Economics and Theological Ethics: An Environmental Economist Replies to his Queen

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Abstract

In recent years, a group of theological ethicists have criticized modern economics for offering a rival theology that undermines an appreciation for creation and God's gifts. In their view, through the logic of opportunity cost, economics substitutes a tragic world of scarcity for God's abundance. Its focus on maximizing utility teaches us to be restless consumers, chasing everything but peace. It privileges markets, which has a coarsening effect on our culture and the church. And it precludes any discussion of the good that is more than the sum of individual wants. In this essay, I argue that some of these points are based on a faulty understanding of contemporary economics, or at least certain strands of it. Consequently, theological critiques have missed their mark. In offering an alternative interpretation of economics, I suggest several points of common ground from which theologians and economists can start a new conversation. Finally, insofar as economic logic is indeed tied to markets, I also offer a (partial) defense of markets against these critiques.

1. Introduction

Over the last half century, economics and the economic way of thinking have expanded their sphere to encompass social questions far outside their traditional domain of production and consumption of private goods, from how to ration medical care to understanding criminal behavior to the management of the natural environment. This "economic imperialism" (Boulding 1969, Stigler 1984, Backhouse and Medema 2009) has met with opposition from many quarters. One critical perspective comes from a group of theological ethicists, including Daniel Bell, Jr., William Cavanaugh, Stephen Long, and Norman Wirzba, among others. They characterize economics as a rival worldview to Christianity, one which points us back to our sin rather than to the grace that

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frees us from it. In particular, they emphasize problems with the liberal foundations of economics and of market reasoning, especially the way they undermine ethical practices and the ability to live into the story of God's creation and salvation. Subjecting the natural environment to market forces, for example, makes it appear as something to be exploited, consumed, or exchanged rather than something to be received as a gift.

If, as the Queen of the Sciences, theology should stand above economics and other social sciences (Long 2000, Milbank 2006), then Christian economists would do well to take these criticisms to heart. Yet economists reading them at times will find characterizations of their discipline that seem almost unrecognizable. By mischaracterizing economics in particular ways, recent theological critics of economics have tended to miss their mark. At the same time, economists often have replied to foundational critiques of economic reasoning from theologians with the claim that markets are just so efficient, a rejoinder that is really as wearisome as it is nonresponsive. Consequently, economists and theologians have continued to talk past one another. It seems that, despite good-faith efforts by both to understand one another,[1] deep misunderstanding remains.

In this essay, I identify and discuss four crucial areas where recent theological critiques of modern economics have misunderstood the discipline, in such ways as to make the critiques misfire in important respects. Additionally, I offer alternative interpretations of mainstream economics and draw into the open particular aspects of the field that may be less well known to theologians, but which have attractive elements that better fit into the Christian narrative than others. To be clear, it is not my goal here to survey the large field of Christianity and economics. And though some of my arguments may be used in such a way, defending markets or market reasoning also is not my main goal. My goal is the more limited one of clarifying particular misunderstandings. I particularly focus on applications of economics to the natural environment, partly for concreteness, but also because they highlight questions pertaining so closely to creation, human nature, and the extension of markets.

In the following sections, I will consider four inter-related points of criticism recently emphasized by some theologians. The first is that economics presupposes a *tragic* scarcity—with emphasis on the adjective "tragic" (Long 2000, Cavanaugh 2008, Bell 2012). To some Christians,

[1] For example, Kidwell and Doherty (2015), Long and Fox (2007), Lunn et al. (2012), Oslington et al. (2011).

this presupposition of scarcity precludes the plenitude announced by Christ in such miracles as turning water into fine wine (John 2:1-12) or feeding 5,000 people with five loaves and two small fish (Mark 6:30-44) or indeed in the abundant grace of the Eucharist itself. It teaches us to be anxious about our needs, whereas God would have us be anxious about nothing.

The second point of criticism is that economics teaches us to construe our lives as consumers, which is not so much to be greedy and possessive as to be acquisitive. To quote William Cavanagh (2008), "pleasure is not so much in the possession of things as in their pursuit. There is pleasure in the pursuit of novelty, and the pleasure resides not so much in having as in wanting…. [But] possession kills desire, [as] familiarity breeds contempt. That is why shopping, not buying itself, is the heart of consumerism. The consumerist spirit is a restless spirit" (p. 47). In other words, economics and markets teach our hearts to be restless, whereas God would have our hearts rest in Him.

The third criticism is that the economic logic of benefits and opportunity costs leads to the extension of markets, which in turn has a coarsening effect on our culture, and which is then imported into the Church. Everything is for sale and nothing is sacred. Everything is available at a price and that price comes to be perceived as the only meaningful sense in which the thing has value. Hence, all values are commensurable; value comes to lie in the exchangeability of a thing, not in its intrinsic nature.

The fourth criticism is that the logic of economics takes preferences as given, whatever they may be. It then seeks to maximize the pursuit of those preferences, and policies are described as good or bad based on the extent to which those whatever-they-are are obtained. But left out of this logic is any articulation of the good, the true, or the beautiful that are actually worthy of pursuit.

I take these points as thoughtful critiques of economics and its extension into areas like the natural environment, critiques which economists should take seriously and reflect on carefully. However, it is my contention that a better understanding of economics—and the way it is applied to the natural environment—provides a basis for at least a partial reply to all four points.

2. Tragic Scarcity?

Consider first the point that economics, as the study of "tragic scarcity", ignores the abundance and plenitude offered to the Kingdom of God as a gift, announced by such miracles as the wedding at Cana and the feeding of the multitude; that in teaching us to think in terms of opportunity cost, it turns us away from thinking like, and acting like, the Church. Consider in particular the following passage from the introduction to Stephen Long's book, *Divine Economy: Theology and the Market* (2000), in which he unpacks the concept of opportunity costs from a popular economics textbook.

> "Mrs. Harris spends an hour preparing a meal." However, she is also a "psychologist in private practice, and can obtain $50 per hour for her services." Thus, we must ask: what are the opportunity costs involved in her preparing the family meal? This seems a harmless enough question. The situation is a nice way of explaining that for every action chosen, another opportunity is sacrificed. The *facts* seem incontestable. No matter what our *values* might be concerning family, work, religion, politics, etc., when Mrs. Harris makes dinner she forgoes the opportunity of generating $50.
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> But this description is misleading. While is appears to give us merely the facts, it gives us much more. It invites us to construe our lives, primarily our lives as family members, in terms of the activities of producers and consumers. The family loses all incommensurable status with other consumable objects. All such objects are placed before the individual and he or she is asked, "which objects will you forego for the sake of the others?" ....
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> To pose the question this way assumes already the legitimacy of viewing all human action in terms of "opportunity costs." In fact, this putatively harmless example contains a complex metaphysics that assumes all human action and language takes place in a *tragic world of scarcity*…. Rather than viewing human action as arising out of a plenitude, this metaphysics assumes it is ensconced in scarcity. Death, violence, and antagonism become the source and end of such a metaphysics. (Long 2000 p. 4, final emphasis added)

As an economist, my initial reaction to this critique is surprise at this description of scarcity as "tragic." The adjective is used repeatedly by Bell, Cavanaugh, and Long, but simply repeating it does not make it so. To an economist, it seems misplaced, in a way that indicates an underlying miscommunication somewhere.

I suggest that the confusion arises from conflating two subtly different meanings of the word "scarcity." The first meaning is scarcity as absence of abundance, as deprivation or dearth. The second is scarcity as the need to make choices, and hence to say simultaneously "yes" to one thing and "no" to another. We might refer to these two as Malthusian and Robbinsian scarcity, respectively.[2] The first is rooted in sin; the second merely in the finitude of creation. Economists have had something to say about both. When they consider problems of poverty and economic development, they are addressing the first kind of scarcity; when they consider choices they are addressing the second.

Debates between theologians and economists have tended to focus on Malthusian scarcity. With us since the fall, this kind of scarcity truly is tragic. It means famine, disease, and death. Jesus wept for such scarcity and announced its end in the coming kingdom. Theologians have interpreted it as fundamental to economic reasoning, and argued that therefore economics is antithetical to the prophetic message of the coming Kingdom. Christian economists, on the other hand, have questioned the wisdom of ignoring such scarcity here in the already / not yet, where there really is tragic scarcity. After all, if taken literally, the real import of applying the story of the loaves and the fishes in such a way would be to do away with farming, baking, and fishing, long before we would even think about doing away with economics. If economics can help overcome such scarcity, economists argue, then that is all to the good.

But my point here is different. However we resolve this debate about the role of economics in this present age, confusion arises when theologians apply their critique of thinking in terms of Malthusian scarcity to Robbinsian scarcity, or the "economic way of thinking" in terms of opportunity cost. But there is a fallacy at the root of that argument. Syllogistically, the argument comes down to this:

- [Malthusian] Scarcity is antithetical to the logic of God's Kingdom of abundance;
- Economic reasoning is based on [Robbinsian] scarcity;
- Therefore economic reasoning is antithetical to the logic of God's Kingdom.

The argument seems valid if we conflate the two kinds of scarcity. But if we distinguish them, we

[2] The second being named for Lionel Robbins, who generally is credited with coining the contemporary definition of economics in his *Essay on the Nature and Significance of Economic Science* (1932). The first of course comes from T. Robert Malthus. A large literature has discussed what Malthus really meant by scarcity and his attempts at theodicy, as well as Paley's revision (Waterman 1991, Oslington, forthcoming). In labelling one sense of scarcity "Malthusian," I wish merely to evoke the general notion conveyed, especially in the first edition of the *Essay*, that, whether from the meanness of Nature or the mistakes of humans, output can be insufficient to furnish the needs of the population, thus leading to misery and vice.

see that the minor premise is not distributed. The Robbinsian scarcity lying at the core of post-war economic logic is rooted, not in deprivation, but in the finitude that is an inherent part of our creaturely nature. Thus, while the theological critique of the first kind of scarcity is certainly valid eschatologically (but debatable in this present age), applying the critique to this second meaning of scarcity is not even correct eschatologically.

We are created as finite beings living in time. As creatures, we are needy. Like our fellow creatures we wake up hungry each day and need to eat. But, created in the image of God, like Him we are creative and participate in creation, tending the garden, naming the animals, and shaping the world around us. We have a job to do, but as finite beings we must do it within the limits of time and our understanding. Each morning there is more work to do. Each day there is more to learn.

The finitude we experience as creatures grounds the second meaning of "scarcity" as the need to make choices. As any gardener knows well, gardening involves choices and tradeoffs. Shall we plant this fruit tree here, in such a place, or a shade tree? Shall we yank out this plant to give more space for this other to thrive, or let them crowd together? The finitude of space requires it be one or the other, not both. Likewise with time. Shall we spend this day resting or tending the garden? If the latter, shall we prune vines or pick flowers? Even if we had infinite extension of time and space in the Garden (and even if we have it again in the world to come), the fact that we live in time and space means that we would still have choices to make about how to shape a particular *place* and what to do in a particular moment. The biblical view of Adam and Eve as gardeners simply does not make sense unless it entails making such choices.

Recognizing this fact changes the way we think about scarcity. Scarcity as absence of abundance is something to escape or overcome. Scarcity as finitude is something to embrace as human. God declared this creation to be good and He came to dwell in it. Thus, if we associate scarcity with finitude rather than with sin, with Creation rather than the Fall, it ceases to be tragic.

This second meaning of scarcity, rooted in finitude, is equivalent to opportunity cost, because choosing one thing is equivalent to not choosing the other. But doesn't that logic imply a kind of tragedy, in that something is always given up? Actually, no. One can be joyful about such a choice and grateful – grateful for the choice itself or grateful for what is chosen. Consider gift giving. When we receive a gift, we are thankful in part precisely because we know the giver sacrificed time, energy, and/or money that could be used for other things, for us.

This distinction between the two meanings of scarcity is one that has developed over the course of the past century, as the way of thinking about and performing economics has evolved historically. At the time of the neoclassical revolution in the closing decades of the 19th century, when modern economics was born, economics was defined very much around the first sense of scarcity. Alfred Marshall, the great synthesizer of neoclassical economics, defined economics in his 1891 *Principles of Economics* as "a study of men as they live and move and think in the ordinary business of life…. [And] the steadiest motive to ordinary business work is the desire for the *material reward* of work" (p. 14, emphasis added). That is, economics was about material wealth. At a time when the tragic scarcity of dearth and starvation was still common in Europe, such a concern seemed highly relevant.

Interestingly, defining economics in such material terms limited the "imperial" tendency of economics, narrowing its scope. For example, when first pressured in the 1940s by bureaucratic imperatives to "price" the natural environment, economists said it could be not done—such things were "spiritual" considerations outside the bounds of economics (Banzhaf 2010). But this definition also tended to limit economists' conception of what counted as the good. Because according to this way of thinking economics could measure the value of developing the natural environment for material gain, but not the value of preserving it for its intrinsic goodness, it seemed that economics was always on the side of development. Its narrow instrumental arguments for preservation inevitably fell short.

The preservationist Aldo Leopold, who was trained in economics and was on the faculty of an agricultural economics department, provides a particularly striking example of the dissatisfaction with this situation (Goodwin 2008). In *A Sand County Almanac*, Leopold wrote:

> "One basic weakness in a conservation system based wholly on economic motives is that most members of the land community have no economic value. Wildflowers and songbirds are examples. Of the 22,000 higher plants and animals native to Wisconsin, it is doubtful whether more than 5 per cent can be sold, fed, eaten or otherwise put to economic use. Yet these creatures are members of the biotic community, and if … its stability depends on its integrity, they are entitled to continuance.
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> When one of these non-economic categories is threatened, and if we happen to love it, we invent subterfuges to give it economic importance. At the beginning of

> the century songbirds were supposed to be disappearing. Ornithologists jumped to the rescue with some distinctly shaky evidence to the effect that insects would eat us up if birds failed to control them. The evidence had to be economic in order to be valid." (Leopold [1949] 1987 p. 210)

But Leopold had in mind an increasingly outdated definition of economics. In his 1932 *Essay on the Nature and Significance of Economic Science*, Lionel Robbins had defined economics as "the science which studies human behavior as a relationship between given ends and scarce means which have alternative uses." That is, economics was no longer to be defined by a set of topics classified as related to business or material well-being; it was to be defined by a way of thinking in terms of the second meaning of scarcity, as opportunity cost. Though this definition was hardly accepted immediately, by the 1960s it was well on the way to being mainstream (Backhouse and Medema 2009).

An economist named John Krutilla did the most to work out the implications of Robbins's way of thinking for the environment (Banzhaf 2017). Attempting to incorporate Muir's perspective into economics, Krutilla (1967) argued that if some natural resource, some landscape, or some place was good and beautiful, then it had value, and that value was a reason to preserve it. The value for songbirds, for example, didn't have to be based on narrow uses (like insect-controlling services) it could be based in their intrinsic value, on their mere existence (a category known as "existence values" in economic taxonomies). But nor did Krutilla's argument suggest a default in favor of preservation. There are still tradeoffs, and choices still have to be made. Development comes at the cost of preservation, but so too preservation comes at the cost of foregoing development. Krutilla thought economics could help with such tradeoffs.[3]

From this perspective, it became possible to think, not in terms of "economics *versus* the environment," but in terms of an "economics *of* the environment" (Banzhaf 2017). As illustrated in Figure 1, in the economics-as-material-welfare view, there is a tradeoff between economic goods (viewed as material wealth) and wilderness. In the economics-as-opportunity-cost view,

[3] Whether Krutilla's move fully satisfies the concerns of those who emphasize the intrinsic value of the natural environment depends on what we mean by "intrinsic" (O'Neill 1992). Krutilla's approach brings intrinsic values into the economic calculus in the sense that places and things can be valued as ends in themselves, without any instrumental value, or any particular "use." But to be compatible with utilitarianism those values still must be rooted in the subjective judgment of people, a position Callicott (1999) calls "truncated" intrinsic value. Thus, they can never encompass arguments for valuing a place or thing independently of human judgement.

economics is elevated to govern the tradeoff between material wealth and wilderness. Greater material wealth is *not* economically efficient if it comes at the cost of valuable wilderness. This move appears, then, to be a two-edged sword for those who oppose the extension of economic reasoning. On one hand, because choices are ubiquitous, it facilitated the application of economic logic to more and more areas of life. On the other hand, it changed the meaning of what was being applied, so as to privilege material wealth no longer. Thought of this way, economics isn't about tragic want, but about the choices that are an inherent part of our finitude. Such choices can be made in a spirit of joy and gratitude.

3. Restless Consumers?

This brings us to the second criticism, which is that economics and the embrace of markets teaches us to be restless consumers, always looking for the next best thing to choose, to have a ravenous "hunger for more, without reference to what [we] already have" (Cavanaugh 2008 p. 90, Bell 2012). It teaches us to be always consuming, never enjoying.

It is true that the metaphor of the consumer has had a growing role both in economics and in popular discourse over the last 100 years.[4] But meanwhile the meaning of "the consumer" and "consumption" has been so abstracted away from its initial one of using something up as to be unrecognizable. We see this increasing abstraction in the history of environmental economics, born in the management of natural resources for consumptive use; then finding its footing in non-consumptive (but still patently instrumental) values for recreation; and finally coming to Krutilla's existence values. "Consumption," in the modern usage of the term, is a misnomer. It refers not so much to using something up as to experience it, even when it is left in place.

Of course, one can still restlessly pursue novel experiences, so the main force of Cavanaugh's critique would seem to remain standing. Doesn't economics teach that "the consumer," always wants more? That he is never satisfied? Economists have tended to assume, along with theologians, that such assumptions are an inherent part of economic rationality. Introductory textbooks often do speak in terms of "(nearly) unlimited wants." Advanced, technical treatments

[4] For example, Sandel (1996) documents the evolution of US anti-trust labor laws during the first half of the 20th Century from a focus on communal autonomy to one of protecting consumer power. Over roughly the same period, inflation was redefined from changes in prices to a more abstract *consumer* price index measuring the cost of living (Stapleford 2009).

speak of a "non-satiation" axiom, which, though slightly weaker than the assumption that more is better, evidently conveys the notion that the consumer is never satisfied.

Insofar as modern economics is fundamentally committed to such notions, Cavanaugh and Bell clearly have identified an important tension between the story economists tell and the story Christians tell. Yet I think there are three points to be made in reply that offer a potential defense of economics, while also pointing to useful starting points in their academic heritage from which Christian economists could develop their discipline in different directions. First, and most simply, we should bear in mind that economics as an academic discipline is not synonymous with commercial society. Economists have long been skeptical both of advertising and the "pro-business" collusive manipulation of markets.

Second, Christian economists wrestling with these foundational assumptions as well as theologians might reconsider how necessary such more-is-better assumptions really are to economics. Economic theorists exploring the minimum assumptions for equilibrium in markets have found that the non-satiation axiom is in fact dispensable (e.g. Mas-Colell 1992, Cornet, Topuzu, and Yildiz 2003). They have constructed models in which some people are completely satisfied with the bundle of goods they obtain, even when that bundle is less than they could achieve if they were striving against their limits, but in which others need help to meet their needs. They then extend the notion of an exchange economy to create what Mas-Colell calls "slack" in the budgets of some consumers. Those in need spend more than they have in market income, and are empowered to do so through transfers from others who have a surplus. That is, there is an economy of gift. Yet even with gift, market prices are still relevant because they act as signals to coordinate the actions of non-omniscient beings (Hayek 1945). They guide the exchanges among consumers, even satisfied ones, and the productive activities in the economy.

Third, the role of productive activities in those models, and the prices that coordinate them, underscores an important point that sometimes can be lost in critiques of consumerism: economics (and economy) is equally about *production* as consumption. Under the old definition of economics, "production" would be narrowly construed to mean harvesting and manufacturing consumables. Under the newer definition of economics rooted in opportunity costs, it means how we shape and order the world much more broadly. Time and energy can be spent on this activity or that; material objects can be transformed into this other object or that; and so on. Indeed, one rhetorical strategy in some economic models is to interpret household purchases as a kind of production. In particular, Gary Becker, Margaret Reid, and Theodore Schultz, associated with the Chicago School of economics, often thought in terms of "human capital" and "household production," in which the household was compared analogously to a tiny firm producing household services (meals, health, and so on). Their idea is that medicines, for example, aren't purchased because people have value for them in themselves, they are instrumental goods that "produce" the intrinsic good of interest (health in this case). Of course, in some ways, reducing human beings to productive firms may be just as problematic theologically—if not more so—than reducing them to consumers. This may be particular so if we associate firms with the relentless pursuit of profits (though we need not do so). But the metaphor of household production also has the advantage of providing a rhetoric, with which economists are already acquainted, in which material goods are not ends in themselves but merely means. It provides a familiar analytical framework for thinking through the ends to which economic activity is ordered; it provides a bridge, perhaps, between modern economics and a more Thomistic analysis of what economics goods are for (Hirschfeld 2014).

In any case, my broader point is that the "production" side of economics remains alive and well. That point is important in turn for two reason. First, as I will discuss more in the following section, production is arguably a more social activity than consumption. Certainly, firms are collective enterprises. Second, production is a (co-)creative act. Consequently, at its core, economics is about how we shape the world in which we live. It is about doing the work in which we thrive. According to this way of thinking, the paradigmatic figure in economics is not the consumer, but the entrepreneur. Or perhaps even the gardener.

From this foundational emphasis on creation and creativity, Christian economics and theologians can build many points of common understanding. Continuing with our application to environmental policy, consider in particular three important starting points for agreement.

First, economists and theologians can agree that creation is ongoing: God continues to move and preserve creation to His purpose. This implies that there is no static, immutable arrangement of the environment that is normative. Indeed, even the sets of species thriving at one time need not be normative. As Baer (1998) has pointed out, some 99 percent of species that have ever existed on earth are now extinct. If the intrinsic value of each species is infinite, why was God so unconcerned about their survival? Increasingly, ecologists too have stressed that static conceptions of an ecological "equilibrium" simply fail to describe reality (Botkin 2012, Budiansky 1995, Marris 2011). For example, the once widely accepted model of forest succession resulting in a climax community now appears to be a drastic oversimplification, with the mix of trees in a forest continually mixing. Not surprisingly, then, attempts to preserve even large areas like Yellowstone or Kenya's Tsavo in one particular "natural" state have been devastating failures.[5]

Second, humans are part of creation too. Thus, as emphasized by Wirzba (2003, 2015) and others, economists and theologians can agree that it is essential that we cease defining "Nature" as something outside humanity, but rather include humanity within our understanding of Nature (or, better, Creation).[6] Doing so has the twin import of emphasizing human creatureliness but also humanity's place in creation. Unfortunately, too often our conservation policies define their objective in misanthropic terms in which the good or the ideal is a "natural" world untouched by humans. Consider, for example, the stated purpose of the US Wilderness Act, which was enacted to protect wild areas from people, such areas where "the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." Over and over, we hear norms being defined by what an ecosystem would have been like if humanity had never touched it or never even been—as if we could even know.[7]

Third, economists and theologians can agree that we should embrace the idea of creatively shaping the world around us. Shaping the environment is part of what it means to be human. It is part of *our* nature.[8] We see this in the first creation story in Genesis 1:

> God said, "Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth." So God created man in his own image, in the image of God he created him; male and female he created them. And God blessed them, and God said to them, "Be

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[5] Botkin (2012) discusses the case of Kenya's Tsavo, where a hands-off approach to nature led to an overpopulation of elephants, which in turn lead to extreme devegetation and Malthusian die-offs, turning it into a "wasted landscape . . . amid a green land" (p. 26).

[6] Kaufman (1972) offers a nuanced discussion of this issue.

[7] Ironically, when such claims get specific, they are invariably wrong. Virtually every landscape has been shaped by humans long ago. For example, when whites first came to North America, commentators were uniformly impressed with the Savannah-like open canopies of the woodlands, a landscape shaped by the fires regularly set by Native Americans. Later, the dense forests perceived by New Englanders to be wild and ancient were the second growths of those forests when such management ceased (Budiansky 1995).

[8] Pollan (1991) develops this point eloquently.

> fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth." …. And it was so. And God saw everything that he had made, and behold, it was very good. (Genesis 1:16-29, 31a)

How to understand "dominion" is controversial, but it seems that it entails an authority from God to shape what the environment around us looks likes, to participate in His creation. Even if this were not a moral claim, it would still be an empirical claim. One school of environmental scientists has dubbed our epoch the *Anthropocene* (Steffan, Crutzen, and McNeill 2007, Kareiva, Marvier, and Lalasz 2012). The simple truth is that we have enormous power to shape the world around us. The only questions are how we will wield it, and what the world will look like as a result (Baer 1998). None of this is to say that the world has only instrumental value, or that it has no *telos*. But it does mean that we have a role to play in shaping it, which it turn implies that there are tradeoffs and choices that we have to make.

We get a better sense of what this kind of dominion is supposed to look like from the second creation story, in which we are told our relationship with our environment is supposed to be like the relationship of a gardener to a garden:

> The LORD God took the man and put him in the garden of Eden to till it and keep it…. Then the LORD God said, "It is not good that the man should be alone; I will make him a helper fit for him." So out of the ground the LORD God formed every beast of the field and every bird of the air, and brought them to the man to see what he would call them; and whatever the man called every living creature, that was its name. The man gave names to all cattle, and to the birds of the air, and to every beast of the field; but for the man there was not found a helper fit for him. (Genesis 2:15, 18-20)

As any gardener knows, gardening involves choices. Placed in a finite in space and time, any gardener since Adam and Eve has had to make choices about what plants to allow to grow in what places in what arrangements. Naming the animals too involves choices. But as this story also makes clear, such choices can be interpreted in the context of relationship, a relationship that need not be exploitive. As Norman Wirzba (2015) has pointed out, Genesis 2 offers the intriguing possibility that our fellow creatures could have been the companions that keep us from being lonely. Clearly, there is a deeper relationship here.

Any proper approach to our relationship with the natural environment needs to embrace both our dominion over nature and our bond to it. Yet too often our rhetoric tears them asunder.

To paraphrase Michael Pollan, the rhetoric of a virgin landscape untouched by man, only to be exploited, teaches us more about virginity and rape than about marriage and relationship (1991 p. 189). What we need is an environmental ethic that can speak to the good, which recognizes that there are multiple, competing particular goods, and an economics that can help us make those tradeoffs.

4. Coarsening Effect?

Even if we agree to such a posture, there remains the theological critique that economic thinking about such tradeoffs privileges market-based solutions, and that markets have a coarsening effect on human beings and their relationships. Markets encourage detachment from things and their history (the argument goes): consumers have no connection to those who made them, nor devotion to keeping them or maintaining them (Cavanaugh 2008). Markets flame idolatrous desire: by linking the procuring of needs and wants to the exchange of money and property from strangers, they undermine community and a spirit of gratitude (Wirzba 2015). Markets are grounded in an ontology of violence: by agonistically finding a brokered peace in the setting of one interest against another, they teach us to exercise will and power, rather than to be subservient to God (Milbank 2006, Long 2000). Markets are enslaving: as the will exercises its power through them it turns the world into "resources" to be exploited. Markets encourage "us to view others in terms of how they can serve our self-interested projects. In the worst cases, people are reified and so become commodities themselves" (Bell 2012 p. 10; also van Houtan and Northcott 2010, Wirzba 2015).

However, these critiques miss their mark in two important respects. First, though it is certainly true that economic reasoning gravitates to market solutions, it does not always do so. A large part of economics uses the logic of benefits and costs in the comparative analysis of different institutions for determining what to create and how. This strand of work, associated with Nobel prize winners Ronald Coase, Oliver Hart, Oliver Williamson, and Elinor Ostrom, subjects markets themselves (or alternative institutions) to benefit-cost tests. For example, Coase, and Hart and Williamson after him, introduced theories of the modern firm as the boundary between where activities are personal and where they are formal. Interactions inside a firm are based on personal relationships, whether hierarchical (as in obedience to a boss) or team-based. Interactions between the firm and others outside it are based on contract and/or exchange. According to their theories, activities best formed by a group requiring collaboration and repeated personal interactions, and where potential contingencies cannot be adequately addressed by contracts, fall inside the firms' boundaries; those requiring cooperation across a widespread social network fall outside.

Ostrom (1990) has applied similar logic to environmental problems. As she documents, many environmental and natural resource problems can be addressed successfully with communal arrangements, such as managing local fisheries, forests, water supplies and so forth. Local communities are best able to handle such problems through personal cooperation and creating norms of behavior to which one has a sense of duty. These arrangements are especially effective when the scale of the problem is small enough that communities can see it in its whole and have the power to effect change. These Ostrom-type challenges may be contrasted with Adam-Smith-type challenges, where the scale of the problem is so large as to require cooperation and coordination among strangers, and where gains are "limited by the extent of the market." An example might be global climate change, which surely cannot be handled by small communities alone.

Although they base their comparative analysis largely on prudential factors, the approach of these economists can be extended to ethical concerns as well. In particular, if people reject market exchange as a suitable way to allocate goods in a particular context, we would not expect the law of one price to hold in the way it does when people embrace markets. Recently, Richard Thaler won the 2017 Nobel Prize in economics in part for his work on just such issues, including the so-called "endowment effect" (Thaler 1980). The endowment effect documents situations in which people's value for a good is different depending on whether they already hold it. If they already hold it, the monetary value ordinarily is measured by their willingness to sell, or "willingness to accept" (WTA) money in exchange for giving it up. If they do not yet hold it, the monetary value is measured by their "willingness to pay" (WTP) money to acquire it. Standard economic theory has tended to predict that the difference between WTP and WTA should be small, but empirical studies often find large disparities.

Potentially, we can think of this WTP-WTA disparity—and how it varies across choice contexts—as an indicator of (and possibly quantitative measure of the extent of) people's ethical rejection of market exchange. A person might reject markets for a variety of different reasons. One such reason might be inclination for the norm of gift and gratitude over exchange, at least in a particular context. Suppose for example a person has received as a special gift or heirloom some object such as a book. Even if that book were replaceable through market exchange, we would not be at all surprised to find that an individual who received it would be unwilling to sell it, even at a price far above the ordinary market value, while another otherwise identical individual might not even want to purchase it at the ordinary price. The particular history and relationship tied up in the gift make it special. On the other hand, if in a laboratory experiment we give a participant some very ordinary thing, such as a candy bar out of a vending machine or a nondescript coffee mug, and asked them the price at which they'd be willing to sell that object, we would not expect a value much different than the price at which they'd be willing to pay to buy it. Any large WTP-WTA disparities in the latter context would be more surprising, and experiments suggest that when participants are motivated to pay attention and understand what is asked of him, such disparities do disappear (Plott and Zeiler 2007). On the other hand, WTP-WTA disparities in the former case of the heirloom book are natural and do not disappear (List and Shogren 1998). In other words, they are a mark of attachment, in contrast to the detachment that Cavanaugh emphasizes as a mark of consumer society.

Similar disparities might arise in any situation where there is a moral or ethical objection to markets. If the market per se is objectionable, somebody would not be willing to sell even at a high price, nor to buy even at a low price. Does this analysis flatten all values into the single dimension of price? Maybe, but I do not think so. To the contrary, it suggests a measure, albeit in the dimension of price, of the extent to which values are not flattened, not evened out into a single value of exchange.

Regardless, the fact that economics is open to such comparative analysis of institutions, of which the market is but one, is theologically significant because it opens the door to the role of cooperation, community, and non-market relationships. Accordingly, it also opens the door to greater cooperation between economics and theologians, as well as sociology and other disciplines.

Such an interdisciplinary analysis would require moving beyond emotive expressions of disapproval to a systematic analysis of where markets are helpful and where they are excessively flattening. Cavanaugh 2008 writes, "In a commercial society, detachment occurs in both selling and buying, and *anything* can be sold: healthcare, space, human blood, names ('Tostitos Fiesta Bowl'), adoption rights, water, genetic codes, the rights to emit pollutants into the air, the use of one's own forehead" (pp. 34-5). Distaste aside, one might ask what these examples have in common and in what ways they differ. More specifically, in considering whether it is permissible or indeed beneficial to buy and sell a particular thing, we might ask the following questions:

- Is the thing or activity useful for serving the *good*, or at least acceptable for use?
- If so, is it scarce, such that it needs to be *allocated* in some way, to determine how it is used and/or who uses it?
- Is the thing alienable, such that it can be *transferred* in some way (by gift, exchange, or otherwise) from one person or group to another?
- Does exchanging the thing for *money* preserve its nature, so that it remains useful? Does allocating it in other alternative ways, such as first-come-first-serve, similarly preserve its nature?
- Does allocating the thing through market exchange preserve the way human beings *relate* to the world or to one another, in such a way as to preserve or support particular virtues?

Answering "no" to any of these questions would be grounds for objecting to market exchange (and perhaps other kinds of exchange as well). From Cavanaugh's list, we might arguably object to trading blood for money on the last criterion, whereas we might object to trading genetic code at any point on the list. On the other hand, we might accept trade in water or air as no different than trade in food or land (a point I will return to below).

A more systematic ethical critique of the ubiquity of markets has come from the political theorist Michael Sandel (2012), who has made similar points consonant with some theologians. To drive home his point and make market advocates squirm, Sandel works through a series of examples of the supposed over-reach of market reasoning. These examples include, among many others, prostitution; "Lexus lanes," in which by paying a fee one can access a faster highway lane in the way that carpoolers do, but by paying a fee; and environmental markets in pollution.

It strikes me that these cases differ in important respects. In the cases of the prostitution, the problem is not so much the market allocating in the presence of scarcity, but the perverse ordering of our desires that gives rise to scarcity where there should not be scarcity in the first place. After all, prostitution would not be better if copulation were allocated by lottery or by queue instead of by money.

On the other hand, in the case of the highway lanes, anyone driving in rush hour knows all too well that there really is scarcity there, in both senses. That scarce highway capacity has to be allocated in some way. Sandel implicitly argues that it is ethically superior to allocate that capacity by queuing (which is all a traffic jam is, after all) than by pricing. Of course, a price still is paid with queuing, but it is paid in time rather than money. Still, Sandel would argue that Lexus lanes undermine equity and a sense of sharing ownership in the transportation system.

Obviously, the construction of roads comes at an opportunity cost and so needs to be financed in some way. Roughly, there are two models for road financing. One is to tax the general public (regardless of their use of the road) and then let users drive on it freely; another is to charge tolls to users. Toll roads of course are an ancient idea and hardly new. Do the objections to Lexus lanes apply to toll roads generally? If so, why is it fairer to charge pedestrians or users of mass transit to pay for a road they do not use, than to charge all users? If toll roads are unobjectionable but Lexus lanes are, what about the case where one road connecting points A and B is tax-financed and an alternative route connecting the same points is toll-financed? And if that is acceptable, what is different about the case of two roads connecting the same points and two different lanes paved in parallel? Would it make a difference if the improved flow made it possible to reduce congestion on all lanes, including the free ones, thus reducing traffic times for everybody, as some studies suggest is possible (Hall 2018)?

Consider finally the case of air pollution, an example raised by Cavanaugh as well as Sandel, and take for concreteness the case of greenhouse gases like carbon dioxide (CO_2). As Sandel acknowledges, there is nothing intrinsically wrong with emitting CO_2. To the contrary, putting CO_2 into the air is part of our nature, for we do it every time we exhale! Unless we are willing to call it immoral to breathe, to roast marshmallows by a campfire, or to heat our homes against a cold winter, we cannot call it immoral to emit CO_2. Nor are the consequences of one form of emissions worse than another. Who emits CO_2, where they emit it, or what activity they are performing makes no difference for the effects of emissions. The problem is purely one of degree: too much CO_2, and the result is harmful climate change. Hence, as with highway lanes, the atmosphere really is scarce in the second, Robbinsian sense of the term.

Sandel acknowledges all this, but then offers the following critique of pollution markets. He says, letting some

> buy their way out of meaningful changes in their own wasteful habits reinforces a

> bad attitude—that nature is a dumping ground for those who can afford it. Economists often assume that that solving global warming is simply a matter of designing the right incentive structure and getting countries to sign on. But this misses a crucial point: norms matter. Global action on climate change may require that we find our way to a new environmental ethic, a new set of attitudes toward the natural world we share. Whatever its efficiency, a global market in the right to pollute may make it harder to cultivate the habits of restraint and shared sacrifice that a responsible environmental ethic requires. (p. 76)

Sandel says two things here: That pollution markets teach us to think of the environment as a dumping ground and that they make it harder to cultivate habits of restraint and sacrifice.

But like it or not, the environment *is* a dumping ground (in part). To deny that fact is again to deny our finitude. Part of being a creature with needs is eating, drinking, and breathing; part of eating, drinking, and breathing is producing wastes; and part of living in a finite universe is that those wastes cannot be put infinitely far from us. Again, there is a trade-off here. We need to deposit wastes, we need a clean environment.

In the face of this dilemma, an environmental market does three things. First, it sets a boundary between what will be appropriated from the environment for private uses, such as depositing wastes, and what will be held back in common for the public good. Second, it signifies the important truth that the environment is scarce, that we can't endlessly dump wastes. As a signal, it provides both information about the effect of what we are doing (oh, my trip uses up that much of the environment at that cost?) and an incentive to reduce wastes. Third, it lets the private market loose where there really is no public reason to quibble. Whether the right goes to transportation or to electricity, to heating or to cooling, or something else, really shouldn't matter to anybody, and the market can work out those choices well.

What about the argument that, in Sandel's words, markets "make it harder to cultivate the habits of restraint and shared sacrifice that a responsible environmental ethic requires"? Both sets of claims are hard for economists to reconcile with their understanding of markets. At the roots of modern economics, Adam Smith argued that mutual exchange required us to humble ourselves and restrain our self-love to just proportions, proportions to which others can relate (*Theory of Moral Sentiments* II.2.2). In saying that we appeal to the interests (not benevolence) of the butcher, brewer, and baker (*Wealth of Nations* I.2), Smith was saying that market exchanges require us to think about the world from another's point of view, that we cannot confront the world only with our wants and will.[9]

Resurrecting Smith's emphasis on the role of virtues in the economy, economists such as Deirdre McCloskey (2006) and Luigino Bruni and Robert Sugden (2013) have pointed out that market practices require and in turn inculcate certain virtues. Virtues of prudence (including foresight, understanding, open-mindedness, and caution), temperance (i.e. self-control), universality (i.e., willingness to work with anybody without bias); and the justice, courage, and faith to produce trust and trust-worthiness. Granted, these are virtues among strangers rather than among friends and family. But sometimes strangers really do need to get along.[10] Sometimes the city of God needs the peace of Babylon. Overcoming large-scale problems like climate change surely is one of those times.

5. Individualism and the Common Good

I take the fourth critique I've mentioned, that economics as it is practiced tends to preclude any discussion of the good, as the most fundamental of the four. If we manage interests, but to no particular end, it is hardly reassuring to know that we've done it efficiently.

This critique certainly applies to the larger share of "mainstream" neoclassical economics and its practice. But not all of it. Economists hold a range of perspectives on the relationship between means and ends. (Most would still put it in terms of "positive" and "normative" economics, though we need not adopt that language.[11]) Modern economists have construed the good and its relationship to economics in three main ways, which might be called the liberal, utilitarian, and republican (or civic) approaches (Banzhaf 2011). The theologians discussed here would have the greatest dispute with the liberal approach, which privileges consumer sovereignty. It claims that whatever the consumer wants should be respected, for the good is found only in individuals and should be entrusted to them, as individuals. The utilitarian approach similarly locates the good in individuals, but differs in arguing that they are not always to be trusted to pursue their own good well. This approach, which is quite old but has experienced a renaissance in recent years with the

[9] On this point, see Hirschman (1977) and Paganelli (2017).

[10] See Hill and Lunn (2007) for an extensive discussion of this point.

[11] As Blanchard (2010) discusses, there is a gray line between economists' efforts to eliminate ethical considerations from what they could then claim to be a purely scientific enterprise, on one hand, and humility regarding the scope of economic analysis, on the other.

popularity of behavioral economics, would define utility or preference not by what people are observed to do but by what they "ought to do if they were entirely rational and well-informed" (Hotelling 1949). At least since Mill, these two approaches have co-existed in political economy in uneasy tension.

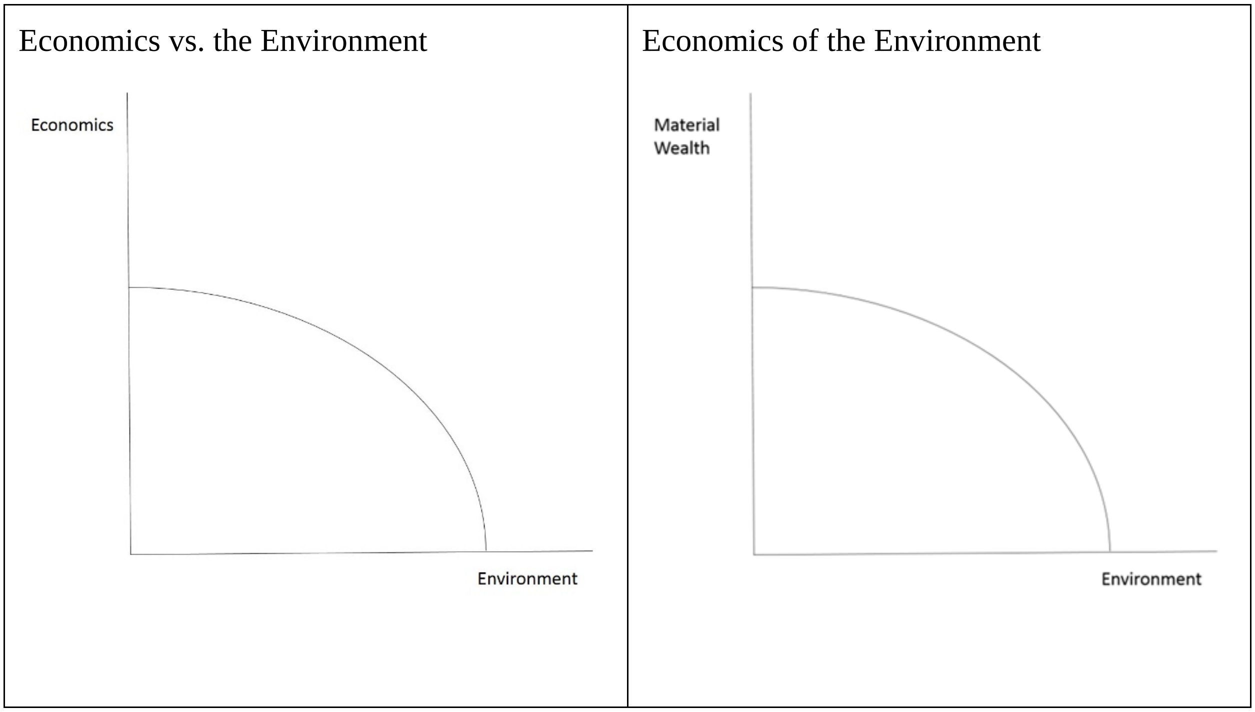
The third approach, the republican or civic approach, is quite different. It proceeds from the idea that the good must be articulated socially rather than taken as the summation of isolated individual values. Implicitly, if not explicitly, this approach appears to be experiencing a resurgence. Focused on the effects of policies on outcomes of independent interest, economists over the past 20 years have increasingly avoided liberal or utilitarian claims about the good. In so doing, they are acting more in line with a movement that reached an earlier peak around 1970, when this approach was vociferously defended by a group of economists and political scientists at Harvard and the World Bank (Banzhaf 2009). They argued that economists should confine themselves to identifying trade-offs and on no account arrogate decisions that are the proper domain of a public process. They proposed an alternative benefit-cost analysis that would take its cues about social objectives from the choices of political representatives and then use them to design public investments. As the economist Robert Dorfman put it, the relative values of such incommensurate goods as human life, endangered species, and jobs

> are not questions of fact that might admit expert answers, but questions about social values and public preference, that only the elaborate and clumsy procedures of democratic decision-making can answer. Such answers are not data to be fed into decision-making processes but, rather, outputs of those processes. (1997 p. 373)

Setting aside Dorfman's fact-value distinction, the important aspect of this approach is that, as against consumer sovereignty, it emphasizes a republican political sovereignty, an iterative process by which, first, scientists, economists and other experts identify the tradeoffs and consequences of actions; second, individuals, community organizations, political leaders, and—let us add—churches discuss the good to be pursued given those realities and the sacrifices they would be willing to make to obtain it; and, third, experts then design policies to meet those ends.

There is, of course, nothing inconsistent with this perspective and ultimately using markets to reach a desired end. Fishing communities, faced with dwindling fish stocks from overharvesting, have come together with governments to limit the right to fish, an overall limit set for the community but allocated to specific individuals within that umbrella through markets. Indeed, the use of markets as opposed to alternative arrangements is itself a decision, one also subject to the tradeoffs between the strengths of tight communities and the strengths of impersonal coordination. Achieving the vision sketched here has perhaps only one certainty: Finding that balance will require closer cooperation among theological ethics, economics, and other disciplines.

Figure 1: Economics and the Environment



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