

Stewardship Without Prices and Private Property? Modern Evangelical Environmentalism's Struggle to Value Nature

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All too often, the Christian social agenda trails world opinion rather than acting decisively to move it in a biblical direction. Christian commentary on environmental issues reveals few exceptions, as some scholars have attempted to repackage the economics of the modern environmental movement in “stewardship” lingo so as to be more palatable to Christians. This article will focus on the economics of some Christian statements on the environment, discussing what we believe to be a serious and pervasive error. Stewardship of nature requires decisions about how to allocate natural resources—decisions that can only be based on comparisons of values. Rejecting the market economy’s methods of obtaining and using information about valuations, some Christian scholars find a moral virtue in placing higher “objective” valuations on nature. If others cannot be coaxed into adopting similar appraisals of nature, these writers suggest that the valuations should be enforced by placing severe constraints on the free-market system and using governmental regulation to move the environment in a direction consistent with their ideals.

In response, we contend that market prices are indispensable in the valuation and allocation of natural resources and that the price system is not inimical to biblical standards. Furthermore, we contend that the “solutions” as proscribed by the modern “stewardship” proponents ultimately collapse when subjected to the same scrutiny that Ludwig von Mises of the Austrian school of economics placed upon socialism. In other words, the “stewardship” paradigm faces the same problems of economic calculation that have doomed socialism.

Introduction

The cultural revolution of the 1960s and early 1970s did not bypass Christian evangelicalism,¹ which, until then was mostly conservative, relatively patriotic, and remarkably apolitical in its outlook.² Among the areas to experience sea changes were civil rights for black Americans (evangelicals had largely been indifferent or openly hostile to black advancement), marriage and the family (as divorce and other problems in evangelical households seemed to mirror the trends of secular Americans), and environmental issues. Like most other Americans, evangelicals in this country before the late 1960s gave little thought to questions of environmental degradation and long-term resource use. By the late 1970s, however, that issue would be front-and-center in the evangelical experience.

Francis Schaeffer (1970) fired one of the first salvos against what he saw as evangelical complacency in *Pollution and the Death of Man*. The book attempted to answer White (1967), who claimed that Christianity was responsible for what he called the modern environmental crisis. Schaeffer presented a critical view of how evangelicals viewed the natural environment, which, he wrote, is the direct creation of God, and, therefore, needed to be treated with more respect than what was currently the case. The ethic that Christians needed to follow, he wrote, was one of *stewardship*, not one of “greed” and “exploitation.”

Others followed Schaeffer’s lead, including Clouse, Pinder, and Pierard (1972), Monsma (1986), and Wilkinson (1980 and 1991), all calling for a new “ethic” of “stewardship” as a replacement for what, they held, was waste and indifference to God’s creation. These critics blamed free-market pricing for what they perceived as a massive environmental crisis. The Arab oil embargo of 1973 and 1974 and the subsequent “energy crisis” gave new urgency to their beliefs.³ When Ronald Sider’s *Rich Christians in an Age of Hunger* (1977) was published by the mainstream evangelical InterVarsity Press, it was clear that much of the evangelical world—and certainly some of its best-known publishing arms—had embraced views on resource and environmental matters that disparaged the market.⁴

While a number of authors⁵ have disputed many of the more apocalyptic claims of environmentalists, little attention has been paid to the notions of “stewardship” that so many Christian environmentalists use. Perhaps there is good reason for this omission, as it is difficult to find a clear, workable definition of stewardship in their work. The purpose of this article, then, is to pro-

vide examples of thought in this vein that bring out the meaning of Christian environmental “stewardship” and to discuss the claim that stewardship is possible without market prices. Our critique will be based upon the arguments first presented by the Austrian school of economics during the Socialist Calculation Debate of the 1920s and 1930s.

The Rhetoric of “Biblical” Stewardship

The idea of “biblical stewardship” is an “apple pie” issue for most Christians. No one claiming to be a Christian would also want to endorse “unbiblical” or bad stewardship. For the most part, Christians who might disagree on many issues are at least united in saying that we are to be “good stewards” of what God has created.

The key term here, of course, is *stewardship* itself. What constitutes being a good steward of God’s creation? Is stewardship the conservation of or wise use of creation? When a Christian environmentalist says that “we must be good stewards of creation,” who, exactly, is the “we”? While many Christians in the environmental movement have continually used this term as though it were self-explanatory, there needs to be much more discussion of this subject than is taking place at present. It is our observation that the term carries with it a great deal of political baggage. Specifically, many Christian environmentalists advocate centralized governmental management as superior to the market in making wise stewardship decisions. Frequently, the outcome is harmful both to humans and the rest of creation, since such central planning encourages resource waste and destroys information that is necessary for intelligent use of natural resources.

Dykema, writing in Monsma (1986), seems to reflect the views of many within the “stewardship” camp. In an attempt to portray a view of “biblical stewardship,” he first presents what he sees as the standard view of economics:

Conventional wisdom views economic activity as being imposed by the rigors of scarcity, even if the only conception of such scarcity is that of too little money with which to purchase too many goods. This view implies that if only there were enough of the stuff of this world provided for us, no economic necessity would be imposed on us. There would be no need to make economic choices, and economists would be unemployed.⁶

Dykema contrasts this with what he calls a biblical view:

A radically different view of the nature of economic activity begins with God's entrusting the care and use of the earth to humankind. This care began in the Garden of Eden, and although that paradise did not last long, the activity itself continued, though tainted by sin after the Fall. To be entrusted with an endowment of resources and to be given the responsibility to choose how those resources should be used is an awesome yet delightful task.⁷

He goes on to describe a world governed by such a biblical worldview, implying that much of the scarcity problem is artificial:

In the process, scarcity will not necessarily be vanquished, although its painful consequences may be reduced. In addition, certain present forms of contrived scarcity—developed through persuasive efforts to increase desire or through monopolistic efforts to restrict supply—may be eliminated. The finiteness of the creation remains a reality under all circumstances, but to the Christian, economics is simply the care for a garden of limited size.⁸

While Dykema at least acknowledges scarcity, he does not seem to fully understand the concept. First, the very term *economics* comes from the understanding that individuals cannot fulfill all of their needs and desires all of the time. Indeed, in a world without scarcity, there would be no need for the study of economics. In a world of no scarcity, there also would be no need for employment, since work is the activity that humans must do in order to provide for their needs. Since there would be no economists in such a world, along with no unemployment, it is meaningless to say that economists in the no-scarcity world would be unemployed.

His definition of economics as being the “care for a garden of limited size” is also problematic. The Garden of Eden no longer exists, and the present state of the earth cannot rightly be described as a garden. In bringing the Flood, God destroyed the Garden of Eden along with most of humanity and the animal kingdom. The post-Flood world no doubt has required much more work and is far less productive than before the Flood. Apart from this, there are difficulties with the idea that there is a fixed “endowment of resources” that must be distributed. The physical creation is indeed finite, but the value that may be created by altering the form, location, and ownership of that creation is without limits.

Dykema's approach to scarcity and desires seems to be that advertising creates desires for things that would otherwise not exist, thus exacerbating the condition of scarcity. Like the Buddhist, who believes that suffering is the

result of craving for material things, Dykema holds that at least some scarcity is derived from alien desires placed into individuals by advertisers. It is difficult to understand how one would be able to distinguish the desires arising from a genuine search to fulfill individual needs from those that are imposed upon the target of advertising.

To state this differently, Dykema has not indicated how we may distinguish between (a) advertising that informs the audience of a way to fulfill a core personal desire and (b) the advertising leading to “contrived scarcity.” Dykema also seems to hold that the condition of monopoly—which, from his description, would simply be the condition of a firm facing a downward sloping demand curve—is unnatural, yet he does not explain how his view of stewardship would usher in a universal condition of “perfect competition.”

Dykema continues his critique of standard economic theory:

The conventional view of economics takes as its most fundamental proposition the assertion that economic behavior is the result of autonomous individuals making choices so as to maximize some subjective quality, such as their psychological satisfaction or pleasure. Those individuals are presumed to be cut off not only from any transcendent norms for governing economic activity but also from human community; they are supposed to make only independent decisions about their own, but no one else’s, economic condition. As a result, they never engage in or value the underpinnings of community: cooperation, concern for one’s neighbor, or public-spiritedness. Even the place of justice in the good economic life is left in doubt.

Economic theory claims that persons compete and struggle for the maximum individual benefit that can be garnered from any given situation. Altruism becomes the antithesis of economic rationality: Either it makes no sense at all, or it interferes with achieving economic purposes. This is the economic theory that for more than two hundred years has served to teach those who seek to gain more economic wisdom. According to this view, servanthood is abdication, a surrendering of the battle for supremacy and freedom. Stewardship is for the weak, the losers.⁹

We are dealing here with competing understandings of the assumptions of individual motivations in economics. According to Dykema, economics assumes away important motivations. Yet, economics as we understand it, takes individual economic goals as given—goals that may easily include concerns for others, for obedience to God, for the environment, or for justice. All of these may provide an individual with “satisfaction or pleasure” as easily as satisfying desires for food or shelter. Cooperation is actually informed and encouraged by “the conventional view of economics,” since free economic

activity rewards behavior that contributes most highly to the goals of others. The autarchic individual would lead the most pitiable of lives.

Dykema continues:

... attempts have been made to justify the tenets and consequences of this theory—for example, to show that individualistic pursuit of self-interest really benefits all of society and is therefore justified. As similar argument is that self-interested behavior is inevitable, a part of human nature, and therefore we must make the best of it. Those Christians who employ this argument say that such self-interested behavior is the consequence of sin. If self-interest and the desire for self-aggrandizement are inevitable, is it not fortunate (so the argument goes) that they also seem to benefit others by creating wealth? If the banquet table of the rich is filled to overflowing, is it not more likely that crumbs will fall to the floor for the poor?¹⁰

By themselves, “self-aggrandizement” and the practice of “self-interest” cannot lead to social betterment. Economists understand the role of institutions in restricting the worst in human behavior, even while those individuals may legitimately be providing goods and services for others. Moreover, it is a misrepresentation or, at least, a misunderstanding, to portray a modern economy as simply a “banquet table for the rich” in which “crumbs” spill off that are gobbled by the poor. The Industrial Revolution was, in fact, characterized by creation of goods *expressly for the poor*—inexpensive clothing, food, transportation, and more. The way to wealth was to provide a banquet for the poor, not luxury goods for the rich. As John D. Rockefeller wrote in 1885, “We must ever remember we are refining oil for the poor man and he must have it cheap and good.”¹¹ Henry Ford made his fortune by manufacturing automobiles that were inexpensive enough for the less-than-wealthy to afford.

Dykema’s critique of the price system reveals an error in his thinking on valuation—an error that pervades the thought of other stewardship advocates:

Economics—strongly affected by a mechanical rationalism borrowed from Cartesian influences and Newtonian mechanics—sought both a precise measuring rod for economic value and ... a deterministic view of how economic value comes into being. The result was a price theory of value that today pervades both the halls of academia and everyday consciousness. Price theory holds that economically valuable things are those with prices, that economic value is proportional to price, and that nonpriced entities are economically valueless.¹²

He goes on to declare that this price theory has “enormous implications,” since he believes that it also determines technology and popular notions of “progress.” He writes, “Individuals and families ... often measure their success, sometimes even their worth, in terms of income levels... Nations likewise focus on the growth of a limited monetary measure of output—Gross National Product—as a measure of their success ... and they vie with one another ... to show that increased output—as measured by price—is proof of superior ideology.”¹³ In other words, the use of prices in production and distribution of goods is illegitimate and *not* a measure of good stewardship.

Although he does not mention the role of property rights in his essay, it is clear that Dykema would like to see significant constraints on an individual’s property rights. In this area, he is clearly in step with others of the “biblical stewardship” movement.¹⁴ Loren Wilkinson, writing in *Through the Eye of a Needle: Readings on Stewardship and Justice*, attacks the long-held belief that common property leads to environmental and resource problems.¹⁵ The real problem, writes Wilkinson, is ownership of private property.

In addressing the issue raised by Hardin (1968) regarding degradation of commonly owned grazing land, Wilkinson claims that the real source of the problem is private ownership of cattle, not the absence of property rights in the land. Such a system, he writes, “... is based on the hypothesis of individual interests, detached from ties with nature, humanity, or God, [so] it is almost inevitable that resources held in common will be misused—or that common actions that need to be taken will not be taken unless someone can speak for the whole interconnected system, not just for one’s individual interest.”¹⁶ Speaking “for the whole interconnected system” seems to imply socialistic management without voluntary exchange and prices.

Elsewhere, Wilkinson (1991) makes a similar argument. In addressing the issue of incentives, he outlines the choice of two payment methods in a cafeteria, the first being all-you-can-eat and the second being payment for each item separately. Most economists agree that individuals operating under the second set of constraints would be less likely to take what they could not eat. However, Wilkinson writes that such analysis is superficial—that an internal rule of frugality should govern our consumption. He writes:

... we have adopted the scarcity mentality: no scarcity, no economizing... Contrast this with the entrustedness view of the same choice: If it is God’s creation—here in the form of food—shouldn’t wise and frugal use of it, as a response to the Creator, follow, regardless of how we are paying?¹⁷

The problem with Wilkinson's analysis is the same problem that is inherent within the approach to "stewardship," whether it be articulated by neo-Calvinists¹⁸ or by other evangelicals: It has no rational methodology for economic calculation. While saying that use of resources is an "awesome, yet delightful task," or calling for their "wise and frugal use" has a sound of high-mindedness to it, such statements are meaningless when it comes to the day-to-day decisions that must be made by the various economic actors. How do we know what uses of resources are "wise"? How do we know what level of use is "frugal"? There is nothing from the "stewardship" camp that answers either of these questions. Paul Heyne (1993) honed in on the information problem:

We will almost certainly fail to achieve our objectives if we simply ask people to become "better stewards." No one knows what "stewardship of creation" implies for his or her own actions. Exhortations to change our lifestyles just do not give us sufficient information.¹⁹

Prices, Property, and Socialist Calculation

These "stewardship" authors seem unaware that the economics profession has dealt with this criticism of the price system before. During the 1920s and 1930s, economists argued about whether socialism could be successful, especially since socialists wanted to engage in economic ordering without prices and private property. The debate set the writings of Ludwig von Mises, who had contended in *Socialism* (1981 [1922]) that the system could not work, against the views of Oskar Lange and Abba P. Lerner, who claimed that a socialist economy could exist and even thrive. Mises argued, on the one hand, that since economic valuation is ultimately subjective, one needed both private ownership and a free system of prices in order to make the economic calculations that would determine not only the production and distribution of final (consumer) goods but also how and where the various factors of production would be employed. Without property and prices, there could be no way to determine the relative scarcity of various goods, and thus, no rational economy would be possible.

Lange and Lerner, on the other hand, accepted the factors of production as a given. Thus, the only requirement for socialist planners was that they manage the distribution of consumer goods through a "shadow price" system through which, planners could supposedly observe the economy to see where

shortages and surpluses were developing and act then to alleviate those problems. While most economists of that time declared that the socialists had “won” the argument, events of the twentieth century have demonstrated that, in fact, socialist economies of the U.S.S.R., Eastern Europe, and Asia were not sustainable. Faced with the socialist calculation problem, most either collapsed or have been slowly changing into market-based systems. Their ability to last as long as they did can be attributed to their ability to consult prices in market economies for an approximation of relative values.

Unlike Lange and Lerner, who at least recognized that prices have a rationing function within an economy, the “stewardship” advocates hold that one can have production and distribution in a modern economy with neither prices nor private property. The problem, as Mises and others within the Austrian camp have adroitly pointed out, is that the condition of scarcity necessarily means that individuals must engage in economizing. The question is, of course, How will one engage in such economizing activity?

In addition to Mises’ arguments, F. A. Hayek (1945) wrote that because the necessary information to make the massive number of decisions that an economy requires on an ongoing basis is widely dispersed, the only mechanism that can possibly tie these loose ends together is a price system. When combined with Mises’ points, Hayek’s observations become a very important second line of argument against the efficacy of a socialist economy.

Calculation and Production

Beginning with consumption goods, we note first that such goods will be scarce and will have to be rationed. The “stewardship” faction acknowledges this fact. Their objection is not with rationing itself but, rather, *how* those goods will be rationed. However, the question of how consumption goods will be rationed begs that we ask another question: How did those goods come into being in the first place? One cannot accept the presence of consumption goods as a given, since they do not appear by themselves, nor are they self-created. They must be produced, and producers must decide exactly what will be produced and how they will allocate the scarce factors of production.

Calculation is an indispensable part of this decision-making process. Mises noted that private ownership of goods and resources and free prices enabled the owners to have a clear picture of the relative value of what they owned. This is because production of goods, or at least the decision to produce them, is not simply a technical issue.

For example, it is perfectly possible to build railroad tracks from titanium instead of steel, yet this is never done. Rail manufacturers choose to make them from steel because steel is adequate to the specifications of rails, *and* because it is relatively less costly than titanium. If an unlikely event occurs in which titanium becomes more plentiful and less costly than steel, perhaps we may see future trains running over titanium rails.

The decision to use steel rather than titanium comes ultimately from the consumers of products made from titanium. The owners of titanium, realizing its relative scarcity and recognizing the uses that consumers most prefer for this metal, require a higher price for their product than do the owners of the ingredients of iron and steel. Their demands are not arbitrary but, rather, flow from the observation that titanium is rarer, and that individuals who wish to obtain it are willing to part with more of their own possessions (or money) than they would be for other ores.

However, without private ownership of titanium and without the ability to ration by prices, it would be difficult to determine what would be the appropriate uses for these metals. Furthermore, as Mises argued, the presence of profits and losses is also a necessary ingredient for production and distribution of goods, inasmuch as they send signals to owners of factors of production as to what is being demanded.

Acknowledging Socialism's Failures

Socialist economies are well-known for their shortcomings, and even communism's most ardent defenders have been forced to admit that the system did not work very well. Communism's failures were magnified when it was realized that its economic planners at least could readily observe the Western market economies at work. Even though that was the case, there was little innovation, and visitors from the West often would comment that the Communist nations were drab, run-down, and seemed frozen in time.²⁰ This was not due to myopia or even lack of intelligence on behalf of socialist planners—the curriculum for economics doctoral students in the former U.S.S.R. was as rigorous as that in United States Ph.D. programs—but rather, because planners lacked the necessary tools for economic calculation.

Unfortunately, the neo-Calvinist "stewardship" advocates and their fellow travelers seem to have missed the lessons of socialism altogether. Unlike the socialists who at least used some form of a price system—albeit a very inadequate one—to ration consumer goods, some neo-Calvinists seem to believe that they can dispense with prices altogether.

Dispensing with market prices, as many “stewardship” advocates are eager to do, is not a directive for justice or fairness. *It is a prescription for chaos.* Christianity offers its adherents many things, including the prospect of eternal life with God. However, Christianity does not give us perfect information as economic planners.

Modern Christian Environmentalists on Valuing Nature

As noted earlier, the dominant strand of modern evangelical environmentalism can be traced to the theologically conservative Francis Schaeffer. Schaeffer’s short book *Pollution and the Death of Man* (1970) responds to alternatives to the Christian approach to the environment, such as pantheism. Schaeffer affirmed the biblical Creator/creature distinction but contended that Christians should be placing a higher value on creation. Recognizing that the rest of creation was made by God, as we were, should lead Christians to hold creation in higher esteem. Reducing pollution, choosing environmentally friendly technologies, and planting trees should therefore be part of our Christian duty. Schaeffer writes that “The Christian Church ought to ... exhibit that in this present life man can exercise dominion over nature without being destructive.” Why has strip mining usually turned into desert the area where it has been used?... What has brought about the ugly destruction of the environment? There is one reason: Man’s greed.

If the strip miners would take bulldozers and push back the topsoil, rip out the coal, then replace the topsoil, ten years after the coal is removed there would be a green field and, in fifty years, a forest. But, as it has usually been practiced, for an added profit above what is reasonable in regard to nature, man turns these areas into deserts and then cries out that the topsoil is gone, that grass will not grow, and that there is no way to grow trees for hundreds of years!

It is always true that if you treat the land properly, you have to make two choices. The first is in the area of economics. It costs more money, at least at first, to treat the land well. For example, in the case of the school I have mentioned [Schaeffer had previously mentioned an ugly Christian school building that had no trees around it], all they had to do to improve the place was to plant trees to shield the building they had built. But it costs money to plant trees, and somebody decided that instead of planting trees they would

prefer to do something else with the money. Of course, the school needs money for its important work, but there is a time when planting trees is an important work.

The second choice that is involved is that it usually takes longer to treat the land properly. These are the two factors that lead to the destruction of our environment: money and time—or, to say it another way, greed and haste. The question is, or seems to be, Are we going to have an immediate profit and an immediate savings of time, or are we going to do what we really should do as God's children?²¹

Many Christian environmental groups are simply applying and expanding on what Schaeffer wrote over three decades ago. As Michael Northcott observed, there are even some parallels with non-Christian thought, such as deep ecology.²²

It is in the application of Schaeffer's idea of stewardship, however, that the calculation problem begins to manifest itself. Trade-offs between beauty and energy, between trees and education, are inevitable in a world of limited resources. What information do we have that will aid us in making that choice? Schaeffer has pointed out that the choices exist, and he claims that they are not being made appropriately. Yet, he has provided no practical instruction in how to decide what the proper trade-offs are.

This is because Schaeffer, in contrast with some of his other work, has here ignored or disdained the market system with its associated prices and profits. He cannot solve the calculation problem without further divine revelation, therefore he is left searching for "excess" costs that can be eliminated to allow for environmental purity and beauty. Profits, then, become the target. If profits fall, more aesthetically pleasing (and costly) methods of production can be used. Schaeffer has apparently either identified profits with greed, or deemed profits a useless accessory that can be discarded if only the entrepreneur is willing to bear the sacrifice. We can hope that it was not, in fact, Schaeffer's intent to communicate such a view, yet many post-Schaeffer evangelical environmentalists have adopted this position.

Economics tells us that profits are neither useless nor evidence of greed. Profit is the compensation to an entrepreneur for correctly perceiving an unfulfilled need and taking a personal risk to supply it. In a market economy, profits serve as a signal to entrepreneurs. Higher profits in an industry attract entrepreneurs and resources into an industry, and lower profits encourage them to go into other industries. If an entrepreneur unilaterally reduced profits for the sake of environmental goals, the value of this signaling function would be sig-

nificantly reduced. If profits no longer accurately reflect the relative needs for resources in their various potential employments, the information necessary to put resources toward their highest-valued uses is missing. The calculation process would be hindered, and the misallocation of resources would be positively correlated to the degree of interference in the profit system.

Schaeffer's comment on time is problematic as well. It is true that it takes additional time to achieve greater natural beauty. Working quickly, however, should not be considered morally objectionable *per se*. Adding capital, labor, or technology (or using different types of these inputs) can speed up the production process without sacrificing environmental impact. Accepting more environmental damage means that the capital and labor are freed up for other productive pursuits. Again, we are left with a trade-off. Deciding how quickly to work, how much labor or capital to use, and how much environmental damage to accept requires information that only the disparaged market can provide.

Christian stewardship is not advanced by the abolition of the market system. Prices, wages, and profits provide a way to "count the cost" of an endeavor—regarded by Jesus Christ as a necessary part of wise decision-making (Luke 14:28). Sometimes doing "what we really should do as God's children" is to gain "immediate profit" and an "immediate savings of time." Frequently, that is evidence of good stewardship over our resources.

Prioritizing Creation

Calvin DeWitt (1994) has echoed Schaeffer's argument that the creation is to be valued *per se*, and that the Christian idea of stewardship requires us to preserve it as we would a fine work of art. "When it comes to masterpieces created by human artists, respecters of Rembrandt keep and take care of Rembrandt's paintings; how much more so should respecters and worshippers of the Creator keep and take care of the Creator's works?"²³ There are several problems here. First, we cannot regard the post-Fall world as "good" in the same way that the antelapsarian world was. Second, and perhaps more important, the value of an object is related to its use. A painting is made for viewing, not for patching a hole in the roof or for starting a fire. Tarpaper is not particularly attractive, but it is more suited than a Rembrandt for the purpose of patching a roof. An expensive wine is valuable not because of its appearance but because of its taste. While Rembrandt's work is valued only for its appearance, not everything that God created is valuable for the same reason. Part of our responsibility as humans is to allocate each resource to its highest and best use.

This responsibility was present at the very beginning. Adam had to prioritize in carrying out God's commands. Living and working necessarily involve the alteration of some part of the created order, and the production of waste that we must presume, was a part of the antelapsarian world as well.²⁴ Adam and Eve were to regard some fruit in the newly created world as better for eating than for viewing.²⁵ Adam's requirement was to "tend" or "cultivate" the garden of Eden,²⁶ which implies some modification of the created order. One of Adam's first tasks would have been to fashion some tools to carry out this work, which may have involved mining, or harvesting a tree or two. Furthermore, the garden of Eden was only a small part of the newly created world, and Adam's task was to "fill" and "subdue" it.²⁷ Adam, apparently, was to imitate God by transforming the rest of the world.

The Fall brought the curse, and with it, an extensive modification of the created order so that Adam would have to contend with nature for sustenance. "Thorns and thistles" would have to be uprooted and predators driven away from livestock. Conflicts would arise between man and the rest of the created world, which would often result in the destruction of some part of the created world. Preservation of the rest of creation as an ultimate goal would have required the death of all mankind. The task of man was, again, to prioritize—to calculate the costs and benefits of an infinite variety of projects, and to choose the best. Today, we must continue that work. In a more complex world, a price system allows us to communicate and coordinate the independent prioritizations of billions of individuals.

Valuation Without Humans?

Steven Bouma-Prediger's approach to valuing creation is similar to DeWitt's. Psalm 104, he writes,

speaks of all things as having been created by God. Everything in heaven and on earth is a result of God's creative activity.... God's creatures are valuable not because of their usefulness to humans—though some are useful, indeed essential, to us. Rather, they are valuable to each other: For example, the cedars are valuable as places for birds to nest, and the mountains are valuable as places of refuge and rest for the wild goats. Most importantly, rocks and trees, birds, and animals are valuable simply because God made them. Their value resides in their being creations of a valuing God, not in their being a means to some human end.²⁸

Van Dyke et al. (1996) makes the same attempt at severing valuation from humanity. “Modern humans, deprived of even a mirror of the image of God, make themselves the measure of all things,” they complain. “What they do not value, they will not sustain.”²⁹ Even conservation for “nonconsumptive uses” such as hiking or camping are guilty of making allocations according to relative human satisfaction. Van Dyke et al. argues that human valuations are flawed because humans will settle for ever-increasing degradation of creation. “If human values and pleasures are the only goal of creation’s protection, then those values and pleasures will be preserved while creation is destroyed.”³⁰

How, then, are competing allocations of creation to be evaluated? We are promised a solution: “There is an answer, and there is a value—a value of creation independent of anything that humans may do to creation or for creation.”³¹ Yet, as the chapter on valuation ends, the problem remains. We are left with only repetitions of the theme: Utility to man is not a proper foundation for value, but created things have value because they were declared good by the Creator.

Bouma-Prediger and Van Dyke et al. would like to have valuation without reference to human beings. Certainly God has his own set of values, which we would do well to adopt as our own, but how are we to discover them? As with DeWitt’s argument, the problem here is that not everything created by God is equally valuable for each use. *Value depends upon the ends sought.* If Bouma-Prediger, Van Dyke, and other scholars in this vein have as their goal the imitation of God’s own set of values, that in itself is an end. They may have a vision for setting the land aside from “productive” purposes, as a nature preserve, because in their minds, that is the closest imitation of God’s own purpose for the creatures that the land contains. Another person may have a vision for using the land as a source of food for hungry people, or housing, or the production of paper for books. This person may believe that the closest approximation of God’s valuation on that land is to make it a source of relief for hunger or homelessness or ignorance. Because all of these applications are also good, and consistent with biblical goals, there exists a conflict—the applications of the land are mutually incompatible. How can the conflict be reconciled? Requiring that valuation be theocentric rather than anthropocentric (a worthy goal) does not eliminate the problem of resolving differing concepts of what the divine valuation actually is.

Without specific, continuing divine revelation about the uses of each piece of property, bidding through a price system is the surest way to resolve conflicts of values. Only the individual buyer and seller know the valuations that

they place on having their respective ways with the land in question. And, as talk is cheap, only the requirement that exchange be voluntary can ensure that the buyer's valuation is at least as high as the seller's. If evangelical environmentalists disapprove of the dispositions that private property owners make of their resources, it would seem that the most appropriate response would be to attempt to convince them that their valuations are inconsistent with God's valuations rather than to disrupt the market exchange process that allows people to maximize total value *as they understand it*.

However, prices and private property are seen as inconsistent with making appropriate allocation decisions when it comes to natural resources. Again, from Van Dyke et al.:

... enclosure and exclusion, the foundation of private property laws, water rights laws, homesteading laws, swamp drainage laws and multitudes of other laws are essential to private control of land productivity, but anathema to the ecological health of natural systems and communities. Saying this does not imply that private property is evil or illegitimate, but private property law often miscarries when it is applied to public lands and public resources.³²

The last sentence is particularly interesting. It seems to be saying that where land and resources are not private, private property law does not work well. Perhaps private property law *would* work well if these public lands and resources were made private.

Official Denominational Statements on the Environment

Since 1990, many denominations, particularly large, mainline denominations, have issued official statements on man's relationship to the environment. This provides a relatively simple way to see the impact of modern evangelical environmentalism on the church today. We have selected six major Protestant churches and the Roman Catholic Church for special attention, though other denominations have produced similar documents.

Presbyterian Church, U.S.A.

Hope for a Global Future, a document produced by the 1996 General Assembly of the Presbyterian Church (U.S.A.), deals with a wide range of social policies but concentrates on those that address world poverty, popula-

tion, and the environment. Like similar documents from other denominations, the PCUSA statement contains major flaws in its economics. Here, we are concerned particularly with whether the document recognizes the importance of the price system in providing information critical to efficient resource allocation. Unfortunately, it does not. *Hope for a Global Future* condemns market-based resource management as “unjust” without providing an alternative to the market’s role in calculation. While the document does not explicitly claim to be “biblical,” its position is very similar to that of the neo-Calvinists mentioned above.

In the section on resource exhaustion, the PCUSA statement asserts that we are “living beyond [our] planetary means . . . maximizing current benefits, particularly for the affluent, at the expense of future generations.”³³ Though the document acknowledges the role of advancements in technology and substitutes in forestalling resource exhaustion, “[T]here really is no substitute for the conservation of nonrenewable resources.” Inevitably, prices are viewed as an inadequate rationing mechanism:

Current market prices made higher by temporary shortages tell us only about near-term demand and supply conditions: They rarely anticipate the longer-term effects of resource depletion. By waiting to recognize environmental scarcity, it probably will be too late to conserve nonrenewable resources for the sake of future generations.³⁴

So how do we know how to strike a balance between conservation of resources for the future and for consumption today? We will address this in more detail below as we examine similar statements on conservation by the Episcopal Church, but it should at least be noted that the PCUSA document offers no source of information that will be of practical assistance in making that decision.

Ironically, when the statement turns to conservation of nonrenewable resources, two of the three primary examples of resource scarcity problems are traceable to an *absence* of a pricing mechanism. Potable water is increasingly scarce in the locations mentioned (Africa, the Middle East, and South Asia) because it is a common-access resource, not privately owned and rationed by the price system. Likewise, open-ocean fisheries³⁵ are producing smaller catches because property rights in fishing banks are largely unprotected. *There really is no substitute for the price mechanism.*

Episcopal Church, U.S.A.

There are several official statements by the Episcopal Church that merit some mention here. One of the more recent is a resolution on energy policy, adopted in February of 2002.³⁶ This document supports extensive governmental intervention to achieve energy conservation and reduce pollution. The resolution urges government to:

- raise CAFE fuel economy standards and require SUVs and minivans to meet the same standards as passenger cars,
- require or subsidize the production and purchase of “clean” vehicles,
- fund inter-city and intra-city mass transit,
- fund “renewable energy” research and development,
- include carbon dioxide as a pollutant and thereby subject it to EPA regulations,
- apply the “strongest feasible” energy-efficiency regulations to consumer goods,
- ban drilling in the Alaska National Wildlife Refuge,
- subsidize energy consumption by low-income households.

Price information is regarded by the Episcopal Executive Council as irrelevant or inconsistent with an appropriate allocation of resources. Each of their policy recommendations is in accord with the socialist ideal of centralized planning, rather than with the market system of decentralized planning.

CAFE standards, just to take one example, are antithetical to an optimal allocation of resources. Individual market participants have decided, independently of one another, that fuel economy should be traded off against other desirable automobile characteristics such as safety,³⁷ comfort, and performance. In a market system, each person has the freedom to decide what combination of these features he wants in a vehicle and will have better information about his own preferences than any governmental regulatory agency could possibly possess.

The cheapness of gasoline in the United States today, even considering gasoline taxes, presents the vehicle buyer with information about the relative scarcity of oil, and the intensity of desires of other people for that oil. Without knowing the volume of oil reserves, the rate of new oil discoveries, the uses that drivers in New Zealand might have for that oil, the advances in technologies of extracting or refining oil, or *anything else* about the process, the buyer has information that is sufficient to make an appropriate energy-conservation

decision. If oil becomes more scarce, or supplies from the Persian Gulf are threatened, or oil refineries are forced by threats of lawsuits to use cleaner and more expensive production practices, the price of gasoline will immediately rise, and consumption will fall. In short, any event that would lead a well-informed environmentalist to promote gasoline conservation should, through the market process, result in a reduction in consumption that strikes a more preferable balance between preservation of existing stocks and economic well-being than any regulatory agency could ever achieve.

United Methodist Church

The *Book of Discipline* of the United Methodist Church, in its *Social Principles*, affirms that all the world is to be valued because it is God's creation, not merely because it is useful to humans. We have the duty of stewardship, which requires us to "place a high priority on changes in economic, political, social, and technological lifestyles to support a more ecologically equitable and sustainable world leading to a higher quality of life for all of God's creation."³⁸ A strict reading of the document reveals almost nothing incompatible with a market economy, though the "social policies" advocated are likely to be understood as policies of the civil government ("social" includes but is not limited to "government"). One exception is the statement on animal life, which advocates "regulations" that support "the life and health of animals," and humane treatment, including the "painless slaughtering" of animals for food.³⁹ Another exception is the advocacy of "rigorous inspections and controls on the biological safety of all foodstuffs intended for human consumption."⁴⁰ Like most such statements, the wording is sufficiently vague to accommodate a wide variety of interpretations. The tone, however, suggests that an expansive regulatory solution to environmental problems is in view.

This is borne out in a later section of the *Social Principles* on civil government: "We believe private and public economic enterprises are responsible for the social costs of doing business, such as employment and environmental pollution, and that they should be held accountable for these costs."⁴¹

Other United Methodist official statements, such as "United States Agriculture and Rural Communities in Crisis," clearly demonstrate the commitment of the denominational leadership to governmental allocation of resources rather than to market allocation. This document advocates federal farm price supports, subsidization of small farms, subsidized lending to farms, moratoriums on farm foreclosures, water quality regulations, and many other interventions. Apparently, environmental stewardship is to be conducted without benefit of price information.

Wesleyan

The Wesleyan denomination's shorter statement on the environment⁴² is similarly vague. Most statements are lowest-common-denominator, platitudinous recommendations that would be unlikely to promote a change in anyone's thinking: "Seek information on environmental issues." "Avoid polluting as much as possible." "Examine the pattern of our consumption and avoid unnecessary expense." To the denomination's credit, all its recommendations except one can be achieved without resorting to governmental intervention. The exception is a call to "support political efforts to make recycling available where it is not."

A call to have the civil government intervene and correct the market's supposed failure to make recycling "available" is implicitly a call for socialist calculation in place of market calculation. Recycling is not available in some places because entrepreneurs have not found it cost-effective to locate recycling facilities there. Clearly, the costs of collection, sorting, and transportation of recyclables will, at some times and places, overwhelm the benefits. To demand recycling in the face of any cost would be to demand that resources be poorly allocated. For example, humans would be using their limited time in the recycling process when their time would be better employed elsewhere—perhaps in an effort to benefit the environment in some other, more effective way. In the absence of a freely functioning market for recyclables (as when the government subsidizes or runs a recycling program), information as to how much recycling is too much is unavailable or corrupted.⁴³

Evangelical Lutheran Church in America

Certainly, stewardship is an important idea to this Lutheran denomination, for it has designated the second Sunday after Pentecost as Stewardship of Creation Sunday. The Lutheran statement on the environment deals with a comprehensive set of environmental issues, and it advocates "stewardship." The document defines stewardship in nonspecific terms: "Such caring, serving, keeping, loving, and living by wisdom sum up what is meant by acting as God's stewards of the earth."⁴⁴ However, it does not explain clearly how stewardship is to be accomplished.

Without stating it explicitly, the Lutheran statement gives far greater weight to governmental intervention as a method of stewardship than to free-market pricing. The market is apparently to be used as a tool for applying pressure against environmentally unsound firms but not to be trusted with resource allocation. Thus, political lobbying, taken by "informed individuals and local

groups” is the favored approach: “We will encourage their communication with governments and private entities, attendance at public hearings, selective buying and investing, and voting. We will support those designated by this church to advocate at state, national, and international levels.” Governmental attempts to correct for alleged abuses of the environment can also include market manipulation: “Government can use both regulations and market incentives to seek sustainability.” Ordinary market pricing is clearly disdained by the Lutherans who drafted this document.

One paragraph, under the heading “Justice Through Sustainability,” demonstrates the inevitable, insoluble struggle that exists when price information is eliminated.

We recognize the obstacles to sustainability. Neither economic growth that ignores environmental cost nor conservation of nature that ignores human cost is sustainable. Both will result in injustice and, eventually, environmental degradation. We know that a healthy economy can exist only within a healthy environment but that it is difficult to promote both in our decisions.

Setting “environmental cost” against “human cost” is problematic. How can a choice be made unless there is some common unit of measurement by which to calculate these two costs? Human cost is assessable within limits, in a market economy under the rule of law. Humans have rights—in their persons, in their property—that derive from God. For those rights that are alienable, such as the property right that one person may have in his automobile, the price voluntarily agreed upon for surrender of that right provides a lower bounds of the valuation for the buyer, and an upper bounds for the seller. Because value is subjective, so is cost, and therefore all further information is irremediably confined in the minds of the negotiating parties. The criticism of Bouma-Prediger’s argument applies here as well. Without explicit divine revelation, there is no other way of comparing values.

Environmental degradation refers to a loss of one or more of the properties of the environment that were useful to some individual. That use need not involve an alteration of the environment—some may value the environment for mineral deposits or farmland, while others value it for a scenic view or for the wildlife habitat it provides. Therefore, “degradation” is not objective but is subjectively perceived by those individuals who might use the environment in some way.

Alteration of the environment's natural state may be beneficial to some and harmful to others, so that "degradation" is a matter of perspective. A farmer viewing the encroachment of indigenous plant life onto his cultivated field may regard this return to a natural state as damaging, while another person may find cause to celebrate the erasing of man-made scars on the earth. The concept of "cost" is nonsensical without reference to the impact on a decision-making being who regards the event as either furthering or hindering accomplishment of individually determined ends. The inanimate environment does not seek ends, and therefore cannot be said to incur "costs." Can there be such a thing as "environmental cost" that is not reducible to "human cost"?

If "environmental cost" is really a subset of "human cost," we are back to the problem of comparing human valuations. The only feasible solution is a price system, which implies private property rights and the freedom to exchange that property voluntarily. Yet, property rights in the environment, much less pricing of the environment, is anathema to our environmentalist churchmen.

American Baptist Churches

The statement of the American Baptist Churches begins with an uncritical review of the science of global warming, ozone depletion, and resource exhaustion. The document, as a whole, identifies any damage to the environment as sinful, and regards use of resources for private gain as necessarily inconsistent with the "common good."

We can choose to disobey, to be irresponsible, to disrupt and disturb the peaceable relationship of creature and creation. We can choose to use nature's resources only for what we perceive is our own immediate interest. Such action is sin. It is a violation of the basic covenant wherein we are called to stewardship.⁴⁵

Outside of a household of a few individuals (an analogy the writers were intent upon using early in the document),⁴⁶ it is difficult to assess the interests of others so that we can take them into account. Using the earth's resources today does not imply a lower standard of living for future generations. Burning cheaper fossil fuels today instead of using cleaner and more expensive sources of energy will allow greater expenditure on research, education, and permanent or semi-permanent capital (e.g., housing or infrastructure that will be used for decades). Would it be better to bequeath to future generations the outcomes of that research and education, or stocks of underground coal? Most likely, future generations will desire both.

Market prices can help to make that allocation decision. Market prices take into account expectations of future scarcity and, in so doing, serve to encourage the use of less-scarce alternatives. As a commodity is consumed, the supply curve shifts upward, driving the price up and promoting conservation. The needs of future generations are taken into account—if a commodity is expected to have a sufficiently higher price in twenty years, suppliers have an incentive to maintain some quantity of the commodity to sell at that time. Even if the individual supplier does not expect to be alive to collect those future revenues, the supplier does at least have the incentive to make the firm attractive for a buyer who will be around to collect. The *immediate interest* firms have in profits (both current profits and expected future profits) tends to produce a result that is beneficial to both living and future generations.

In contrast, political systems allow only the living generation to have political power. Politicians, after all, are not elected on the expectation of future votes. It would seem that political solutions would be more likely to neglect the interests of future generations than would a market system. Yet this is exactly the proposed solution: “As Christians and faithful stewards, we bear the responsibility to affirm and support programs, legislation, research, and organizations that protect and restore the vulnerable and the oppressed, the earth as well as the poor. This responsibility for a habitable environment is not just for human life but for all life.”

The authors of the Baptist statement, like many others, read into certain biblical texts a message consistent with their own statist environmentalism. A good example is their statement on the Old Testament law of Jubilee:

Jesus’ ministry provides a model for choosing sides. He is clear about where his loyalty lies. In his earliest reported reading of Scripture in public, he chooses, Luke tells us, to read from the prophet Isaiah. He proclaims that his mission is to serve the poor, the captives, and the down-trodden—the victims of social injury. He further states that he will “proclaim the acceptable year of the Lord.” This is the Jubilee Year of Leviticus 25, a year of land reform. It is a recognition that all land basically and ultimately belongs to God and that no person or group has the right to destroy it or to use it unendingly for unjust personal or institutional gain.⁴⁷

The message of the Jubilee year had nothing to do with the destruction of land, or the use of it for “personal or institutional gain.”⁴⁸ It was not “land reform” in the modern sense, in which the government seizes land from rightful owners and transfers it to those of its choosing. It was a restriction on the market alienability of the land, not on the use of the land.

Furthermore, the Jubilee law is a statute that applied only to the temporal and geographical context of the Old Covenant State of Israel. As Gary North has argued,

The Jubilee land laws of Israel have all been annulled.⁴⁹ They were never cross-boundary laws; they applied only to the land and heirs of the conquest. No judicial appeal to any of those laws is valid today. Those who appeal to them risk placing us in bondage: the revival of permanent chattel slavery or the imposition of permanent slavery to the messianic welfare State (liberation theology).⁵⁰

It is interesting that those who want to use the Jubilee law as a basis for diminishing private property rights are unwilling to apply the rest of the law (such as genocide,⁵¹ or the enslavement of foreigners and their children),⁵² much less the remainder of the Mosaic civil law. Their hermeneutic is apparently based on whether the biblical text is consistent with their personal brand of statism.

Roman Catholic Church

One key, Roman Catholic statement acknowledges that allocating resources to their most appropriate uses is not easy but goes no further in suggesting ways to solve the problem:

Stewardship implies that we must both care for creation according to standards that are not of our own making and at the same time be resourceful in finding ways to make the earth flourish. It is a difficult balance, requiring both a sense of limits and a spirit of experimentation. Even as we rejoice in earth's goodness and in the beauty of nature, stewardship places the responsibility for the well-being of all God's creatures.⁵³

In *The Ecological Crisis: A Common Responsibility*, Pope John Paul II (1989) promotes world government as a way to exercise stewardship over the environment: "The concepts of an ordered universe and a common heritage both point to the necessity of a more internationally coordinated approach to the management of the earth's goods."⁵⁴ Later, in *Centesimus Annus*, the same pope contends, "It is the task of the State to provide for the defense and preservation of common goods such as the natural and human environments, which cannot be safeguarded simply by market forces."⁵⁵ In the next paragraph, the encyclical affirms the value of the market, but within limits:

Here we find a new limit on the market: There are collective and qualitative needs that cannot be satisfied by market mechanisms. There are important human needs, which escape its logic. There are goods, which, by their very nature, cannot and must not be bought or sold. Certainly the mechanisms of the market offer secure advantages: They help to utilize resources better; they promote the exchange of products; above all, they give central place to the person's desires and preferences, which, in a contract, meet the desires and preferences of another person.⁵⁶

What it is about the nature of goods that precludes their market alienability, or the logic of this distinction, is never made clear in *Centesimus Annus*. Certainly, Christian thought regards certain goods or services as properly market inalienable, such as children or murder. Yet, an appeal to the nature of the good or service is not likely to produce consistent understanding among Christians. While we consider rivers, oceans, scenic wilderness, and even air quality as marketable goods, other Christians will regard these environmental goods as off-limits to pricing mechanisms.

Conclusion

Christians are right to seek ways to improve stewardship over nature. Yet those who are most vocal in their advocacy of stewardship seem intent upon neglecting critical sources of information about the allocation of natural resources. Numerous evangelical scholars and entire denominations give far greater weight to governmental intervention as a method of stewardship than to free-market pricing. *This is a prescription for chaos*. As Mises noted eight decades ago, schemes of central planning are no substitute for the market's role in calculation. Statist environmentalism, however dressed in rhetoric of "justice" or "Christian stewardship," is untenable because it lacks the necessary information to make resource allocations. Pursuing "eco-justice" or conservation of nature without protecting private property and the price system is "zeal without knowledge." Being a Christian does not give one access to new revelation on the ideal allocation of resources.

Notes

1. We consider in this article only environmental thought going under the name of “Christian,” rather than extending our discussion to other religions. We believe that an analysis similar to our own could be applied to the environmental statements in other religions, but we find that the relative cohesiveness of Christian thought provides a convenient boundary to our discussion.
2. These last two observations are not mutually exclusive, as one might first think. Evangelical Christians tended to support governments at all levels in this country, but there were no attempts to politically organize Christians after the repeal of Prohibition in 1933—at least before the cultural changes of the 1960s.
3. One of the authors attended InterVarsity’s 1973 Urbana conference, at which, speaker after speaker declared that the “energy crisis” was proof that the world would run out of oil before the end of the century.
4. Sider gives much play to both Heilbroner’s militantly atheistic *An Inquiry into the Human Prospect* (1975) and to the Club of Rome’s *Limits to Growth* (Meadows et. al. [1972]). The dire predictions that both works predicted for the latter part of the twentieth century did not pan out, even though most of the policy prescriptions they demanded were not enacted.
5. For example, Beisner 1990; Simon 1996, 1999; and Lomborg 2001.
6. Dykema (1986), 105.
7. Ibid., 105, 106.
8. Ibid., 106.
9. Ibid., 106, 107.
10. Ibid., 107.
11. Folsom (1991), 83.
12. Dykema (1986), 113.
13. Ibid., 113, 114.
14. However, Paul Heyne’s (1993) idea of biblical stewardship is a notable exception.
15. In Calvin College Department of Economics and Business (1986).
16. Ibid., 24.
17. Wilkinson (1991), 241.
18. See Dennison (1999).
19. Heyne (1993), 21.

20. One of the authors traveled to East Germany in 1982. Despite the fact that the former German Democratic Republic was considered to be the most prosperous and economically advanced of the Communist countries, the depressing differences between East and West could hardly go unnoticed.
21. Schaeffer and Middelmann (1992) [1970], 81, 82.
22. Northcott (1996), 128.
23. DeWitt (1994), 82.
24. There are some who have argued that there was no death before the Fall. We are not biblical scholars, but it seems that death in some form must have occurred before the Fall, however limited. Eating fruit involves the death of that part of the plant. Some animals (e.g., predators, some germs or other parasites that can exist only when the host is killed) require death to live. Adam may have stepped on an ant occasionally. This difficulty could be avoided by saying that there was basically a second Creation after the Fall of all these sorts of animals (and plants), and there is some evidence of a second creative event in Genesis 3:18. Yet, Scripture, it seems to us, is largely silent on this.
25. Genesis 1:29; 2:9, 16.
26. Genesis 2:15.
27. Genesis 1:28.
28. Bouma-Prediger (1998), 10.
29. Van Dyke et al. (1996), 43.
30. *Ibid.*, 45.
31. *Ibid.*, 46.
32. *Ibid.*, 156.
33. Presbyterian Church (U.S.A.) (1996), 53.
34. *Ibid.*, 51.
35. *Ibid.*, 53.
36. Executive Council, Episcopal Church (U.S.A.) (2002).
37. Crandall and Graham (1989) show that diminished crashworthiness resulting from the CAFE standards may have resulted in 2,200 to 3,900 excess fatalities and 11,000 to 19,500 excess serious injuries in 1989. Shin (1990) finds support for Crandall and Graham's conclusions.
38. United Methodist Church (2000), 96.
39. *Ibid.*, 97.

40. *Ibid.*, 98.
41. United Methodist Church (2000), 113.
42. Wesleyan Church (2002).
43. A Presbyterian document makes similar errors on recycling, even advocating mandatory recycling in cities. See Presbyterian Church (U.S.A.) (1990), 50–52.
44. Evangelical Lutheran Church in America (1993).
45. American Baptist Churches (1989).
46. One suspects that the authors find the family household analogy attractive because prices are not normally part of a household's resource allocation process. In a household with (usually) two to six individuals, it is comparatively simple to estimate the needs of others without assistance of prices, and penalties (explicit or implicit) for failure to work for the good of the whole household are readily available. Other denominations' documents have also made use of this analogy (e.g., Presbyterian Church [U.S.A.] [1990], 25).
47. American Baptist Churches (1989).
48. We note that the authors are tripping over superfluous qualifiers: Is using land "for unjust personal or institutional gain" acceptable if it is thus used only temporarily instead of "unendingly"?
49. See Luke 4:18–21.
50. North (1994), 429.
51. *Ibid.*, 385–89.
52. Leviticus 25:44–46.
53. United States Catholic Conference (1994).
54. John Paul II (1989), 9.
55. John Paul II (1991).
56. *Ibid.*

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