

## FIVE ERRONEOUS WAYS TO ARGUE ABOUT RESOURCE ECONOMICS

MATTHEW MCCAFFREY

**ABSTRACT:** This paper examines several problematic aspects of George Reisman's *Capitalism: A Treatise on Economics*, specifically, five problems in the economics of natural resources. I argue first, that Reisman's work lacks sufficient grounding in economic theory. Second, his exposition neglects important arguments in the environmental literature. Third, it avoids problems of uncertainty, leading to a faulty theory of economic development. Fourth, he does not sufficiently explain or to criticize potential fallacies in the environmental movement. Fifth, the rhetoric Reisman deploys in his arguments confounds rather than supports his exposition.

**KEYWORDS:** resource economics, environmental economics, property rights, economic growth, uncertainty

**JEL CLASSIFICATION:** D23, O13, O33, Q32, Q51

---

Matthew McCaffrey (mcm0016@gmail.com) is a Ph.D. candidate at the University of Angers. He would like to thank Carmen Dorobăţ and Xavier Méra for helpful comments on early drafts of this paper. Any remaining errors are entirely his own.

## INTRODUCTION

Professor George Reisman's *Capitalism: A Treatise on Economics* has set itself a goal which is ambitious to say the least—nothing less than “[a] complete and integrated understanding of the nature and value of human economic life.” Among the many topics he pursues toward this end, Reisman attempts to provide a comprehensive analysis of environmental and resource economics inasmuch as these relate to capitalist economies. This portion of the treatise has been mostly neglected in other commentaries.<sup>1</sup> While Reisman has certainly brought many interesting arguments to light in this regard, I wish to discuss five aspects of his exposition which appear unsatisfactory. First, two important elements are missing from Reisman's presentation—a unifying economic framework, and a discussion of the extant literature. After discussing these, I turn to Reisman's theory of capitalist development and technological advancement. Lastly, I address Reisman's critiques of the environmental movement, in terms of both his economic arguments and his rhetoric. The final section provides concluding remarks.

## THE GAPS IN REISMAN'S RESOURCE ECONOMICS

I begin by examining what Reisman's exposition of resource economics appears to lack. The first general comment is that there is no truly economic theme which serves as the foundation for Reisman's treatment of environmental economics. While there are of course many distinct problems in environmental economics, it is important to deploy a framework through which to understand the basic issues. Rothbard (1982), for instance, analyzes resource use in light of property rights, and Cordato (2004) in terms of property rights and individual plan formation. In Reisman's case, however, the themes which bind the presentation together are not generally economic. Rather, Reisman tends to focus on non-economic arguments or value judgments regarding the desirability of capitalism, technology, and economic progress (Reisman, 1996, pp. 90–91, and throughout). Reisman vigorously rejects the notion of value-freedom in economics (Reisman, 1996, p. 36), holding human

---

<sup>1</sup> Cf. Kraus (2009), and the sources cited throughout this paper.

life and reason to be ultimate values. But whatever the merit of these values, they are not economic explanations, and do not grant any specific, overarching economic insight. Reference to such values does not necessarily solve the problems posed by the economic theory of resource use. This value-based approach is strange considering that Reisman insists his book is strictly an exposition of the principles of economics, and not a treatise on philosophy (1996, p. 36). To be sure, one or even a few fundamental principles will not be able to explain every problem relating to environmental economics, but placing one's theory on clear economic foundations is obviously essential in an economic treatise. The reality of this problem will, I believe, become clear in what follows.

To take another obvious example, there is an odd absence of an economic analysis of property rights regimes and their specific implications for resource economics.<sup>2</sup> There are brief examples (as when Reisman mentions the influence of the profit incentive on privately owned forests [1996, p. 75], or the ownership of bodies of water [1996, pp. 83, 85]) where property rights enter the discussion, but these are exceptions, and there is no systematic analysis of how private, public, and communal property rights regimes influence resource use.<sup>3</sup> Property rights appear almost an afterthought to Reisman's presentation. In fact, he even passes up opportunities to mention property rights when a discussion would significantly strengthen his argument. For example, immediately after mentioning problems with government ownership of resources, he dismisses the near-extinction of the American buffalo as an insignificant event (1996, pp. 75–76, 84). Reisman claims that the buffalo's extinction would have imposed needless costs on mankind, and that the near-extinction was necessary for economic progress. What matters for him is that the benefit exceeded the cost for mankind. Reisman could, however, have pointed out that the buffalo were overexploited because they were

---

<sup>2</sup> I emphasize this point because using a theory of property rights is one useful way to develop a genuinely economic theory of resource development. The concept of property links individual decision-making with other attendant economic concepts: means and ends, uncertainty, costs, entrepreneurial judgment, and so on.

<sup>3</sup> There is however some discussion of contract law with regard to the problem of externalities, which is unfortunately limited to only a few pages (1996, pp. 96–98, 335–336).

an economic “commons,” and were thus subject to the tragedy of the same (Anderson and Hill, 1975). This would have been one way to ground the discussion in both economic theory and history, and bolster Reisman’s case for capitalism, regardless of whether people accept Reisman’s value judgments about resources and their proper use.

The importance of emphasizing economic reasoning over ideological judgments in environmental economics has been pointed out in Shaw (2002). In this regard, Reisman’s case is atypical: a standard environmentalist approach is to assume that altering nature is always harmful in some way. Reisman seems to err in the opposite direction, by being too willing to assume away environmental damage as insignificant. Even if one accepts Reisman’s judgment that mankind’s well-being is the only valid ethical standard, it does not follow that “one cannot regard man’s activities in relation to nature with anything but awe and admiration” (1996, p. 84).

The second major point, related to the problem of economic foundations, is the troubling fact that despite the enormous literature on environmental economics, there is very little discussion in *Capitalism* of the fundamental problems of the resource economics literature. To take some canonical examples, there is no mention of Garrett Hardin’s famous article “The Tragedy of the Commons” (1968), or the extensive literature which the article has engendered. Neither is there mention of the transaction costs literature inspired by Coase (1960), which dominates much of the writing on environmental economics. These sources are usually required reading for resource economists, as well as students of the various branches of natural resource science. Forsaking these, Reisman deals mostly with common objections made against free markets and capitalist production, or with the psychology of environmental preservation advocates. To the uninitiated, it might appear as if resource economics consists only of popular or non-economic objections to capitalism.

Another important tension which is not resolved is the relation of capitalism to prevailing systems of economic intervention. Even though Reisman employs a clear definition of capitalism as “a social system based on private ownership of the means of production... characterized by the pursuit of material self-interest under freedom and... a foundation [based on] the cultural influence of reason” (1996, p. 19), he appears to apply the concept indiscriminately to

various periods in human history. To take only one example of many, he claims capitalism (and its attendant element, human reason) was responsible for the great increases in life expectancy beginning with the industrial revolution and continuing to the present day (1996, pp. 76–77). But in claiming this, Reisman refers to the Western world in general, which consists of economically heterogeneous countries, whose specific economic policies have changed much and mostly moved away from “capitalism” over the last two centuries. Reisman would hardly deny the spread of economic interventionism. But if one acknowledges that the Western world has moved steadily toward greater government influence over the economy, then it becomes difficult to see how one can simply attribute any historical event to “capitalism.”<sup>4</sup> Intervention permeates all aspects of economic life. How then does one isolate the effect of capitalism? How can one simply declare which events are caused by capitalism and which are not? This must be thoroughly supported by economic analysis; it is not something that may simply be assumed. It requires the careful use of economic theory in historical studies, and the performance of what Mises refers to as “historical understanding” (Mises, 1998, pp. 51–58). Reisman’s argument appears incomplete without such a historical explanation, and careful setting aside of false causes.

As noted above, there are few purely economic principles which guide Reisman’s analysis. In his effort to defend the capitalist system, Reisman doggedly pursues what he views as the fallacies of resource economics, and never truly develops a theory of environmental economics, but only a theory of capitalist progress (discussed below). To this end, the argument shifts between different and sometimes incompatible claims: from “resource over-exploitation is impossible” to “overexploitation is not significant” to “overexploitation is caused by economic intervention” (each of these receives mention in this paper). The reader never really gets a feeling for a foundational theory of resource use under capitalism. The unifying theme is simply that capitalism and economic progress are desirable, full stop.

---

<sup>4</sup> This sort of objection has been raised against Reisman by other authors. Cf. Carson (2006), which contains a response to criticism by Reisman (2006) regarding the definition and historical reality of capitalism.

## ECONOMIC PROGRESS UNDER CAPITALISM

We may now turn to the third important argument examined in this paper: the theory of capitalist progress developed in Professor Reisman's treatise. This theory is prominent in his discussions of natural resources and environmentalism, and is in some sense a substitute for a theory of resource economics. Economic progress is for Reisman the answer to many objections raised against capitalism regarding its possible negative effects on the environment. Reisman surveys many arguments which criticize the way resources are allocated under capitalism, and his responses provide insight into his theory of economic growth and progress. We shall examine several of his claims in turn. While *Capitalism* deals with many problems in the philosophy, law, and economics of natural resources, this section shall focus mostly on the economic aspects.

The first argument addressed by Reisman is the idea that human economies are exhausting the supply of natural resources, and that this exhaustion is quickly leading toward a crisis for humanity. As a way of refuting this claim, Reisman points to the current availability and abundance of natural resources. He emphasizes that the entire planet Earth—in fact the entire universe—is composed of matter and energy (natural resources) which merely wait to be exploited by human beings:

The problem of natural resources is in no sense one of intrinsic scarcity. From a strictly physical-chemical point of view, *natural resources are one and the same with the supply of matter and energy that exists in the world and, indeed, in the universe....* What nature provides is a supply of matter and energy that for all practical purposes is infinite. Yet at the same time, nature does not provide a single particle of natural resources in the form of wealth. The bestowal of the character of economic goods and wealth on what nature provides is the work of human intelligence. An essential economic task of man is progressively to apply his intelligence to achieve a growing understanding of nature and to build progressively more powerful forms of capital equipment that give him growing physical mastery over nature. (1996, pp. 63, 65; emphasis in original)<sup>5</sup>

---

<sup>5</sup> Cf. Reisman (2002), which contains much the same argument. Reisman is correct in claiming that things only possess goods-character in virtue of their relation to human wants. But goods-character is not bestowed in general: wealth is the outcome of a speculative process of entrepreneurial investment. Entrepreneurs must decide how to use resources to satisfy consumers in the face of possible

The tricky part, as Reisman observes, is “usability, accessibility, and economy” (1996, p. 63), in other words, bestowing goods-character on the resources of the world. As we shall see though, this is not, in Reisman’s view, a very important problem. This relates to the theory of uncertainty, which is discussed below. But for now let us focus on a different aspect of the above passage. In support of his claim about the abundance of resources, Reisman also points out the immense technological advances made since the industrial revolution; advances which made extraordinary amounts of resources available which were either previously inaccessible or for which man had no economic use (1996, p. 64). The quantity of resources available to the economy is staggering compared to recent centuries, and Reisman concludes from this that resource *overexploitation* is simply impossible. The general rule seems to be that any exploitation is good exploitation. No attention is given, for example, to the idea of a socially optimal level of exploitation, as is typically found in the literature.<sup>6</sup>

However, there are difficulties in using Reisman’s historical answer to address concerns about the future of environmental exploitation. Reisman appears to project the technological advances of the past into the future, claiming even that “There is no limit to the further advances that are possible” (1996, p. 64), and arguing that increases in productivity and resource availability will increase as fast, or faster, than human beings can use them. Reisman concludes that concerns about the extreme scarcity of natural resources are therefore unjustified. However, all Reisman demonstrates is that society has *in the past* discovered and exploited natural resources at a rate far exceeding any which has existed in human history.<sup>7</sup> The issues which concern the sort of argument Reisman is attacking are not the problems of the past (economic history), but those of the future, and the future availability of natural resources (resource allocation in the face of uncertainty).

---

failure. Hence, the importance of grounding a theory of resource economics in a theory of property rights.

<sup>6</sup> Cf. Brätland (2000) for a summary, as well as an exposition of an Austrian view.

<sup>7</sup> We must note once again, however, the tension between the capitalism of Reisman’s economic theory and the experience of pseudo-capitalist economies in history.

Reisman claims that “Clearly, the only effective limit on the supply of such economically usable natural resources—that is, natural resources in the sense in which they constitute wealth—is the state of scientific and technological knowledge and the quantity and quality of capital equipment available” (1996, p. 64). To begin, even if we accept the notion that the possibilities for technological advancement are both limitless and can be known to entrepreneurs (which we are by no means bound to do), this does not require that technological and economic *possibilities* will become *realities*. For this to be the case, technological innovations such as those Reisman describes—the great inventions and innovations of the industrial revolution, for example—must first be imagined, financed, and realized through a time-consuming process of production. This is the fundamental problem of the entrepreneur-capitalist, whose function it is to bear the uncertainties of the future and make accurate judgments about them. Uncertainty pervades the entire process of production and resource exploitation (Mises, 1998, pp. 286–291).

Entrepreneurial success at any given time is a practical matter, because of uncertainty and the limitations on human knowledge, learning, and memory, all of which can be faulty to the extreme. If one assumes away these problems, capitalist development can only succeed. And it is precisely the element of uncertainty which is left out of Reisman’s treatment of natural resources. As Brätland (2008) argues, resource exhaustibility is a specifically entrepreneurial problem, because “resources” have little economic meaning without reference to an entrepreneurial plan.<sup>8</sup> Unfortunately, there

---

<sup>8</sup> Brätland further argues that natural resources are not “nonaugmentable land,” but capital goods. He summarizes the problem of resource extraction in a manner which speaks directly to Reisman’s presentation:

Exhaustibility has relevance only within the context of a particular entrepreneur’s plan; economic exhaustion motivates investment in capital goods that maintain the value of the entrepreneurial enterprise. The exhaustion’s only importance arises in the process by which the entrepreneur seeks to make and develop new discoveries.... This restructuring process requires entrepreneurial judgment in selecting the respective stages of the production process in which to invest. The stages include: (1) land-surface access, (2) exploration, (3) development, and (4) resource extraction. To the extent that these speculative efforts succeed, capital is maintained. However.... investment processes that are narrowly focused on a mechanistic cycle of



is no systematic discussion in *Capitalism* of either the function of entrepreneurship, or of the critical problem of the uncertainty which the entrepreneur bears,<sup>9</sup> and thus this crucial aspect of the capitalist process is neglected in favor of an automatic view of economic progress.

It seems that for Reisman the whole process of resource exploitation under capitalism is a technological exercise performed mechanically, which will continue, as he says, “Until the sun begins to cool” (1996, p. 63):

So long as men preserve a division-of-labor, capitalist society and are free and motivated to think and to build for the future, the body of scientific and technical knowledge at the disposal of mankind will grow from generation to generation, as will the supply of capital equipment. On this basis, man can steadily expand his physical power over the world and thus enjoy an ever-greater supply of economically useable natural resources. There is no reason why, under the continued existence of a free and rational society, the supply of such natural resources should not go on growing as rapidly as in the past or even more rapidly. (1996, p. 65)

As indicated above, this exposition says nothing about the necessary uncertainty which characterizes action, nor does it discuss

---

physical replacement are not necessarily valid examples of successful capital maintenance. (Brätland, 2008)

Brätland infers from this that resource exhaustion is not a problem so long as entrepreneurial behavior is not artificially restricted. Although this conclusion is similar to Reisman's, it appears to be more firmly grounded in economic theory.

<sup>9</sup> This absence is mentioned in Tabarrok (1997). Cf. Reisman's telling response to this criticism (Reisman, 1998). It is possible that Reisman's difficulty with uncertainty may stem from his definition of “wealth.” If wealth is merely “material goods made by man” (1996, p. 39), then even failed entrepreneurs produce wealth, in the sense that they produce *something*, even if the product earns a loss for the entrepreneur. Uncertainty never enters the picture. This leads to a sort of automatic-success-theory of the entrepreneur, in the sense that entrepreneurs produce wealth by definition. Reisman does discuss the need to anticipate future consumer wants (1996, pp. 179, 180), but only as a part of the somewhat mechanical process of capital reallocation; there is no hint that the capitalists might not know exactly which innovations will revolutionize production, or which industries are destined for elimination through the process of “Creative Destruction,” to use Schumpeter's happy phrase. There is also a brief discussion of uncertainty with regard to investment opportunities (1996, p. 722), but unfortunately no link to Reisman's earlier arguments regarding natural resources.

the possibility of the limits (even temporary limits) to individuals' abilities to forecast the future, be it the future state of consumer wants, of the availability of capital goods, or of natural resources. The possibility of the failure of entrepreneurs to successfully develop new methods of exploitation is simply not addressed.<sup>10</sup>

Incidentally, this criticism does not imply that natural resources will be overexploited under capitalism, or that the process of capitalist development will grind to a halt due to a lack of technological progress. All I mean to say is that Reisman has not given us sufficient reason to believe that the process of capitalist development will continue indefinitely. We are not obliged to admit either that the rate of technological advance or the economic development of natural resources will match the increasing needs of the world economy for any length of time, or even that any progress will occur at all, much less that in capitalist society "economic progress is the norm" (1996, p. 69). Reisman does not, for example, furnish evidence (empirical or theoretical) that the quantity of resources available to individuals is not currently decreasing (in the economic sense), or even that resource usage is not increasing at a decreasing rate, or some other scenario. That these situations are impossible is taken as a matter of course in *Capitalism*, provided only that the capitalist system is allowed to flourish. Reisman has unfortunately conflated the conditions for progress with the occurrence of progress, an attitude due, at least in part, to a neglect of the problem of uncertainty. With the above arguments, Reisman has not addressed the problem of extreme scarcity with an economic theory, but rather has attempted to tackle scarcity in terms of the current quantity of natural resources, which he contrasts with an empirical-historical estimate of human economic progress.

Even with perfect certainty however, capitalism might face other obstacles to progress. Preference, specifically *time preference*, plays a fundamental role in determining the pattern of investment, and thus of natural resource use. This topic alone is worthy of much discussion, but I will make only one observation,

---

<sup>10</sup> Mises argues against the idea of an automatic tendency for society to progress, pointing out that capital accumulation is not simply a given (Mises, 1985 [1957], pp. 369–370). He does, of course, attribute the increases in standards of living in the last two centuries to capitalism, but the point is that he does not seem to infer that anything is guaranteed about progress under capitalism.

to wit that Reisman does not account for changing rates of time preference in his discussion of natural resources.<sup>11</sup> Specifically, he does not consider the possibility that time preferences might rise dramatically, resulting in capital consumption and a decline in resource discovery. This would certainly halt economic progress. Setting aside the likelihood of such an event actually occurring in a capitalist society, there is no reason why such an event is conceptually impossible.<sup>12</sup> Yet the existence of such a possibility further demonstrates that progress is by no means automatic. This theory assumes that no economically destructive changes occur in individual preferences. Reisman holds that in capitalist society time preference is necessarily low (1996, p. 58), but even if this is true, it does not prove that in any period time preference will be low enough to encourage the discovery of new resources at a rate faster than the exploitation of old resources. In any case, the low time preference of *some* individuals is only a necessary, but not a sufficient, condition for economic development.

Ultimately, Reisman does not provide sufficient reasoning to explain on economic grounds why capitalism must progress, and not merely that it might. To take another example, Reisman lists several characteristics of the division of labor<sup>13</sup> in order to explain why the division of labor increases productivity (1996, pp. 123–128); principles which are proposed, in part, to demonstrate the necessity of progress under capitalism. Of these characteristics, none has any necessary ability to reduce uncertainty or necessarily to make the predictions of capitalist-entrepreneurs free from error. Employing any of these methods of productivity increase *might* result in entrepreneurial success, but none of them *must*. Likewise, Reisman's analysis of the profit motive shows only that consumers and capitalists have an incentive to innovate and improve (pp.

---

<sup>11</sup> Note that Reisman's opposition to the pure time preference theory of interest (1996, pp. 792–797) does not imply anything about the fact of time preference or its relevance for resource economics.

<sup>12</sup> Cf. Mulligan (2007) for a discussion of the significance of this "Ikiru effect."

<sup>13</sup> Reisman's six characteristics of the division of labor which increase productivity are (1) the multiplication of knowledge through specialization, (2) the benefits accruing to geniuses, (3) individual specialization, (4) geographical specialization, (5) increases in the efficiency of learning processes, and (6) the increased use of machinery in production.

45–46, 106, 176–180), but not that capitalist-entrepreneurs will ever succeed in innovating or improving. Having an impetus to do something does not imply success in doing it. The division of labor and the profit motive are the primary conditions which, according to Reisman, ensure economic progress. Yet ultimately, all he can truly say with confidence is that under a capitalist system, the *possibility* of progress, and the corresponding *potential* to expand production, is larger than under any alternative system of social organization. Given the above arguments, we can see that additional conditions are necessary, beyond the mere existence of a capitalist society, in order to guarantee economic growth. What is required is an explanation which incorporates uncertainty and human preferences—an explanation not provided by Reisman.

Reisman again runs into difficulties with his critique of the conservation movement, particularly in his discussion of environmental pollutants. Some would argue that the disposal of dangerous wastes such as radioactive material should be prohibited because such pollutants render land useless for extremely long periods of time. Reisman claims however that such an argument cannot be accepted based solely upon the loss of land use. Reisman's counterargument runs as follows:

We do not need every last piece of land that we possess... we have hundreds of thousands of square miles of land—deserts and mountains, for example—that as far as their contribution to human life are concerned might as well be covered with sea water. The marginal utility or importance of such land is simply zero. Even if some of it were totally lost to use forever, it would make absolutely no difference to human life and well-being. In insisting on the sacredness of every square mile of land, we place ourselves in the position of a kind of irrational miser—not a miser of money, but... of water in a country that is filled with lakes, rivers, and streams. It is as though we were a farmer needing, say, a thousand gallons of water a day for every purpose that water can serve, and having ten thousand gallons a day available, and yet losing sleep at night over the loss of a cupful somewhere. (1996, p. 73)

It is true that not every piece of land is a necessary part of some current production process. Once again, however, we run afoul of the problem of uncertainty. Just because some given amount of land exists unused today, does not mean that it will be unused in the future. Resources not currently exploited may become highly

valued in the future, for whatever reason. Certain units of land currently enjoying zero marginal value to human society might attain positive value as other units of land are rendered unusable through pollution. It is unlikely that Reisman would disagree with this statement in theory. Yet somehow he still appears to believe that land is essentially superabundant for human beings, and that it always will be. Such an approach would put him in the impossible position of denying that the value of a marginal unit of unused resources can ever change significantly from its current valuation, which he surely cannot believe. Why is it impossible that in the future mankind will use up, through long-term pollution, enough land to render previously unvalued land suddenly highly valued, perhaps even vitally necessary to human survival? Reisman does not provide us with an answer, but once again assumes that the discovery of resources under capitalism will always reach levels adequate to support an expanding economy, *no matter the rate at which expansion might occur*.

Reisman never tires of emphasizing that due to human ingenuity new resources which were previously useless in terms of production will acquire economic value. But if this is true, how can he simply dismiss the effects of long-term pollution in the future on lands which *currently* have no marginal utility? By claiming, at least implicitly, that land is so abundant that we can afford to lose “some of it” (1996, p. 72) without significant problems.<sup>14</sup> But in fact, Reisman’s development theory, because of its emphasis on the successful expansion of production, essentially *requires* that valueless lands acquire positive marginal value as the capitalist system progresses. It is therefore contradictory for Reisman also to claim that “Even if some of [this zero-marginal-utility land] were totally lost to use forever, it would make absolutely no difference to human life and well-being” (1996, p. 72). If the success of capitalism is as certain as Reisman claims, then we may very soon require the use of sub-marginal land. And clearly, if such land is destined in the future to be valuable, its loss today represents a loss of future income and wealth. This may not be a sufficient reason to refrain from developing (or polluting) valueless land in the present.

---

<sup>14</sup> Further, what does Reisman mean by “some” land? What is the limit to the land we can permanently do away with?

But where long-term pollution is concerned, there is certainly a trade-off between present and future consumption which must be made, and in any case, the assertion that the loss of these lands would make “no difference to human life and well-being” is not necessarily true, even by Reisman’s own reasoning.

## REISMAN’S CRITIQUE OF ENVIRONMENTALISM

### Responses to Environmentalist Criticisms

This brings us to a fourth problem—Reisman’s criticism of the doctrines of environmentalism. There are many aspects of the environmental movement addressed in these sections, and here too there is no overarching theme to the exposition (besides the theme of the inherent value of capitalism, and its benefits trumping its costs). Instead, Reisman focuses on certain individual arguments made by environmentalists. Although many of Reisman’s arguments are intuitively appealing, one often finds reasoning insufficient to support his conclusions.

On occasion, Reisman’s critique of environmentalism even exhibits what is perhaps best described as desperation on Reisman’s part to discover something, *anything* amiss in the claims of environmentalists, even if this attempt appears to involve unfortunate misunderstandings of the environmentalist argument. Witness this comment on the opposition to chemical food preservatives: “Since everything physical in the world is a chemical, it is absurd to fear *chemical* preservatives. Such a fear is tantamount to the fear of preservatives as such and thus fear of the very fact that food does not spoil as rapidly” (1996, p. 80; emphasis in original).<sup>15</sup> First, this argument depends entirely upon assuming the uniform definition of the word “chemical.” Yet given the context of this statement, it appears (although we have no way of knowing because Reisman does not cite an example of the opposition to “chemical preservatives”) that Reisman means “chemical” in its broadest technical sense. Environmentalists who oppose chemical preservatives however might simply use

---

<sup>15</sup> Note the rhetorical implication: why must individuals “fear” chemicals, and not simply “oppose” them? In other words, why not some other, less emotionally-charged attitude toward chemicals?

the term to mean “artificially created by man,” or “not naturally found in nature” or some other definition which focuses on the “unnatural” or potentially dangerous nature of “chemical preservatives.” In such a (plausible) case, the objection that everything is a chemical is irrelevant. It may certainly be the case that the word “chemical” is used loosely in the environmental literature (again, we have no references to go on), but this remains a possible false conflation of two different meanings of a common word.

Second, and more importantly, the above line of reasoning contains an error of a sort common in Reisman’s writing. Specifically, it ignores the possibility that economic goods could have different uses and be valued in different contexts, some more worthy of skepticism than others. Reisman’s argument moves from the fear of chemical preservatives to the fear of preservatives in general. But this generalizes an opinion which might be much narrower. Opposing the use of a resource, the use of chemical preservatives, for example, when that resource is used *for a specific purpose* (preservation of foodstuffs) is not the same as opposing the use of that resource *in general*. For instance, I do not fear aftershave in general, but I do fear drinking it by the gallon. Context and specific purpose condition my valuation and fear of the good in question. A contextual opinion cannot be generalized in the way Reisman does. Trepidation about the dangers of certain substances is not therefore “absurd on simple logical grounds” (1996, p. 80). We require information as to the specific context of the opinion. Trepidation may certainly be misguided and based on faulty assumptions or logic, but Reisman has not demonstrated this.<sup>16</sup>

---

<sup>16</sup> A variation of this argument, related to the above discussion of long-term pollution from radiation, is contained in Reisman’s defense of the use of atomic power: “Nor are the alleged dangers of storing atomic wastes a valid objection [to atomic power]. Nature itself has always stored such highly radioactive elements as radium and uranium without significant danger to human life” (1996, p. 117, n. 44). Reisman has neglected to see the possibility that there could be a difference in the methods of storage of nature and of human actors, or that the relevant qualities and quantities of the elements might differ. It is doubtful that environmentalists oppose the storage of radioactive materials in nature; what they most likely object to is their concentrated storage in locations which would result in human exposure to dangerous substances. It does not matter whether the threats from atomic energy are real or imagined: the relevant point is that Reisman has constructed a faulty analogy based on the conflation of two very different problems, a natural problem and an economic one.



This type of argument is found again when Reisman discusses the environmental movement's attempt to "smash science and technology" (1996, p. 79). It is difficult to imagine two categories broader than "science" and "technology," but Reisman firmly asserts that the environmental movement opposes both.<sup>17</sup> Yet is it really true that environmentalists oppose all science and technology? Or is it perhaps the case that under some *particular* circumstances environmentalism opposes the use of *certain* scientific advancements, or *specific* technologies? Is it reasonable to assume that all science is a target of environmentalism, as opposed to science which might wreak some supposed environmental havoc? This position is especially strange considering that Reisman acknowledges the environmentalists' desire for "alternative energies" such as wind and solar power. Yet are not these technologies novel scientific developments?<sup>18</sup> They may be economically inefficient or prohibitively expensive to adopt *en masse*, but this does not make them any less technological or scientific.

One further problem deserves attention. In his discussion of global pollution, Reisman points out that in many cases it is impossible to identify an individual as a source of pollution, and thus that it is impossible or unnecessary to restrict the behavior of individuals who cause such pollution. Effectively, no individual is responsible, and therefore there is no significant economic conflict to address. Reisman argues,

Negative effects which are not caused by any individual, but which are the result of the combined actions of the members of the group to which the individual belongs... should properly be regarded as the equivalent of acts of nature.... The fact that the separate, independent actions of vast numbers of people may result in significant negative consequences to someone by virtue of their cumulative effect is simply not the

---

<sup>17</sup> Cf. Reisman (1996, pp. 86–88, 99) for claims that the environmental movement is necessarily opposed to science and technology.

<sup>18</sup> Reisman first argues (1996, p. 64) that solar power is a potential energy source, merely awaiting economic development. Just a few pages later, however, he denounces solar and wind power as "utterly impracticable as significant sources of energy" (1996, p. 80). Although he is referring first to solar power's potential and later to its current productivity, we are left wondering why the environmental movement's support for solar power could not *lead* to productive innovations in solar technology, or how support for solar power is anti-scientific.



responsibility of any of the individuals concerned. It should not be a basis for prohibiting his actions. 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.... Such phenomena as floods downstream possibly resulting from the actions of tens or hundreds of thousands of separately acting individuals, each of whom as an individual causes no perceptible harm to anyone, should be regarded in exactly the same way as floods that result when few or no human beings are present upstream. (1996, p. 92; emphasis in original)

Setting aside any moral implications of this argument, the aggregation of individual behavior into a collective “act of nature” completely eliminates the acting individual from this portion of the analysis. Individuals, using scarce means to achieve ends, disappear from the picture entirely. To treat aggregative problems such as human-caused flooding as acts of nature necessarily removes them from the sphere of economic activity (although there may be further economic *effects* of this act of nature: these must presumably be taken as given). Looking at things this way appears to be simply a way of absolving individuals in capitalist society from any harmful actions purely through defining terms such that no problem ever appears. This difficulty persists throughout the discussion. Why this method of distinguishing between economic and natural phenomena? Why must events fall outside the realm of economics simply because liability cannot in practice be easily attributed to specific individuals? In the above example, all individuals involved, whether causing or suffering the consequences of group action, are still engaged in economic activity at a “micro-economic” level which produces real and important economic consequences. It remains unclear why this should be an “act of nature” and not simply an economic problem of group action.

An analogy might be made between environmental economics and price theory. An individual making a small purchase from a large firm might be insignificant for the behavior of that firm; a miniscule part of the firm’s business and process of decision-making, which is influenced by the actions of millions of consumers. However, it would certainly be odd to suggest that because of this, the price of a good should be treated as an act of nature. To be sure, this analogy is imperfect—even individual consumers can be identified in the accounts of large firms—but it is suggestive

regarding the potential problems with aggregating economic actions into noneconomic events. Actually, it is difficult to establish whether or not this analogy is appropriate, because Reisman does not explain the criteria used to separate economic and natural (non-economic) activity. Further explanation is required as to the boundary between economic and natural problems; the exact point at which many individuals acting economically become equivalent to an act of nature.

### The Rhetoric of Capitalism and Environmentalism

Some words must be said about the rhetoric of Reisman's treatise. Others have already commented on this aspect of Reisman's work—some positively (Tabarrok, 1997), some negatively (Kirzner, 1999)—but the point bears special emphasis with regard to the problem of environmentalism. To put the problem lightly, it is often difficult to extricate Reisman's economic arguments from the many broad claims he makes about the environmental movement's values and psychology. The rhetoric of *Capitalism* appears designed to imply not only the economic, but also the intellectual and moral poverty of environmentalism (1996, p. 99). There is a difference, however, between forcefully stating an argument and deliberately using harsh and abrasive language against one's opponents without special justification for invective. I argue that the latter possibility is unfortunately the case with *Capitalism*.

The claims Reisman makes regarding environmentalists, all his assaults on their academic integrity notwithstanding, are such as to give the reader pause to consider his objectivity. For example, environmentalists are described as "those who wish one dead and whose satisfaction comes from human terror, which, of course, as I have shown, is precisely what is wished in the environmental movement—openly and on principle. This conclusion it must be stressed, applies irrespective of the scientific credentials of an individual" (1996, p. 83).<sup>19</sup> One section is titled "The Dishonesty

---

<sup>19</sup> This brings up another problem: the problem of using homogeneous terms such as "the environmental movement" to refer to literally millions of individuals who presumably have differing views on all manner of environmental principles. Reisman's terminology is used throughout this paper, but it conceals the hetero-

of the Environmentalists' Claims." Here, Reisman asserts that "[t]he environmentalists reach for whatever is at hand that will serve to frighten people, make them lose confidence in science and technology, and, ultimately, lead them to deliver themselves up to the environmentalists' tender mercies" (1996, p. 86). At their worst, environmentalists are sometimes even "depraved individuals who would rather kill than live, who would rather inflict pain and death than experience pleasure, whose pleasure comes from the infliction of pain and death" (1996, p. 102). These are only a sampling of Reisman's opinions on the environmental movement, but they highlight the verbal extremes with which Reisman characterizes his opponents (who are rarely identified by name).<sup>20</sup>

Returning from his ruminations on the motives and psychology of environmentalists, Reisman arrives at the astounding conclusion that "[i]n the absence of verification of sources totally independent of the environmental movement and free of its taint, *all of its claims of seeking to improve human life and well-being in this or that specific way must be regarded simply as lies, having the actual purpose of inflicting needless deprivation or suffering*" (1996, p. 87; emphasis added). It is not clear how Reisman, often citing only a few quotations from the popular press, can proceed to project this opinion onto the entire environmental movement.

This difficulty is probably due to the fact that, when discussing all the hatred and vitriol which supposedly flows from the environmental movement, Reisman's claims are rarely substantiated with textual evidence. We must simply take Reisman at his word when he states that the environmental movement believes this or that. Even worse, we are not even given criteria to judge the relative weight of any reference Reisman makes to the environmental literature. But

---

geneity of beliefs concerning the environment, a fact which Reisman partially admits, but dismisses (1996, p. 81).

<sup>20</sup> Reisman does occasionally temper his criticisms of environmentalism with qualifying statements to the effect that not all environmentalists are "poison" (1996, p. 81, 82–83), proposing instead the odd claim that only "several parts per ten" are poisonous. Yet even this qualification belies his ultimate conclusion: "The problem is that the mixture is poisonous. And thus, when one swallows environmentalism, one inescapably swallows poison" (1996, p. 82). It is not clear why accepting environmentalist principles necessitates accepting bad principles at the expense of good, and not, for example, the other way around.

surely a movement that is responsible for "the creation of a horde of hysterical bumpkins in the midst of modern civilization" (1996, p. 79) should have left behind some records which would (even implicitly) indicate their designs. Environmentalism must have left some sort of, if I may be allowed a happy word, "footprint." Without a great deal of primary sources serving as a foundation for his claims, Reisman's characterization of the environmental movement could be perceived as a groundless attack or a straw man.

It is possible that Reisman's rhetorical flourishes are due to his distance from the environmental movement, and his lack of a systematic exposition of what the movement believes *in its own words*. Reisman believes himself to be paraphrasing the tenets of environmentalism, but extraordinary claims, large paragraphs, even entire sections appear without any citation to the environmental literature. For instance, a section titled "The Alleged Pollution of Water and Air and Destruction of Species" contains no citations to any environmental writings. Another, "The Environmental Movement's Dread of Industrial Civilization," contains only one citation to an opposing author (Carl Sagan). The citation in question merely lists some of the more dangerous environmental effects of the industrial revolution, and their possible long-term costs in terms of human health, a citation which does not actually support the ambitious section title by stating the position of Reisman's opponents. These sorts of references do nothing to expose us to the "Pathology of Fear and Hatred" which allegedly characterizes the environmental movement. When citations do appear, they are often taken from the popular press, precluding the possibility that they might represent a sustained, systematic presentation of the environmental movement's principles. Even in cases where he finds what seem to be damning statements from leading environmentalists, Reisman appears to misinterpret these comments, confusing serious argument with exaggeration for literary and pedagogical effect (1996, p. 81).

Once again, it may be the case that Reisman is correct in some of his judgments about the environmentalists, but he fails to adequately demonstrate this to the reader, and much less does he do his topic complete scientific justice. In pursuing a calm and careful study of environmentalism and environmental economics, it may be useful to contrast Reisman's approach and presentation

with similar research in the same field. An important recent work is Nelson (2010), which traces the intellectual and religious origins of the environmental movement, presenting environmentalism as a secular religion. Nelson avoids the difficulties of Reisman's work by carefully examining the history of the environmental movement, its declared (and implicit) values, and its arguments for environmental preservation. It is also relevant in light of Reisman's writings because it juxtaposes environmentalism with another secular religion: growth economics, which appears to share much with Reisman's own views on economic progress.

In any case, we are left with the uneasy feeling that Reisman has little acquaintance either with the literature of the environmental movement or of resource economics in general. Ultimately, we cannot avoid the conclusion that, disturbing as it may be, this is not a sober analysis of the environmental movement, but a caricature and a straw man. The unfortunate truth appears to be that Reisman, in attempting to defend the capitalist system economically and ethically from environmentalist criticisms, has fallen prey to the very "hysteria" which he attributes to the environmental movement.

## CONCLUSION

The problems of resource economics are certainly among the most pressing in applied economics and merit serious, systematic attention from economists. Unfortunately, this is an attention *Capitalism* does not provide. Professor Reisman, as both a student of Ludwig von Mises and as a prominent analyst of the capitalist system, surely deserves a sympathetic hearing, and I must emphasize that I am in agreement with certain conclusions he reaches. Yet as this paper shows, his exposition runs afoul of several important problems which require resolution. First, economic principles must form the groundwork of research into the problems of resource allocation. Second, there is a significant literature which must be addressed in serious treatments of the subject. Third, economic progress is not automatic, even under the best of conditions. Fourth, much clarification is required to understand—and accept or refute—the claims of the environmental movement and avoid simplistic dismissals of environmental doctrines. Fifth,

invective in economics does not strengthen either the case for capitalism or against environmentalism, but rather undermines both. All these problems lead inevitably to the conclusion that *Capitalism* cannot be considered a canonical presentation of the problems of environmentalism or resource economics. While to some extent Professor Reisman's writing might provide excellent food for thought, considerable problems accompany its digestion.

## REFERENCES

- Anderson, Terry, and P.J. Hill. 1975. "The Evolution of Property Rights: A Study of the American West." *Journal of Law and Economics* 18, no. 1: 163–179.
- Brätland, John. 2008. "Resource Exhaustibility: A Myth Refuted by Entrepreneurial Capital Maintenance." *Independent Review* 12, no. 3: 375–399.
- . 2000. "Human Action and Socially-Optimal Conservation: A Misesian Inquiry into the Hotelling Principle." *Quarterly Journal of Austrian Economics* 3, no. 1: 3–26.
- Carson, Kevin. 2006. "Rejoinder to George Reisman." *Journal of Libertarian Studies* 20, no. 1: 116–132.
- Coase, Ronald. 1960. "The Problem of Social Cost." *Journal of Law and Economics* 3: 1–44.
- Cordato, Roy. 2004. "Toward an Austrian Theory of Environmental Economics." *Quarterly Journal of Austrian Economics* 7, no. 1: 3–16.
- Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162, no. 3859: 1243–1248.
- Kirzner, Israel M. 1999. "Report on a Treatise." *Review of Austrian Economics* 12, no. 1: 81–94.
- Kraus, Wladimir. 2009. "A Treatise for a New Age in Economic Theory: A Review of George Reisman's *Capitalism*." *Libertarian Papers* 1, no. 14: 1–10.
- Mises, Ludwig von. 1998. *Human Action*, Scholar's Edition. Auburn, Ala.: Ludwig von Mises Institute.

- . 1957. *Theory and History*. Auburn, Ala.: Ludwig von Mises Institute, 1985.
- Mulligan, Robert F. 2007. "Property Rights and Time Preference." *Quarterly Journal of Austrian Economics* 10, no. 1: 21–47.
- Nelson, Robert H. 2010. *The New Holy Wars: Economic Religion Versus Environmental Religion in Contemporary America*. University Park, Penn.: Pennsylvania State University Press.
- Reisman, George. 1996. *Capitalism: A Treatise on Economics*. Ottawa, Ill: Jameson Books.
- . 1998. "Reisman on Capitalism." *Quarterly Journal of Austrian Economics* 1, no. 3: 47–55.
- . 2002. "Environmentalism in the Light of Menger and Mises." *Quarterly Journal of Austrian Economics* 5, no. 2: 3–15.
- . 2006. "Freedom Is Slavery: Laissez-Faire Capitalism Is Government Invasion: A Critique of Kevin Carson's *Studies in Mutualist Political Economy*." *Journal of Libertarian Studies* 20, no. 1: 47–86.
- Rothbard, Murray N. 1982. "Law, Property Rights, and Air Pollution." *Cato Journal* 2, no. 1: 55–99.
- Shaw, Jane S. 2002. "Private Property Rights, Not Ideologies, Are the Crux." *Independent Review* 7, no. 1: 109–113.
- Tabarrok, Alexander. 1997. "Review of *Capitalism: A Complete and Integrated Understanding of the Nature and Value of Human Economic Life*." *Review of Austrian Economics* 10, no. 2: 115–132.