer great punishments, often taking the form of environmental calamity — punishments of a biblical kind, it might be noted.

Josephson strongly asserts this new (or perhaps we should say old) set of religious values but does little either to defend it or to explain its full implications. Others will have to to develop whatever arguments might apply. Nevertheless, with books such as this, we see emerging the intellectual contours of a new theological age. Of course, the modern age just closing was also an age of theology — the various religions of progress — but theological purpose and character were typically disavowed. Ironically, a lack of theological introspection contributed to modernism's failures. The time has come for open and frank acknowledgment — not only by Josephson but also by the many other people today who offer views of nature similar to his — of the necessity for a new theological discussion of the relationship of human beings and nature. The revival of theology — this time conducted in explicit terms — may be a defining feature of the post-modern era.


References


