

Environmentalism in the Light of Menger and Mises

By George Reisman

I

President Rockwell, Members of the Faculty and Staff of the Ludwig von Mises Institute, Members of the Faculty of All Other Institutions of Higher Learning Here Present, Ladies and Gentlemen:

It is a great honor for me to have been invited here today to deliver a lecture in memory of Ludwig von Mises.

I had the enormous privilege of personally knowing Ludwig von Mises over a period of twenty years, that began when I was but a high school student and was invited by him to attend his graduate seminar at NYU (along with Ralph Raico, who was then my fellow high school student), and that ended only with his death in 1973. I attended von Mises's seminar for the first eight years of this period, and in the course of that time had the honor of translating his book *Epistemological Problems of Economics* and, far more importantly, the honor of having him serve as my mentor when it came time for me to write, first, my MBA thesis and, then, my doctoral dissertation. But incomparably more important even than this is the fact that von Mises was, and continues to be, *the leading intellectual influence on my life and work*. I judge that I owe to him and his magnificent writings well over half of the knowledge that I possess that I consider to be both important and distinctive, that is, known to relatively few other people and yet, at the same time, urgently in need of being known by everyone, or at least by those whose ideas and influence govern the conduct and determine the fate of our country and our society.

I remember a conversation I had many years ago with Ralph Raico, which I think occurred sometime before we had met von Mises, but after we were both well advanced in our

understanding of his ideas and their importance. The subject of that conversation was the importance of von Mises in history. I did not want to appear to go overboard, and so I was content to agree simply that von Mises should be regarded as one of the ten or so most important figures in history. My actual estimate of his importance was, and is, higher. And now, many years later, informed by a better understanding than I had then of the principle of marginal utility, I can state my actual estimate of Mises's importance in these terms: I do not say that Mises is more important than such great men as Newton or Aristotle or Euclid or Copernicus or Columbus or Edison, or a number of other very familiar names, including Ayn Rand. I do say, however, that at what economists call *the margin*—that is, the area to which we need to devote our attention—he is the *most important man of all*, past or present.

That is, he is the man whose ideas are today and for the foreseeable future more urgently in need of being more widely understood and accepted than those of any one else, past or present. The world probably already has the entire direct benefit of the discoveries of such figures as Euclid, Newton, Copernicus, Columbus, and Edison. It has very, very much of the benefit of the philosophy of Aristotle. It now even has substantial exposure to the writings of Ayn Rand, who is read by millions. What the world most seriously lacks and of which it is most urgently in need of an enlarged supply is the understanding and influence of the ideas of Ludwig von Mises.

Mises provides vast knowledge that is indispensable to the defense and continued existence of modern, capitalist civilization and all that depends on that civilization in terms of material well-being and human life itself. The knowledge he provides is unique in terms both of many of its major components and in terms of the way it is systematized. As I wrote in my book *Capitalism*:

What von Mises undertook, and which summarizes the essence of his greatness, was to build a systematic intellectual defense of capitalism and thus of material civilization.

Point for point, von Mises developed answers to virtually all of the accusations made against capitalism—from its alleged exploitation of labor and responsibility for unemployment and depressions to its alleged responsibility for monopoly, wars, and racism. He developed a social philosophy of capitalism which demonstrates the benevolent operation of all of capitalism's leading institutions, especially private ownership of the means of production, economic competition, and economic inequality. He expounded a procapitalist interpretation of modern economic history, and provided a devastating critique of socialism and government intervention in all of its forms. [And], he demonstrated that a socialist economic system lacks the ability to engage in rational economic planning because of its lack of a price system and thus the ability to perform economic calculation. (p. 5)

With great regret, sheer lack of time prevents me from quoting all that I say about von Mises's enormous contributions.

However, additional major evidence for the vital importance of his contributions is provided precisely by the rise of environmentalism, which movement, of course, is the subject of my lecture.

Environmentalism is the product of the collapse of socialism in a world that is ignorant of the contributions of von Mises—a world that does not know what he has said that would logically explain the collapse of socialism and, even more importantly, the success of capitalism.

Because of ignorance of the contributions of von Mises, the great majority of the intellectuals, and of the general public too, which has been subjected to the educational system fashioned and run by them, continues to believe such things as that the profit motive is the cause of starvation wages, exhausting hours, sweatshops, and child labor; and of monopolies, inflation, depressions, wars, imperialism, and racism. At the same time, they believe that saving is hoarding and a cause of unemployment and depressions, as is, allegedly, economic progress in the form of

improvements in efficiency. And by the same logic, they regard war and destruction as necessary to prevent unemployment under capitalism. In addition, they believe that money is the root of all evil and that competition, is “the law of the jungle” and “the survival of the fittest.” Economic inequality, they believe, proves that successful businessmen and capitalists play the same social role in capitalism as did slave owners and feudal aristocrats in earlier times and is thus the logical and just basis for “class warfare.”

Real, positive knowledge of the profit motive and the price system, of saving and capital accumulation, of money, economic competition, and economic inequality, and of the *harmony of interests among men* that results from the joint operation of these leading features of capitalism—all of this knowledge is almost entirely lacking on the part of the great majority of today’s intellectuals.

In the absence of such knowledge, such *theoretical* knowledge, of which von Mises is far and away the most important source, concrete, historical facts are generally insufficient to change the intellectuals’ ideas or attitudes. Merely to show them such facts as the economic superiority of West Germany over East Germany, of South Korea over North Korea, of Taiwan over mainland China, and, of course, and above all, of the United States over the Soviet Union, makes virtually no impression.

It does not because the intellectuals operate on the basis of a theory. Theory, even when it is actually wrong, is held as an understanding of reality in terms of a system of principles, that is, in terms of logical connections between propositions which are regarded either as self-evidently true or as logically derived from such propositions. Finding a fact at variance with what is considered to be such knowledge, usually only serves to call into question the fact, not the theory. The situation is comparable to someone who knows the laws of arithmetic being confronted with a situation in

which the facts of the case appear to contradict those laws, e.g., a case in which two plus two appears to add up to five. In such a case, the truth of two plus two equals four will not be questioned. What will be questioned is the report of their adding up to five and every aspect of the process of reaching such a mistaken conclusion.

In the minds of the intellectuals, the evil of virtually every aspect of capitalism appears as absolutely certain. In their view, it simply cannot be that such an evil system could possibly produce good results. At the same time, the goodness of socialism appears as equally certain to them.

Of course, the economic theory of the intellectuals is riddled with false propositions, logical errors, and gross ignorance. But not having read von Mises, the intellectuals do not know this. And thus they hold their theory as being more certain than almost any historical fact. It is a *structure of mutually reinforcing ideas*—ideas that serve as intellectual struts and braces, and cross struts and cross braces, as it were. The only way it can be refuted is by means of the kind of comprehensive economic theory provided by von Mises. Nothing less will do. It cannot be done simply by confronting the intellectuals' socialist theory with historical facts that contradict it.

And I must add that refuting the intellectuals' socialist ideas also cannot be done merely by confronting them with a different fundamental philosophy, notably Ayn Rand's philosophy of Objectivism. This is because just as the historical facts are too narrow to do the job of changing the intellectuals' minds about capitalism, so too, a philosophical system by itself is too abstract and broad to do the job. Only von Mises is squarely on target in providing a comprehensive and compelling case for capitalism and against socialism. He is absolutely essential. Without him, the result of Objectivism alone easily turns out to be someone like Hillary Clinton, who had "an Ayn Rand period" and nevertheless ended up as a thorough-going statist.

Ignorance of the ideas of von Mises—the willful evasion of his ideas—has enabled the last three generations of intellectuals to go on with the delusion that capitalism is an “anarchy of production,” a system of rampant evil, utter madness, and continuous strife and conflict, while socialism is a system of rational planning and order, of morality and justice, and the ultimate universal harmony of all mankind. For perhaps a century and a half, the intellectuals have seen socialism as the system of reason and science and as the ultimate goal of all social progress. On the basis of all that they believe, and think that they know, the great majority of intellectuals even now cannot help but believe that socialism should succeed and capitalism fail.

Ignorant of the contributions of von Mises, the intellectuals were totally unprepared for the world-wide collapse of socialism that became increasingly evident in the last decades of the twentieth century and that culminated in the overthrow of the communist regimes in Eastern Europe and the former Soviet Union. Carrying their ignorance to the depths of depravity, they have apparently chosen to interpret the undeniable failure of socialism not as evidence of their own ignorance *but as the failure of reason and science*. Socialism, they believe, is the system of social organization implied by reason and science. Its failure, they conclude, can only be the failure of reason and science. Such is the state of ignorance that results from ignorance of the contributions of von Mises.

This much at least must be said here about the actual relationship between socialism and reason. Reason is an attribute of the individual, not the collective. As von Mises repeatedly said, “Only the individual thinks. Only the individual acts.” So far from being any kind of system demanded or even remotely supported by reason, socialism constitutes *the forcible suppression of the reason of everyone except that of the Supreme Dictator*, or that of the Supreme Dictator and the handful of other members of the central planning board. They alone are to think and plan, while all others are merely to obey and carry out orders from above. A system in which one man, or a few men, presume to establish a

monopoly on the use of reason must, of course, fail. Its failure can certainly not be called a failure of reason. It can no more be called a failure of reason than it could be called a failure of human legs if one man or a handful of men were somehow to deprive the rest of the human race of the power to use its legs and then, of course, found its own legs inadequate to support the weight of the human race. So far is the failure of socialism from being a failure of reason that it would be much more appropriate to describe it as a failure of *lunacy*: the lunacy of believing that the thinking and planning of one man or a handful of men could be substituted for the thinking and planning of tens and hundreds of millions of men cooperating under capitalism and its division of labor and price system. (Of course, because they never bothered to read von Mises, the intellectuals do not even know that ordinary people do in fact engage in economic planning, planning that is integrated and harmonized by the price system. From the abysmally ignorant perspective of the intellectuals, ordinary people are chickens without heads. Thinking and planning are allegedly actions that only government officials are capable of performing.)

Because of ignorance of the contributions of von Mises, one cannot expect very many people to know that Nazism was actually a major form of socialism and thus that the fifteen million or more murders for which it was responsible should be laid at the door of socialism. Nazism and all of its murders aside, Marxian “scientific” socialism was responsible for more than *eighty million* murders in the twentieth century: thirty million in the former Soviet Union, fifty million in Communist China, and untold millions more in the satellite countries.

The great majority of the intellectual establishment never took these latter mass murders very seriously and certainly did not regard them as being caused by the nature of socialism. (They did take seriously the murders committed by the Nazis, which they blamed on capitalism, in their naive belief that Nazism was a form of capitalism.) Even when, late in the twentieth century, well after the great majority of the murders had been committed and were known to the world, President Reagan

characterized the Soviet Union as “the evil empire,” the intellectual establishment was capable of no other response than to criticize him for being impolite, undiplomatic, and boorish.

Now the reality is that the great majority of intellectuals of the last several generations have blood on their hands. Morally speaking at least, in urging the establishment of socialism and/or in denying or ignoring its resulting bloody consequences, *they have been accessories to mass murder*, either before the fact or after the fact.

And, indeed, the intellectuals have some form of awareness of their guilt. For not only do they blame reason and science for the failure of socialism but they now also regard reason and science, and its offshoot technology, as *profoundly dangerous phenomena*, as though they, and not socialism, had been responsible for the mass murders. Indeed, the same intellectual quarter that a generation or more ago urged “social engineering” has taken the failure of social engineering so far as to now oppose engineering of virtually any kind. The same intellectual quarter that a generation or more ago urged the totalitarian control of all aspects of human life for the purpose of bringing order to what would otherwise allegedly be chaos, now urges a policy of *laissez-faire*—out of respect for natural harmonies. Of course, it is not a policy of *laissez-faire* toward human beings, who are to be as tightly controlled as ever. Nor, of course, is it a policy that recognizes any form of economic harmonies among human beings. No, it is a policy of *laissez-faire* toward *nature in the raw*; the alleged harmonies that are to be respected are those of so-called eco-systems.

But while the intellectuals have turned against reason, science, and technology, they continue to support socialism and, of course, to oppose capitalism. They now do so in the form of environmentalism. It should be realized that environmentalism’s goal of global limits on carbon dioxide and other chemical emissions, as called for in the Kyoto treaty, easily lends itself to the establishment of world-wide central planning with respect to a wide variety of essential means of

production. Indeed, as I wrote in *Capitalism*, “a global central planning authority is implicit in all potential international efforts to combat alleged global problems. For what is necessarily present in all such efforts is the attempt to organize mankind into a collective unit that acts as one and does so with consistency and coordination, i.e., is centrally planned.” (p. 101)

As I wrote, one of the most prominent theorists of the environmental movement, Barry Commoner who was also the Green Party’s first candidate for President of the United States, provides a major bridge between socialism and environmentalism. The bridge is in the form of an attempted ecological validation of one of the very first notions of Karl Marx to be discredited—“namely, Marx’s prediction of the progressive impoverishment of the wage earners under capitalism. Commoner attempts to salvage this notion by arguing that what has prevented Marx’s prediction from coming true, until now, is only that business firms have been subsidized by society at the expense of the environment. In effect, says Commoner, the exploitation of the workers has been mitigated by capitalism’s ability—temporarily—to exploit the environment. But now this process must come to an end, and the allegedly inherent conflict between the capitalists and the workers will emerge in full force. In Commoner’s own words:

‘Marx believed that as capital accumulated, the amount of its fixed forms (productive machinery)—which is related to what he called the “organic composition of capital”— would increase. This is the denominator in the profit equation, and Marx believed that as this denominator grew, the rate of profit would fall. To counteract this trend, the capitalists would need to make increasing inroads on the share of production that goes to the workers. The working class would become increasingly impoverished, and the growing conflict between capitalist and worker would lay the grounds for the revolutionary change that is the political outcome of the Marxist analysis. . . .’

“Commoner continues:

‘In a curious way, an explanation of why Marx’s prediction has failed to materialize—that is, until now— emerges from the improved understanding of economic processes that is one product of the recent concern with the environment. . . . Since no one has to pay for it, there is nothing to keep pollution from happening. And, as we now

well know, the cost is borne by society as a whole. As I pointed out in *The Closing Circle*, “. . . this arrangement leads to “. . . [a] temporary cushioning effect of the ‘debt to nature’ represented by environmental degradation on the conflict between entrepreneur and wage earner, which as it now reaches its limits may reveal this conflict in its full force. . . . In this sense the emergence of a full-blown crisis in the ecosystem can be regarded, as well, as the signal of an emerging crisis in the economic system.’

“Thus, according to Commoner, Marx will be proved right after all—on the basis of such things as the accumulation of carbon dioxide in the atmosphere and of beer cans on the beach. These will allegedly compel the world to adopt a social system in which much less is produced in total and in which the members of one group can gain only at the expense of the loss of the members of other groups. In that world, apparently, Commoner will feel at home. It will be a world in which men do not join together to subdue nature for their mutual and increasing benefit, but an impoverished, static world in which men must fight one another for scraps of bread, for the alleged sake of appeasing nature.” (Idem.)

As I wrote in summing up the relationship between environmentalism and socialism:

The only difference I can see between the green movement of the environmentalists and the old red movement of the Communists and socialists is the superficial one of the specific reasons for which they want to violate individual liberty and the pursuit of happiness. The Reds claimed that the individual could not be left free because the result would be such things as “exploitation,” “monopoly,” and depressions. The Greens claim that the individual cannot be left free because the result will be such things as destruction of the ozone layer, acid rain, and global warming. Both claim that centralized government control over economic activity is essential. The Reds wanted it for the alleged sake of achieving human prosperity. The Greens want it for the alleged sake of avoiding environmental damage . . . [And] Both the Reds and the Greens want someone to suffer and die; the one, the capitalists and the rich, for the alleged sake of the wage earners and the poor; the other, a major portion of all mankind, for the alleged sake of the lower animals and inanimate nature. (Ibid., p. 102)

Of course, the socialism of the environmental movement is by no means entirely Marxist. The environmental movement also advocates socialism on a much less grandiose scale than does Marxism. For example, it also advocates socialism in the form of “bio-regionalism,” which represents socialism on the scale of self-sufficient local regions allegedly distinguished by their biological characteristics. (See, for example, the writings of Kirkpatrick Sale.) Indeed, such forms of socialism are more consistent than is Marxism with the movement’s thoroughgoing irrationalism and also with the irrationalist origins of socialism itself, which began as part of the “romantic” reaction against modern capitalism and the Enlightenment as a whole.

If the world’s intellectuals had been open to the possibility that they had been wrong about the nature of capitalism and socialism—profoundly, devastatingly wrong—and taken the trouble to read and understand the works of von Mises in order to learn how and why they had been wrong, socialism would have died once and for all with the Soviet Union, and the whole world would now be moving toward laissez-faire capitalism and unprecedented economic progress and prosperity. Instead, the intellectuals have chosen to foist the doctrine of environmentalism on the world, as a last-ditch effort to destroy capitalism and save socialism.

II

All that I have said up to now should be understood as in the nature of an introduction. I consider the substance of my talk to be the refutation of the two essential claims of the environmentalists and then a critique of their essential policy prescription. The two essential claims of the environmentalists, which I take for granted are already well known to everyone, are (1) that continued economic progress is impossible, because of the impending exhaustion of natural resources (it is from this notion that the slogan “reduce, reuse, recycle” comes), and (2) that continued economic progress, indeed, much of the economic progress that we have had up to

now, is destructive of the environment and is therefore dangerous. The essential policy prescription of the environmentalists is the prohibition of self-interested individual action insofar as the byproduct of such action when performed on a mass basis is alleged damage to the environment. The leading concrete example of this policy prescription is the attempt now underway to force individuals to give up such things as their automobiles and air conditioners on the grounds that the byproduct of hundreds of millions or billions of people operating such devices is to cause global warming. And this same example, of course, is presently the leading example of the alleged dangers of economic progress.

The basis of my critique of the essential claims of the environmentalists is Carl Menger's theory of goods. The basis of my critique of their essential policy prescription is the spirit of individualism that runs throughout the writings of Ludwig von Mises.

In his *Principles of Economics*, Menger develops two aspects of his theory of goods that are highly relevant to the critique of the environmentalists' two essential claims. The first aspect is his recognition that what makes what would otherwise be mere things into goods is not the intrinsic properties of the things *but a man-made relationship* between the physical properties of the things and the satisfaction of human needs or wants. Menger describes four prerequisites, all of which must be simultaneously present, in order for a thing to become a good, or, as he often puts it, have "goods-character."

He writes:

If a thing is to become a good, or in other words, if it is to acquire goods-character, all four of the following prerequisites must be simultaneously present:

1. A human need.
2. Such properties as render the thing capable of being brought into a causal connection with the satisfaction of this need.

3. Human knowledge of this causal connection.
4. Command of the thing sufficient to direct it to the satisfaction of the need (p. 52).

The last two of these prerequisites, it must be stressed, are *man made*. Human knowledge of the causal connection between external material things and the satisfaction of human needs must be discovered by man. And command over external material things sufficient to direct them to the satisfaction of human needs must be established by man. For the most part, it is established by means of a process of capital accumulation and a rising productivity of labor.

All this has immediate bearing on the subject of natural resources. It implies that the resources provided by nature, such as iron, aluminum, coal, petroleum and so on, are by no means automatically goods. Their goods-character must be created by man, by discovering knowledge of their respective properties that enable them to satisfy human needs and then by establishing command over them sufficient to direct them to the satisfaction of human needs.

For example, iron, which has been present in the earth since the formation of the planet and throughout the entire presence of man on earth, did not become a good until well after the stone age had ended. Petroleum, which has been present in the ground for millions of years, did not become a good until the middle of the nineteenth century, when uses for it were discovered. Aluminum, radium, and uranium also became goods only within the last century or century and a half.

An example concerning goods-character being created only after the establishment of command sufficient to direct the resource provided by nature to the satisfaction of a human need would be the case of petroleum deposits lying deeper than existing drilling equipment could go. As drilling equipment improved, command was established over deposits lying at greater and greater depths. Those deposits, to the extent that they were known, then became goods, which

they had not been before. Similarly, for some years after the creation of the goods-character of petroleum, those petroleum deposits containing a significant sulfur content were unuseable for the production of petroleum products and were therefore not goods. Their goods-character was created only when Rockefeller and Standard Oil developed the process of cracking petroleum molecules, which then made sulfurous deposits useable.

The second aspect of Menger's theory of goods that is highly relevant to the critique of the environmentalists' essential claims is his principle that the starting point both of goods-character and of the value of goods is *within us*—within human beings—and radiates outward from us to external things, establishing the goods-character and value first of things that directly satisfy our needs, such as food and clothing, which category of goods Menger describes as “goods of the first order,” and, second, the means of producing goods of the first order, such as the flour to bake bread and the cloth to make clothing, which category of goods Menger describes as “goods of the second order.” Goods-character and the value of goods then proceed from goods of the second order to goods of the third order, such as wheat, which is used to make the flour, and cotton yarn, which is used to make the cloth to make the clothing. From there they proceed to goods of the fourth order, such as the equipment and land used to produce the wheat, and the raw cotton from which the cotton yarn is made. Thus, goods-character and the value of goods, in Menger's view, radiate outward from human beings and their needs to external things more and more remote from the direct satisfaction of human needs.

In Menger's own words: “The goods-character of goods of higher order is derived from that of the corresponding goods of lower order.” (p.63) And: “. . . the value of goods of higher order is always and without exception determined by the prospective value of the goods of lower order in whose production they serve.” (p. 150) And as to the value of goods of the first order:

“The value an economizing individual attributes to a good is equal to the importance of the particular satisfaction that depends on his command of the good.” (p. 146) “The determining factor . . . is . . . the magnitude of importance of those satisfactions with respect to which we are conscious of being dependent on command of the good.” (p. 147)

In Menger’s view, it is clear that the process of production represents a progression from goods of higher order to goods of lower order, that is, from goods more remote from the satisfaction of human needs and the source of the value of all goods, to goods less remote from the satisfaction of human needs and the source of the value of all goods. The process of production unmistakably appears as one of continuous enhancement of utility, as it moves closer and closer to its ultimate end and purpose: the satisfaction of human needs.

To apply Menger’s views to the critique of the essential claims of environmentalism, it is first necessary to stress the fact that in his account of things, nature’s contribution to natural resources is implicitly much less than is generally supposed. According to the prevailing view, what nature has provided is the natural resources that man exploits, that is, for example, all of the iron mines and coal mines, all of the oil fields and natural-gas wells, and so on. At the same time, according to the prevailing view, man’s only connection to these allegedly all-nature-given natural resources is merely that he uses them up, with no means of replacing them. It is generally thought, for example, that while man produces such things as automobiles and refrigerators, his sole connection to the natural resources used in their production, such as iron ore, is merely to use them up, with no possibility of replacing them.

As I say, in Menger’s view, nature’s contribution to natural resources is much less than what is usually assumed. What nature has provided, according to Menger, is the material stuff of

the deposits in these mines and wells, but it has not provided *the goods-character of any of them*. Indeed, there was a time when none of them were goods.

The goods-character of natural resources, according to Menger, is *created by man*, when he discovers the properties they possess that render them capable of satisfying human needs and when he gains command over them sufficient to direct them to the satisfaction of human needs. In Menger's own words: "Things that can be placed in a causal connection with the satisfaction of human needs we term *useful things*. If, however, we both recognize this causal connection and have the power actually to direct the useful things to the satisfaction of our needs, we call them *goods*"(p. 52).

All that needs to be added to Menger's view of the man-made creation of the goods-character of natural resources is a precise, explicit recognition of the *extent* of the *things* Menger refers to that nature has provided and which are not yet goods, but which, under the appropriate circumstances, might become goods, or, at least, from the domain of which things might be drawn to a greater extent to receive goods-character by virtue of man's contribution to the process. In other words, what precisely has nature provided with respect to which man might discover causal connections to the satisfaction of his needs and over greater portions of which he might gain command sufficient to direct such things to the satisfaction of his needs?

My answer to this question is that what nature has provided is *matter and energy*—matter in the form of all the chemical elements both known and as yet unknown, and energy, in all of its various forms. I call this contribution of nature "the natural resources provided by nature." Natural resources in the much narrower sense of "goods," as Menger uses the term, are drawn from this virtually infinite domain provided by nature. Natural resources that are goods in Menger's sense are natural resources provided by nature that man has made useable and

accessible by virtue of discovering properties they possess that enable them to satisfy human needs and by virtue of gaining command over them sufficient to direct them to the satisfaction of human needs.

What is essential here is to grasp the distinction between the two senses of the expression “natural resources.” First, there are natural resources as provided by nature. Such natural resources, as I say, are matter, in all of its elemental forms, and energy, in all of its forms. And then, second, drawn from this domain, are natural resources to which man has given goods-character.

We are already familiar with the fact that an outstanding characteristic of natural resources in the first sense, that is, of natural resources as provided by nature, is that none of them are intrinsically goods—that their achievement of goods-character awaits action by man, namely, his discovery of such useful properties on their part as enable them to be placed in a causal connection to the satisfaction of human needs, and the establishment of command over them sufficient to direct them to the satisfaction of human needs. A further, equally important characteristic of natural resources as provided by nature, and which now needs to be stressed as strongly as possible, is *the enormity of their quantity*. Indeed, for all practical purposes, *they are infinite*. Strictly speaking, *they are one and the same with all the matter and energy in the universe*. That is the full extent of the natural resources supplied by nature.

Thus, in one sense, the sense of useable, accessible natural resources—that is, of goods as Menger defines the term—the contribution of nature is *zero*. Practically nothing comes to us from nature that is ready-made as a useable, accessible natural resource—as a good in Menger’s sense. In another sense, however, the natural resources that come from nature—the matter, in the

form of all the chemical elements, known and as yet unknown, and energy in all of its forms—are virtually *infinite* in their extent. In this sense, nature's contribution is boundless.

Even if we limit our horizon exclusively to the planet earth, which certainly need not be our ultimate limit, the magnitude of natural resources supplied by nature is mind-bogglingly huge. It is nothing less than the *entire mass of the earth* and all of the energy that goes with it, from thunder storms in the atmosphere, a single one of which discharges more energy than all of mankind produces in an entire year, to the tremendous heat found at the earth's core in millions of cubic miles of molten iron and nickel. Yes, the natural resources provided by nature in the earth alone extend from the upper limits of the earth's atmosphere, four-thousand miles straight down, to its center. This enormity consists of *solidly packed chemical elements*. There is not one cubic centimeter of the earth, either on its surface or anywhere below its surface, that is not some chemical element or other, or some combination of chemical elements. This is nature's contribution to the natural resources contained in this planet. It indicates *the incredibly enormous extent of what is out there awaiting transformation by man into natural resources possessing goods-character*.

And this brings me to what I consider to be the revolutionary view of natural resources that is implied in Menger's theory of goods. Namely, not only does man create the goods-character of natural resources—by obtaining knowledge of their useful properties and then creating their useability and accessibility by virtue of establishing the necessary command over them—but *he also has the ability to go on indefinitely increasing the supply of natural resources possessing goods-character*. He *enlarges* the supply of useable, accessible natural resources—that is, natural resources possessing goods-character—*as he expands his knowledge of and physical power over nature*.

The prevailing view, that dominates the thinking of the environmentalists and the conservationists, that there is a scarce, precious stock of natural resources that man's productive activity serves merely to deplete is wrong. Seen in its full context, *man's productive activity serves to enlarge the supply of useable, accessible natural resources by converting a larger, though still tiny, fraction of nature into natural resources possessing goods-character*. The essential question concerning natural resources is *what fraction* of the virtual infinity that is nature does man possess sufficient knowledge concerning and sufficient physical command over to be able to direct it to the satisfaction of his needs. This fraction will always be very small indeed and will always be capable of vastly greater further enlargement.

As I stated a moment ago, the supply of useable, accessible natural resources expands as man expands his knowledge of and physical power over the world and universe. Up to now, although considerably expanded in comparison with what it was in previous centuries, man's physical power over the world has been essentially confined to the roughly thirty percent of the earth's surface that is not covered by sea water, and there it has been further confined to depths that are still measured in feet, not miles. Man is literally still just scratching the surface of the earth, and the far lesser part of its surface at that. And nowhere is he dealing with nature nearly as effectively or efficiently as he someday might.

In addition to the examples previously given with respect to iron, petroleum, aluminum, radium, and uranium, consider the implications for the supply of useable, accessible natural resources of man becoming able to mine at greater depths with less effort, to move greater masses of earth with less effort, to break down compounds previously beyond his power, or to do so with less effort, to gain access to regions of the earth previously inaccessible or to improve his access to regions already accessible. All of these increase the supply of useable, accessible

natural resources. They do so, of course, by virtue of creating what Menger describes as command over things sufficient to direct them to the satisfaction of human needs. All of them bestow the character of goods on what had before been mere things.

As I wrote in *Capitalism*:

Today, as the result of such advances, the supply of economically useable natural resources is enormously greater than it was at the beginning of the Industrial Revolution, or even just one or two generations ago. Today, man can more easily mine at a depth of a thousand feet than he could in the past at a depth of ten feet, thanks to such advances as mechanical-powered drilling equipment, high explosives, steel structural supports for mine shafts, and modern pumps and engines. Today, a single worker operating a bulldozer or steam shovel can move far more earth than hundreds of workers in the past using hand shovels. Advances in reduction methods have made it possible to obtain pure ores from compounds previously either altogether impossible to work with or at least too costly to work with. Improvements in shipping, railroad building, and highway construction have made possible low-cost access to high-grade mineral deposits in regions previously inaccessible or too costly to exploit.

And, I added:

There is no limit to the further advances that are possible. Reductions in the cost of extracting petroleum from shale and tar sands have the potential for expanding the supply of economically useable petroleum by a vast multiple of what it is today. Hydrogen, the most abundant element in the universe, may turn out to be an economical source of fuel in the future. Atomic and hydrogen explosives, lasers, satellite detection systems, and, indeed, even space travel itself, open up limitless new possibilities for increasing the supply of economically useable mineral supplies. Advances in mining technology that would make it possible to mine economically at a depth of, say, ten thousand feet, instead of the present much more limited depths, or to mine beneath the oceans, would so increase the portion of the earth's mass accessible to man that all previous supplies of accessible minerals would appear insignificant in comparison (p. 64).

The key point here is that, following Menger's insights into the nature of goods, the supply of economically useable, accessible natural resources is *expandable*. It is enlarged as part of the same process by which man increases the production and supply of all other goods, namely, scientific and technological progress and saving and capital accumulation.

The fundamental situation is this. Nature presents the earth as an immense solidly packed ball of chemical elements. It has also provided comparably incredible amounts of energy in connection with this mass of chemical elements. If, over and against this massive contribution from nature stands motivated human intelligence—the kind of motivated human intelligence that a free, capitalist society so greatly encourages, with its prospect of earning a substantial personal fortune as the result of almost every significant advance, there can be little doubt as to the outcome: Man will succeed *in progressively enlarging the fraction of nature's contribution that constitutes goods*; that is, he will succeed in progressively enlarging the supply of useable, accessible natural resources.

The likelihood of his success is greatly reinforced by two closely related facts: the progressive nature of human knowledge and the progressive nature of capital accumulation in a capitalist society, which, of course, is also a *rational* as well as a free society. In such a society, the stock of scientific and technological knowledge grows from generation to generation, as each new generation begins with all of the accumulated knowledge acquired by previous generations and then makes its own, fresh contribution to knowledge. This fresh contribution enlarges the stock of knowledge transmitted to the next generation, which in turn then makes its own fresh contribution to knowledge, and so on, with no fixed limit to the accumulation of knowledge short of the attainment of omniscience.

Similarly, in such a society the stock of capital goods grows from generation to generation. The larger stock of capital goods accumulated in any generation on the foundation of a sufficiently low degree of time preference and thus correspondingly high degree of saving and provision for the future, together with a continuing high productivity of capital goods based on the foundation of advancing scientific and technological knowledge, serves to produce not only a larger and better supply of consumers' goods but also a comparably enlarged and better supply of capital goods. That larger and better supply of capital goods, continuing on the same foundation of low time preference and advancing scientific and technological knowledge, then serves to further enlarge and improve the supply not only of consumers' goods but also of capital goods. The result is continuing capital accumulation, on the basis of which, from generation to generation, man is able to confront nature in possession of growing powers of physical command over it.

On the basis of both of progressively growing knowledge of nature and progressively growing physical power over nature, man progressively enlarges the fraction of nature that constitutes goods, i.e., the supply of useable, accessible natural resources.

III

I turn now to the second aspect of Menger's theory of goods that relates to the critique of the essential tenets of environmentalism, namely, his view of the process of production as one of continuous enhancement of utility as it moves from goods of higher order to goods of lower order.

All that it is necessary to add to Menger's view is recognition once again of the fact that the earth is an immense ball of solidly packed chemical elements. Now these chemical elements

constitute man's external material surroundings, i.e., his *environment*. They are the external material conditions of human life.

When these facts are kept in mind, it becomes clear that the process of production, and the whole of economic activity, so far from constituting a danger to man's environment, as the environmentalists claim, have the inherent tendency to *improve* his environment, indeed, that that is their essential purpose.

This becomes obvious as soon as one realizes that not only does the entire world physically consist of nothing but chemical elements, but also that these elements are never destroyed. They simply reappear in different combinations, in different proportions, in different places. As I wrote in *Capitalism*:

Apart from what has been lost in a few rockets, the quantity of every chemical element in the world today is the same as it was before the Industrial Revolution. The only difference is that, because of the Industrial Revolution, instead of lying dormant, out of man's control, the chemical elements have been moved about, as never before, in such a way as to improve human life and well-being. For instance, some part of the world's iron and copper has been moved from the interior of the earth, where it was useless, to now constitute buildings, bridges, automobiles, and a million and one other things of benefit to human life. Some part of the world's carbon, oxygen, and hydrogen has been separated from certain compounds and recombined in others, in the process releasing energy to heat and light homes, power industrial machinery, automobiles, airplanes, ships, and railroad trains, and in countless other ways serve human life. It follows that insofar as man's environment consists of the chemical elements iron, copper, carbon, oxygen, and hydrogen, and his productive activity makes them useful to himself in these ways, his environment is correspondingly improved.

Consider further examples. To live, man needs to be able to move his person and his goods from place to place. If an untamed forest stands in his way, such movement is difficult or impossible. It represents an improvement in his environment, therefore, when man moves the

chemical elements that constitute some of the trees of the forest somewhere else and lays down the chemical elements brought from somewhere else to constitute a road. It is an improvement in his environment when man builds bridges, digs canals, opens mines, clears land, constructs factories and houses, or does anything else that represents an improvement in the external, material conditions of his life. All of these things represent an improvement in man's material surroundings—his environment. All of them represent the rearrangement of nature's elements in a way that makes them stand in a more useful relationship to human life and well-being.

Thus, all of economic activity has as its sole purpose the improvement of the environment—it aims exclusively at the improvement of the external, material conditions of human life. Production and economic activity are precisely the means by which man adapts his environment to himself and thereby improves it (p. 90).

If anyone should ask how the environmentalists could miss the fact that precisely production and economic activity constitute the means whereby man improves his environment, the answer is that the environmentalists do not share Menger's (or Western Civilization's) starting point of value, namely, the value of human life and well-being. In their view, the starting point of value is the alleged "intrinsic value" of nature—that is, the alleged value of nature in and of itself, totally apart from any connection to human life and well-being. Such alleged intrinsic value is destroyed every time man changes anything whatever in the preexisting state of nature.

When the environmentalists speak of "harm to the environment" in connection with such things as clearing jungles, blasting rock formations, or the loss of this or that plant or animal species of no known or foreseeable value to man, what they actually mean in the last analysis is the loss of the alleged intrinsic values constituted by such things, and not any actual loss whatever to man. On the contrary, they are eager to sacrifice human life and well-being for the preservation of such alleged intrinsic values. To them, the "environment" is not the surroundings

of man, deriving its value from its relationship to man, but nature in and of itself, deriving its value from itself—i.e., allegedly possessing “intrinsic” value.

Of course, the environmentalists also frequently pose as supporters of human life and well-being, and at such times they direct their fire at various comparatively minor negative byproducts of production and economic activity, such as local degradation of the quality of air or water, while totally neglecting the enormous positives, which, of course, are of overwhelmingly greater significance.

What guarantees that the positive benefits of production and economic activity incalculably outweigh any negatives associated with their byproducts is the principle of respect for individual rights. Although by no means always observed, this principle requires that one’s production and economic activity not only benefit oneself but also that insofar as any other people are involved in the process, the use of their labor and property must be obtained only by their voluntary consent. And, of course, to secure their voluntary consent, their cooperation must be made worth their while.

Thus, for example, if I wish to construct a building, not only will I benefit from it, but also all those who work for me in its construction and all those who supply me with materials and equipment for constructing it. So too will the building’s purchaser or tenants—if I construct it for the purpose of sale or rent. In addition, no third party’s property or person may be harmed by my action. For example, I risk serious legal penalty if I construct my building in a way that undermines a neighboring building’s foundation or which makes my building unsafe for passersby.

The major complaints the environmentalists currently make concern the fact that I heat and air-condition my building—to be sure, not I as one isolated individual, but as one of many

tens or hundreds of millions of individuals using fossil fuels or CFCs. In so doing, mankind is allegedly guilty of the crime of increasing the level of carbon dioxide and other greenhouse gases, thereby causing “global warming,” or increasing the level of ozone-destroying molecules in the upper atmosphere, thereby causing higher rates of skin cancer. And because mankind is allegedly guilty in these ways, the environmentalists assume that I as one individual man must be restricted, if not prohibited altogether, in my use of fossil fuels and CFCs, even though I, as one individual, am utterly incapable of causing any of the effects alleged; and the same, of course, is true, *mutatis mutandis*, for each and every other individual.

IV

Here I want to turn to the enormous spirit of individualism that is found in von Mises. Only individuals think and only individuals act, says von Mises. It follows, of course, that it is only for his own actions that an individual should be held responsible. The son should not be punished for the sins of the father; one member of a race or nation or economic class should not be held responsible for the deeds of any other members of that race, nation, or economic class.

And so too should it be in the case of any alleged environmental damage. If an individual, or an individual business enterprise, is incapable by himself of causing global warming or ozone depletion, or whatever, on a scale sufficient to cause harm to any other specific individual or individuals, then there is absolutely no proper basis on the individualistic philosophy of von Mises for prohibiting his action. As I say in *Capitalism*, “To prohibit the action of an individual in such a case is to hold him responsible for something for which *he* is simply not in fact responsible. It is exactly the same in principle as punishing him for something he did not do (p. 91).”

The individual should not be punished for consequences that can occur only as the result of the actions of the broader category or group of which he is a member, but do not occur as the result of his own actions. Thus, even if it is true that the combined effect of the actions of several billion people really is to cause global warming or ozone depletion (neither of these claims has actually been proven—the claims of global warming have all the certainty of *a weather forecast*, extended out to the next 100 years!), but even *if*, as I say, the claims were true, it still would not follow that any proper basis existed for prohibiting any specific individual or individuals from acting in ways that only when aggregated across billions of individuals resulted in global warming or ozone depletion or whatever.

If global warming or ozone depletion or whatever, really are consequences of the actions of the human race considered collectively, but not of the actions of any given individual, including any given individual private business firm, then the proper way to regard them is as the equivalent of *acts of nature*. Not being caused by the actions of *individual* human beings, they are equivalent to actions not *morally* caused by human beings *at all*, that is to say, to *acts of nature*.

Once we see matters in this light, it becomes clear what the appropriate response is to such environmental change, whether global warming and ozone depletion, or global cooling and ozone enrichment, or anything else nature may bring. It is the same as the appropriate response of man to nature in general. Namely, individual human beings must be free to deal with nature to their own maximum individual advantage, subject only to the limitation of not initiating the use of physical force against the person or property of other individual human beings. By following this principle, man will deal with the any negative forces of nature resulting as byproducts of his

own activity taken in the aggregate in precisely the same successful way that he regularly deals with the primary forces of nature.

Allow me to elaborate on this. Here we are. We enjoy an incredibly marvelous industrial civilization, whose nature is indicated by the fact that because of its vast numbers of human beings can travel at breathtaking speeds for hundreds of miles at a stretch in their own personal automobiles, listening to symphony orchestras as they go—indeed, can fly over whole continents in a matter of hours in jet planes, while watching movies and drinking martinis; can walk into darkened rooms and flood them with light by the flick of a switch; can open a refrigerator door and enjoy delicious, healthful food brought from all over the world; can do all this and so much more. This is what we have. This, and much, much more, is what people everywhere could have if they were intelligent enough to establish economic freedom and capitalism.

But all this counts for virtually nothing as far as the environmentalists are concerned. They are ready to throw it all away because, they allege, it causes global warming and ozone depletion, i.e., *bad weather*. And the best way, they say, for us to avoid such bad weather, and thus to control nature more to our advantage, is to abandon modern, industrial civilization and capitalism.

The appropriate answer to the environmentalists is that we will not sacrifice a hair of industrial civilization, and that if global warming and ozone depletion really are among its consequences, we will accept them and deal with them—by such reasonable means as employing more and better air conditioners and sun block, not by giving up our air conditioners, refrigerators, and automobiles.

More fundamentally, the answer to the environmentalists is that the appropriate response to environmental change, whether global warming or a new ice age, is *the economic freedom of a capitalist society*. Sooner or later, such environmental change will occur—if not in this new

century or even in this new millennium—then certainly at some time in the more remote future. At that time, it will require vast changes in human economic activity. Some areas presently used for certain purposes will become unuseable for those purposes. Conceivably, they might even become uninhabitable. Other areas presently uninhabitable or barely habitable, will become much more desirable. Major changes in the comparative advantages of vast areas will take place, to which people must be free to respond.

For example, if and when global warming ever actually comes, vast areas in Canada, Greenland, and Russia would become far more hospitable to human beings than they now are. An article in *The New York Times* of Nov. 12, 2000, describes how the area around Hudson Bay, presently, in the article's words, a "sub-Arctic region of treeless tundra," could "shift to New England-style temperate leafy forest . . ." The enormous positive significance of such a development is entirely lost in the article's concentration on the plight of the local polar bears. They, the article complains, "are 10 percent thinner and have 10 percent fewer cubs than they did 20 years ago. The culprit [the emotive word used by the alleged reporter], scientists and residents here said, is climate change."

As I wrote in *Capitalism*,

Even if global warming turned out to be a fact, the free citizens of an industrial civilization would have no great difficulty in coping with it—that is, of course, if their ability to use energy and to produce is not crippled by the environmental movement and by government controls otherwise inspired. The seeming difficulties of coping with global warming, or any other large-scale change, arise only when the problem is viewed from the perspective of government central planners.

It would be too great a problem for government bureaucrats to handle (as is the production even of an adequate supply of wheat or nails, as the experience of the whole socialist world has so eloquently shown). But it would certainly not be too great a problem for tens and

hundreds of millions of free, thinking individuals living under capitalism to solve. It would be solved by means of each individual being free to decide how best to cope with the particular aspects of global warming that affected him.

Individuals would decide, on the basis of profit-and-loss calculations, what changes they needed to make in their businesses and in their personal lives, in order best to adjust to the situation. They would decide where it was now relatively more desirable to own land, locate farms and businesses, and live and work, and where it was relatively less desirable, and what new comparative advantages each location had for the production of which goods. Factories, stores, and houses all need replacement sooner or later. In the face of a change in the relative desirability of different locations, the pattern of replacement would be different. Perhaps some replacements would have to be made sooner than otherwise. To be sure, some land values would fall and others would rise. Whatever happened individuals would respond in a way that minimized their losses and maximized their possible gains.⁶³ The essential thing they would require is the freedom to serve their self-interests by buying land and moving their businesses to the areas rendered relatively more attractive, and the freedom to seek employment and buy or rent housing in those areas.

Given this freedom, the totality of the problem would be overcome. This is because, under capitalism, the actions of the individuals, and the thinking and planning behind those actions, are coordinated and harmonized by the price system (as many former central planners of Eastern Europe and the former Soviet Union have come to learn).⁶⁴ As a result, the problem would be solved in exactly the same way that tens and hundreds of millions of free individuals have solved much greater problems, such as redesigning the economic system to deal with the replacement of the horse by the automobile, the settlement of the American West, and the release of the far greater part of the labor of the economic system from agriculture to industry. (pp. 88-89)

A rational response to the possibility of large-scale environmental change is to establish *the economic freedom of individuals to deal with it*, if and when it comes. Capitalism and the free market are the essential means of doing this, not paralyzing government controls and

“environmentalism.” And both in the establishment of economic freedom and in every other major aspect of the response to environmentalism, the philosophy of Ludwig von Mises and Carl Menger must lead the way.

I want to end on a less formal, somewhat personal note. I’ve explained my estimate of the supreme importance of von Mises and his ideas. From this derives the importance of the von Mises Institute and the work it is doing. It is by far the main vehicle for bringing the ideas of von Mises to the attention of the world and winning for them the influence they deserve.

Under Lew Rockwell and his staff of highly competent and enthusiastic people, such as Jeff Tucker, Pat Barnett, and Guido Hülsmann, and reinforced by outstanding academic associates such as Ralph Raico, Joe Salerno, Hans Hoppe, and David Gordon, the Institute has performed a wide range of enormously valuable services. Among them have been the publication of books by von Mises and other members of the Austrian school, as well as two quarterly journals, three regularly published newsletters, and a quarterly book review. The Institute also holds the annual Mises Summer University, these annual Austrian Scholars’ Conferences, graduate seminars, and frequent other conferences and seminars here and around the country relating to von Mises, Austrian economics, and economic freedom. It also operates a major web site that makes the text of *Human Action* and most of the other works of von Mises available worldwide, to anyone with access to a personal computer, and reinforces this with up-to-the-minute articles and analyses applying the ideas of von Mises to leading events of the day.

These accomplishments surpass anything I had ever thought would be achieved in my lifetime. And I know that this is just the beginning and that much more is yet to come. I’m honored and delighted to have become part of it. Thank you.