

Running the Good Race with John Cobb: an eco-ethical marathon

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John Cobb has been a seminal figure in Christian Theology for many decades. It is fitting and timely for the PCTS to be dedicating a full meeting to a review of his lifetime of work. I am honored to have been asked to write this paper focused on a topic of significant importance in that work is his writings about the environment. It is not possible in this short paper to fully examine all his writings on this topic. At the conference organizers' suggestion, I will look at two important texts, *The Liberation of Life*,¹ co-authored with biologist Charles Birch in 1981, and *For the Common Good*, co-authored with economist Herman Daly in 1989 and republished in 1994² Of interest will not only be the importance of these works historically within their fields, but primarily the continued contribution Cobb and his collaborators can make today, both in terms of his arguments but also the example he sets for interdisciplinary work. After revisiting these works with an eye toward bringing still relevant insights into the contemporary conversation, I will propose ways they can shape ongoing conversations and formation of Eco-ethics, especially in regards to change needed in the personal arena. I propose Christian asceticism as a model for that change. I will speak specifically from my own Orthodox Christian perspective. This may seem removed from Cobb's own location with Christianity, but the cross-schism conversation will be appropriate for a scholar as dedicated to boundary breaking as Cobb has proved to be.

The Liberation of Life

In 1981 John Cobb co-authored a book with biologist Charles Birch called *The Liberation of Life: from the cell to the community*.³ The central argument in first part of this text is for the use of ecology as the model for viewing life on the planet. This is a somewhat surprising argument to read

¹ Charles Birch and John B. Cobb, *The Liberation of Life: From the Cell to the Community*, 1st ed. edition. (Cambridge Cambridgeshire ; New York: Cambridge University Press, 1981).

² Herman E. Daly and John B. Cobb, *For The Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*, 2nd, Updated edition. (Boston: Beacon Press, 1994).

³ Birch and Cobb, *The Liberation of Life*.

today, given that history has so thoroughly agreed with Birch and Cobb that we may have forgotten that ecology has not always been with us.⁴ Thus, my treatment of this argument will be brief. As argued by Birch and Cobb, an ecological framework provides a better theoretical basis for understanding the data of biology when compared to the older mechanistic methodology. This older framework viewed units of life as if they were machines, and attempted to describe and explain biological functions through this method. Birch and Cobb define the ecological method as one that attends to internal and external relationships, and thus does not examine subjects as closed off systems or primarily as substances. This relational thinking places all biological subjects, including humans, within their particular ecosystems and within interactive and dependent relationships. While the older mechanistic model is still employed at times to explain aspects of biological phenomenon, ecology is now the dominant framework used. The last holdout within biology may have been medicine, but new types of research topics show that even here the human body is now being contextualized within its ecosystem.⁵

It is not just within biology that we have seen ecological thinking take hold. Everywhere today the prefix “eco” is used abundantly. Theology is no exception; discussions of the eco-theology are commonplace in theological texts and conferences. On the surface, at least, the Birch and Cobb argument has here also won the day. However, anyone reading *The Liberation of Life* will notice the great depth of collaboration between the disciplines of biology and theology. This is a not a shallow treatment of the subject; molecular, organismic, and population ecology are each covered separately, and are frequently illustrated with detailed examples drawn from biological data. The growing trend of theologians discussing ecology should be examined more closely. Have they truly incorporated a deep understanding of ecology into their theological reflections? Or, have theologians taken a traditional understanding of community, as developed for centuries under the

⁴ The one caveat in the success of the Birch-Cobb argument is their curious insistence on the role of purpose within evolution. Here, the weight of history is against them – such a view has not become accepted. Evolution does remain a controversial topic and thus could provide much fodder for conversation, but I propose to leave it outside the scope of this paper.

⁵ Examples include research on the human gut biome, effects of racism on health, and thinking about gun violence as an epidemic.

label ecclesiology, and merely relabeled it ecology? If so, this would be a true misunderstanding of ecology. Human community, even one that is multicultural, is typically viewed and discussed as the relations of a group of humans – a single species phenomenon. Such a group might be labelled by biologists as a monoculture; it is typically seen as a problem, for example when an invasive exotic species overtakes an ecosystem by competing the native species out of existence. However, a true monoculture does not exist; in nature, it is not possible for an ecosystem to be construed from a single species. To discuss a single species community outside of its ecosystem requires abstraction of the type bemoaned in the Daly and Cobb text discussed below. Situating humans in the ecosystem invites us to complexify our descriptions of interactions to include not only co-ordinated cooperative relationships (as found in human communities), but also those that are competitive, predatory, parasitic, noninteractive, and/or symbiotic. We cannot put value or moral judgements on these relationships; they are described as normal, but cannot be described as either good or bad, just or unjust. (because they are committed by entities that are not considered moral agents.) All these aspects of the ecosystem are distinctive in comparison to human community; care should be taken to not view community and ecosystem as synonymous terms.

Birch and Cobb go on to discuss the implications of their proposed ecological model and in particular they call for a new approach to ethics.⁶ I would characterize their approach as a modified form of rule utilitarianism. Like utilitarianism, they call for the maximization of a good, here defined as the experience of ‘aliveness’. They note that in the human experience, “we enjoy life in the present, we want to continue to live, and we want our life to be as alive as possible. In short, the sheer givenness of life is accompanied by a positive valuation of life that is deeper than reflection about values, meanings and purposes.”⁷ Being ‘as alive as possible’ is then clarified as “when we are most attuned, most in harmony, most stimulated, most integrated, most responsive, most loving, most accepting, most spontaneous, most honest and most innocent.”⁸ Such an aliveness leads to an

⁶ They also discuss economics, which will be left aside in favor of the content of the second book under consideration, *The Common Good*.

⁷ Birch and Cobb, *The Liberation of Life*, 106.

⁸ *Ibid.*, 106–107.

experience of gratitude and love. They offer further clarification that “aliveness can be correlated with two facts: how rich is the world to which one is attuned and how fresh is the response of feeling, thought and action to that world. Both are matters of novelty. To stay alive requires new stimuli and newness of response.”⁹

Aliveness is a very rich concept, and a welcome addition to ethical discourse, especially the long history of discourse around human flourishing. Aliveness as a definition of good in a consequentialist ethic, however, presents difficulties as it is quite difficult to either qualify or quantify. Like with any form of utilitarianism, the difficulty of calculating the consequences of an action in terms of total aliveness make the method more theoretical than practical. There is no clear way to adjudicate between two choices of increased aliveness; it is likely that such decisions would be subjectively determined, undermining the very benefit of having a defined ethical method. It is also debatable how easily this approach can be applied to other species. Does aliveness as an experience of novelty really translate to moss and bacteria? Perhaps this method suggests the need for a tiered approach based on species’ capabilities to experience, but then the question arises of how well humans can assess another species’ experiences.

Aliveness, even when applied to humans, also is prone to critique concerning social location. Is such an aliveness inherently more available to people who are educated and who enjoy enough financial security to be able to seek out new experiences? Does this definition downplay the deep contentment that some feel for a life of repetitive happiness such as found in the small daily experiences of family life? A potential interesting conversation partner here might be Martha Nussbaum.¹⁰ Her focus is on defining the capabilities needed by a person to pursue human flourishing. These capacities fall into the following categories: Life; Bodily Health; Bodily Integrity; Senses, Imagination, and Thought; Emotions; Practical Reason; Affiliation; Other Species; Play; Control over One’s Political and Material Environment. Integrating the capabilities approach with the Birch & Cobb approach would shift the emphasis from having the experience of aliveness to

⁹ Ibid., 107.

¹⁰ See her list of 10 capabilities in Martha C. Nussbaum, *Women and Human Development: The Capabilities Approach*, 1st Edition edition. (Cambridge: Cambridge University Press, 2001), 78–80.

being capable (i.e., being free from legal restrictions, cultural norms, material limitations, etc.) of choosing to have particular forms of an experience of aliveness.

This shift in emphasis brings us to the ‘rule’ portion of the Birch & Cobb rule utilitarianism. They advocate for an extension of (human) rights to non-humans; this extended set of rights serves as the limit of the moral agent’s freedom to seek experiences of aliveness. Groups protected by rights should include animals, but Birch & Cobb do not hold that such an extension of rights beyond humans means that all forms of life have “infinite or absolute value.”¹¹ Every entity does have both intrinsic value (as an end in itself) and instrumental value (especially to human ends), however, since intrinsic value is linked to subjectivity (ability to have the experience of aliveness), the intrinsic value of some entities is small enough to “safely be ignored”, such as that of events at the subatomic, atomic, or molecular levels, as well as that of entities such as rocks.¹² With animals, the intrinsic value rises to the level of deserving protection via rights, especially rights that help the entity realize their capacity to experience aliveness. Birch & Cobb express doubt that there is much that humans can do to increase the richness of animals’ experience; thus their approach to rights is about limited the decrease of aliveness through abuse or neglect of animals. When rights of animals are in conflict with the good of humans, Birch & Cobb hold that “it requires a great human advantage to compensate for animal suffering and loss.”¹³ How to exactly balance human benefit against animal loss must be considered on a case by case basis. Between humans, rights should be viewed as equitably as possible, with all humans equally protected. However, special consideration should be given to two groups of humans needing protections – young children and the poor.¹⁴ Rights abiding humans must also look to protect the biosphere, although Birch & Cobb stop short of advocating here to grant rights to entities such as rivers, mountains, forests, etc. Their general maxim is to maximize the quality of human life with minimum impact on non-human life.

¹¹ Birch and Cobb, *The Liberation of Life*, 141.

¹² *Ibid.*, 152.

¹³ *Ibid.*, 161.

¹⁴ *Ibid.*, 164.

Birch & Cobb recognize some of the difficulties of using human rights as a model for their own ethical proposal. Global support for the language of human rights has certainly not resulted in universal protection of rights, nor even in the absence of horrific acts of violence, the likes of which originally spurred the creation of the UN Charter of Human Rights. As such, I think Birch & Cobb's proposal should be amended to focus on providing civil rights for animals; that is to say, to create civil laws protecting animals. It is only with civil law that rights holders receive the benefits of the institutions of law enforcement, criminal courts, civil courts, and the penal system to enforce civil rights by threat of prosecution of violators. It is only under these circumstances that rights have 'teeth' and thus, have any practical benefit. Indeed, in the time since the writing of this text, the existence of these laws has increased, although certainly there is more work to be done.

One further point of discussion on the proposed ethical approach is that of moral anthropology. The moral agent that maximizes the quality of human life while minimizing the impact on non-human life is a type of human that finds his origins in Enlightenment ideals. He is a person of great knowledge, foresight, reason, and self-control acting autonomously for the benefit of self and others, without needing help for any God.¹⁵ As such, he resembles the *homo economicus* that Herman Daly & John Cobb critique in their *Common Good*, discussed below. It is unclear if Cobb's thought has developed over this timeframe, or if Birch & Cobb were unaware of their reliance on Enlightenment contributions to ethics.

Of significant note is the overall collaborative methodology used by Cobb and Birch when writing *The Liberation of Life*. This is an impressive approach to interdisciplinary work, rarely seen in the field of theology. The finished text, in which the two authors speak with one voice, highlights the shared views. It would have been interesting to overhear their preliminary conversations where in they worked out their positions. Which issues were harder to find agreement? Where there issues where they failed to agree? We might also imagine how this approach could be updated to speak to issues today and build new connections between theology and the natural sciences. Of specific note

¹⁵ The use of male pronouns here is deliberate, as I am sure that the Enlightenment's ideal human being as almost always male.

is the opportunity and need for theologians to engage in collaborative work with climate sciences as we face climate change. As noted by many, religious communities have a special role to play that complements the data gathering and analysis done by the scientific community.¹⁶

For the Common Good

In 1989 John Cobb co-authored a book with economist Herman Daly called *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. It was expanded and reprinted in 1994. In it, Daly and Cobb offer a substantial critique of the field of economics with a particular concern for the ways in which economics as a field fails to adequately account for the importance of community. This critique has a number of focal points and the authors highlight examples of a “misplaced concreteness” with which economics is often presented. The text is too detailed to adequately summarize here; it includes a number of factors, such as: which measurements are being used and how they are presented (for example, falsely presenting GNP as a measurement of welfare); the propensity to abstract economic situations in a way that externalizes complicating factors, creating distance between economic theory and real world data; an anthropology – *homo economicus* – that bears little resemblance to real world humans; a refusal to account for the cost of using up natural resources. The authors also present a comprehensive set of updated public policy recommendations based on their reassessment of economic theory. I will not delve into details of the full work as other presenters at the meeting are better equipped to handle these arguments. I want to focus on some specific aspects of the work that most specifically address environmental concerns. (I say that with the awareness that how economic theory functions also has significant, if generalized, ramifications for environmental concerns.) These areas of focus will be Daly & Cobb’s prioritization of the localized community, the notion of sustainability as it pertains to income, the legacy of the Enlightenment, and the need to break down the barriers between and around academic disciplines. However, as a general note to the work, it seems history has been less

¹⁶ See, for example, Larry L. Rasmussen, *Earth-Honoring Faith: Religious Ethics in a New Key* (New York: Oxford University Press, 2013), 6.

kind to Daly and Cobb than it was to Birch and Cobb. The arguments in this book seem contemporary, largely because there has not been significant movement or change since the book was published. Many theologians and ethicists have made similar arguments over the years and continue to do so today; see for example Sallie McFague, Larry Rasmussen, and Cynthia Moe-Lobeda¹⁷. Why there has been no change is an interesting question needing an answer.

Community

Daly & Cobb argue for prioritization of local communities (such as municipalities) over subsidiary 'higher' communities, such as those at the state or national level; these local communities should include the non-human world.¹⁸ This is a useful principle for both thinking about the environment and for countering globalization. It seems natural that humans would feel the most affinity with their local communities, such as municipalities. It is also at the local level that people have the greatest opportunities for being involved and taking meaningful action. Humans could learn to value the ecosystems within their cities. It is in this local watershed/micro-climate/ecosystem that humans have a chance to experience and encounter 'nature' on a regular basis; thus it could be the foundation for building a relationship with creation and seeing oneself as part of that localized Creation. It would also be easier for humans to accept responsibility on this localized level for restoration of habitat or any other needed remedy to human destruction.

One of the other advantages of thinking about community on a localized, person-to-person level is that such a community may act as a community of accountability for academics. Here, theologians have long had an advantage over many other branches of academia. Because we have a strong connection to particular communities, those communities can hold us accountable for our academic work. However, all academics could be persons-in-community. Our interaction with communities means that scholarship cannot remain in 'the ivory tower', but rather that research

¹⁷ Sallie McFague, *Life Abundant* (Minneapolis: Fortress Press, 2000); Rasmussen, *Earth-Honoring Faith*; Cynthia D. Moe-Lobeda, *Resisting Structural Evil: Love as Ecological-Economic Vocation* (Minneapolis, MN: Fortress Press, 2013).

¹⁸ Daly and Cobb, *For The Common Good*, 17–18.

should be understandable, relevant, and even helpful to the community. Criticisms and feedback from the community should have the ability, when appropriate, to shape the nature and focus of future research. It is especially important to bring scholarship on climate change into the public sphere.

Sustainability

Daly & Cobb remind their readers that the idea of sustainability has a pre-environmentalism use within economic theory. It refers to a situation where a person or family has enough income to cover expenses; it is a balanced budget that keeps the person or family from becoming impoverished. Income is the calculation of the money needed to sustain the household.¹⁹ Income, as understood here, is not calculated for wealth creation or growth. Daly & Cobb bring this reminder into a discussion of the merits of GNP for determining community welfare, moving from a household income to a national income. However, I think the household illustration is useful, first as a potential way to speak to environmental skeptics by rooting this key term in economic theory. Secondly, it supports a critique of growth as a goal through the introduction of the concept of ‘enoughness.’ Sustainability is about having enough, where enough is a golden mean between too little and too much. Enoughness is not a popular enough notion in our consumerist society.

Enlightenment

A key aspect of the Daly & Cobb critique of economics is their analysis of “*homo economicus*,” the human at the center of the market who acts rationally to maximize self-benefit.²⁰ This idealized economic actor is also, in many ways, an ideal Enlightenment figure – a rational, autonomous individual unencumbered by emotion, values, or community ties. There is significant tension between the way the theoretical economic actor behaves and the way real people behave. Daly & Cobb also note that according to the true meaning of *economia*, this theoretical actor is not an *economic*

¹⁹ Ibid., 70–72.

²⁰ Ibid., 85–96.

figure, but rather a *chrematistic* actor. Chrematistics, a term Daly & Cobb borrow from Aristotle, pertains to the “manipulation of property and wealth so as to maximize short-term monetary exchange value to the owner.”²¹ In a word, chrematistics is about greed. Economics properly pertains to household management, originally a single house but now also the community as a whole. Daly & Cobb relate that in an experiment designed to record the degree to which people will actually act for self-benefit, many participants took the opportunity to help others, not just themselves. This is a clear deviance from the expectations of economic theory. Daly & Cobb note that one group of participants was significantly less likely to help others – economics graduate students, who apparently knew how they are supposed to act and thus demonstrated characteristics closer to the *homo economicus* ideal than other participants. Unfortunately, it seems that now it is not just economics students that have internalized this chrematistic ideal. Bemoaning the ‘disease’ of consumerism which accompanies the postulate of nonsatiety has become a reoccurring theme in recent years.²² It is fairly clear that cultural values have also followed the economic (chrematistic) ideal.

Disciplinary barriers

Daly & Cobb lament the division of academia into overly segregated disciplines and argue that economic theory would benefit from ‘outside’ input.²³ Cobb has demonstrated repeatedly how deep interdisciplinary work can be fruitful, as these two books prove. In both cases, arguments are made for rethinking the basic framework of a field of study. Both of these works also show the level of commitment needed to do this interdisciplinary work well; it is difficult to learn enough about a second field in order to be able to evaluate different positions and make effective critiques. Additionally, not all feel as Cobb does that interdisciplinary work is beneficial. Theologians regularly

²¹ Ibid., 138.

²² For a good example, see William T. Cavanaugh, *Being Consumed : Economics and Christian Desire* (Grand Rapids, Mich.: William B. Eerdmans Pub. Co., 2008). For Daly & Cobb’s discussion of nonsatiety, see Daly and Cobb, *For The Common Good*, 87–89.

²³ Daly and Cobb, *For The Common Good*, 121–137.

get told to ‘stay in their lane’ when venturing to offer opinions on non-theological topics. Even Popes receive this criticism over Catholic Social Teaching. Cobb may understate the ways in which divisions of disciplines work as a justification to keep critical voices at bay; this is a problem that needs to be overcome for continued interdisciplinary work. Additionally, the model put forth by Cobb – voices from two disciplines speaking as one—is not the only approach. I would have liked to eavesdrop a bit on the earlier conversations between Cobb and his co-authors to see how they worked out their differences. Interdisciplinary discussions can offer a different approach that produces a what may be a less cohesive outcome, but one that may be especially rich. I propose a hypothetical version of such a discussion next.

Biology, Theology, Ethics, and Economics: imagining a dialogue

What if we bring these four disciplines together into a type of interdisciplinary discussion over basic questions and thus continue the conversation already begun by Cobb when he brought these fields together within these books. I will pose a number of questions to a hypothetical panel of scholars from these fields: What is a human? How do we understand community? What is the goal of humanity or the definition of success? How do we understand nature, especially as it relates to humans? What change is needed for an improved human-nature relationship? These questions were chosen for their relevance to building an eco-ethic, to be discussed later in the conference.

1) What is a human?

Understanding the nature of humans and humanity is perhaps the most basic question facing scholars (or any humans), and thus seems a good place to start, and the question deserving the most attention. I turn first to biology for an answer. In order to present a view from biology I have, in imitation of Cobb’s method, consulted a biologist – Dr. Jean Woods, Curator of the Bird & Mammal Collection of the Delaware Natural History Museum. According to Woods, biology sees humans as “large brained, tool making, social animals” who are distinguished from other animals by

two characteristics. First, humans can and do alter their environment on a scale beyond that of other animals. The scale of alterations can be large enough to alter the entire ecosystem, and can far out last the lifespan of the humans making the changes.²⁴ Examples include coal mining through mountaintop removal, large scale deforestation, and damming rivers. The second distinguishing factor is that humans have disassociated their individual wellbeing from that of the social group or species.²⁵ We see this particularly in the reduced birth rates of wealthier countries where the parents (invoking an economic analysis) have fewer children due to the cost associated with raising children. In as much as these characteristics developed as part of human survival strategies, they could be considered positive. However, the combination of these factors has the potential to be quite dangerous. It is worth noting that from a biological point of view, the jury is still out on the question of human successfulness, which is measured by longevity. Humans – *homo sapiens* - are relative newcomers as a species, having existed for just over 300,000 years. In contrast, some truly successful species, such as cockroaches, have lived on earth for over 300 million years.

This biological description of humans bears little resemblance the description put forth by economists, who focus on the human being – Daly & Cobb’s *homo economicus* – as a participant in the market place. This description is looks at the individual (not the species) who is described as a rational participant in the market, always acting to maximize self-benefit – the chrematistic individual. As noted above, Daly & Cobb suggest an alternative view of humans as persons in community, a view that moves them closer to biology and away from the Enlightenment.

From the point of view of Christian theology, the biological description of humans may raise some issues. How does the biological understanding allow for humans to being made in the Image of God? Theologians have long sought to associate being made in the Image of God with a special characteristic held only by humans – with reason or rationality being the favorite candidate over the years. However, such a claim is less and less supported by biological research. Such research has identified more and more characteristics that animals share with humans, such as various intellectual

²⁴ Jean Woods, “Private Conversation,” March 16, 2019.

²⁵ Ibid.

or emotional aspects. Moreover, theology is distinct from the other disciplines in speaking to spiritual aspects of the human person. There is often an emphasis on both transcendence and transformation.

Ethics has traditionally, at least since the Enlightenment, seen the human as a moral agent, usually situated at the center of a moral crisis. This human bears similarities to the economic human, with a focus on rational decision-making. (Indeed, the moral agent might really be *homo economicus* with a few friends.)

A prime example of this approach to ethics is the well-known ‘trolley’ case study. In this fictional moral dilemma, a person is standing along a trolley car track near a switch. Along the tracks in one direction is a trolley car approaching. On the other side of the moral agent is a fork in the track. The switch is set to send the trolley down one of the lines, on which stand a number of clueless individuals who will be killed by the trolley. On the other line there are also clueless people, but fewer of them. The moral question is, do you throw the switch so the trolley kills fewer people?

The answers to the questions are, in my opinion, far less interesting than the representation of the moral agent. He is in possession of all relevant knowledge (yes, the people will be killed by the trolley), and is also fully enabled to act (yes, he knows how to operate a train switch); only he can save the people. Here is the ideal Enlightenment Man. Notice, what options are not on the table – he cannot, apparently, merely yell at the clueless victims to move, nor is he able to communicate with the trolley driver. Also, he apparently cannot rely on the good sense of the people on the tracks to be aware of the oncoming trolley and move without need of his intervention. This moral agent is, like *homo economicus*, situated in a very abstracted context. The choices have very easily calculated consequences, and no unforeseen outcomes are allowed. In real life, even if someone could operate a railroad switch – if they knew how and if the switch wasn’t locked by the railroad company – quickly throwing a switch in front of an oncoming trolley would likely result in derailing said trolley, especially if it were travelling fast enough to be unable to stop before the people on the track.

We see throughout this ethics case study the same abstractions that Daly & Cobb find in economic theory. This is an issue that ethics has not yet fully acknowledged. Ethics has one significant advantage over economics, however, in that ethics pre-dates the Enlightenment by some significant period of time. Thus, we have older views of humanity, such as that found in virtue ethics which draws most significantly on the writings of Aristotle and Thomas Aquinas. Here, the human is seen as a complex creature, situated in community. The post-Enlightenment resurgence of virtue ethics is often tied to the landmark text, *After Virtue*, first published by Alasdair MacIntyre in 1987 (thus predating the Birch & Cobb text.)²⁶ Currently ethics has a multicultural approach to theory – students of ethics are typically taught various options from which they may choose the theory that best suits them – i.e. deontology, Utilitarianism, virtue ethics, etc.. While proponents of different methods will argue with each other, there is an underlying acknowledgement that all the theories represent acceptable understandings of ethics – opponents are not derided for failing to understand ethics, just for not making the best choice. This seems quite different from the current state of affairs in economics.

2) How do we understand community?

This question asks us about the social context of the human defined above, and thus has already be touched upon. Biology includes in its basic understanding of humans that we are social animals, living in an ecosystem. Biology would add that this social aspect is part of the species' survival strategy, and includes culture – the sharing of knowledge between members of the species, again, as part of the species' survival strategy.

Traditional economics, in many ways, reduces community to the market – the (sometimes imaginary) context within which an efficient distribution of goods is attained. Daly & Cobb make an

²⁶ Alasdair C. MacIntyre, *After Virtue: A Study in Moral Theory*, 3rd ed. (Notre Dame, Ind: University of Notre Dame Press, 2007).

extended argument for economics to give community a much more central position within the field; as noted above, they prioritize the local community and situate humans within their local ecosystem..

Ethics falls in line here, as it often sees community as the context of the moral agent – a context that acts as a source of values, norms, and definitions of good/right. It is telling that the roots of the words ‘morality’ and ‘ethics’ both speak to community norms – mores and ethos. Some ethical methods, such as utilitarianism, may have more room for discussing the common good, and thus community welfare. Additionally, any description of justice is always social.

Christian theology stands out as having a much more sophisticated view of community. Community (the Church) is mystically equated with the Body of Christ. Membership is voluntary and purposeful and carries with it implications in terms of both behavior and salvation. To be sure, this is something akin to biology’s understanding of social group and culture being part of the human survival strategy, but biology cannot so easily divide the society into small, voluntarily segregated groups. Theology sees community as a coordinated, cooperative group serving to meet spiritual needs, alongside other benefits.

3) What is the goal of humanity or the definition of success?

Biology, especially evolutionary biology, sees success as survival of the species, and measures this success on a very, very long timeline. Culture supports this endeavor by passing along useful knowledge, and individual members of the species support the survival of the species by passing along their DNA when they are successful enough to breed offspring. While biology has a very minimal definition of success, it also gives us the most cause for alarm about failure in the aforementioned distinctive aspects of the human species – humans have demonstrated that we are capable of both altering our own ecosystem and of disassociating individual choices from survival of the species.

Traditional economic theory seems to offer two options for defining the success of humanity. First, from an individual perspective, success is maximizing self-benefit. From a social or collective perspective, it seems to be maximizing the freedom of the market – so as to most

efficiently allocate goods. Daly & Cobb discuss income as supporting sustainability, setting that as a goal which seems to link to biology's notion of survival.

Christian theology moves past biology in looking at a long timeframe; we might even say it looks beyond time in a discussion of eschatology. The goal of humanity, from a Christian theology perspective, is salvation, however defined by particular branches of the church. It is worth noting within this interdisciplinary conversation that God's plan for the salvation of humanity is often called the Divine Economy. God is managing the household of earth.

For ethics, the notion of a *telos* is sometimes attributed to the individual human person and sometimes to humanity as a whole. Virtue ethics is an example of the former and defines acquisition of virtues as the goal of humanity (a feat that may lead also include the contemplation of God.) For ethicists using a consequentialist method, community may be part of the *telos* – such as with Martin Luther King's (penultimate) *telos* of a Beloved Community (a community marked by love, mercy, and justice.) Of course, the *telos* varies considerably based on the values of the ethicist and his or her community. Options of language used to describe this *telos* include love, justice, happiness, maximization of good, etc.

4) What is 'nature' or 'the environment', especially in regards to humanity?

Biology understands everything to be part of nature. All life, from the largest animals to the smallest micro-organisms, are part of nature; ecosystems are also part of nature and include all of the earth. Nature serves as the context for living life and the source of all resources needed for survival of a species, but can also be the sources of all threats to survival. Humans are not separate from nature, but rather part of it. Non-human nature exists not just immediately outside our front doors, but inside our homes as well as both in and on our very bodies.

Traditionally, economics has externalized nature – a point of critique from Daly & Cobb. Nature provides resources (inputs) for the production of goods and is something other than humanity. One might imagine a dotted line surrounding human settlements that segregates humanity from nature. Nature comes into the human settlement as raw materials which are then

produced into goods consumed by humans. This is obviously not a view that can be supported by biology. Daly & Cobb want to see economic theory develop in a way that has a more robust understanding of nature and of the human relationship to nature.

Christian theology views nature as Creation – the work of God that is inherently good. Creation includes humanity and stands on one side of a great gulf between that which was created and that which was not created (God, the Creator.) At the same time, however, Christians see humanity as separate from and above the rest of Creation because of the special status given to humans at the time of Creation. First, humans are made in the image of God, and secondly, humans are given dominion over nature. In some sense, then, Christian theology shares a position with both biology and economics.

The view of nature within ethics can vary. Christian ethicists will, of course, carry the theological view noted above. Additionally, nature provides the widest possible definition of the context within which the moral agent acts, as well as the context for human society as a whole. The human relationship with nature (or with parts of nature) has come to be seen, in recent decades, as an important location for ethical inquiry. However, nature, or subsections of nature such as particular animals, are typically seen as a non-moral entity (meaning, nature or an animal is not a moral agent) making the human relationship with nature quite distinctly different than human relationships with other humans (who are moral agents.)

5) What change is needed for an improved human-nature relationship?

As we think about how to formulate an eco-ethic or environmental ethic, we need to address two aspects of the change needed. Change within particular fields of study (change in theories, etc.) and social change needed in the world. These two aspects of change should be seen as related. Ideally, academic study exists not for its own sake, but for the common good; when the common good demands change, academic study should be able to inform and support that change.

For biology, the needed change within the field happened in the 1980's, as noted above; the paradigm shift to an ecological model, as was argued for in *Liberation of Life*, has been thoroughly

instituted. The acceptance of this new model, which followed on the heels of the final acceptance of evolution (related to the discovery of DNA), has lead biologists to identify, with alarm, the possibility of humans not surviving due to our own actions. Thus, there is a need for an updated survival strategy that moves humanity away from the two distinctive characteristics of humans noted above – human propensity to massively alter the ecosystem and the disconnect between individual choices and species survival. That updated survival strategy may include more education of the public on key biological issues.

As noted above, the Daly & Cobb book outlines in great detail many of the changes needed within the field of economics, most notably the need to situate humans within community and the accompanying changes to economic theory to support this new anthropology. More specifically concerning the environment, Daly & Cobb note the importance of sustainability as a part of the definition of income, and the need to properly measure this goal of sustainability so it can become part of the public policy recommendations brought forth by economists. This will involve both internalizing some externalities, and also moving away from viewing unlimited growth as good. Again, education of the public will be essential to gain support of the needed policy changes.

Theology, as a field, has been slowly evolving in reaction to the ecological crisis. Most notable is the inclusion of care for the Creation within the list of concerns addressed by theologians – a topic that was largely absent prior to the 1970's. There has been a move to more explicitly declare Creation to be extrinsically good, not merely instrumentally beneficial. When regarding change at the personal or social level, Theology has a particularly long and extensive tradition. This tradition involves the language of sin, confession, repentance, and metanoia (or reorientation), forgiveness, and healing. As theology applies this old tradition to a new topic, environmental sin and injustice, there is a need for more work to articulate the connections and relationships between humanity, Creation, and God. This articulation of beliefs must be directed at the membership of the communities, so as to garner support for needed social change.

Ethics also has been evolving to include environmental considerations within ethical theory, both in terms of seeing the ecological horizon as the ultimate context for ethical decision making

and in developing a new subsection of ethics that particularly addresses right and good within human relationships to nature. Current ethical methods are being adapted to the ecological context and the notion of climate justice has opened new ways of thinking about ethical responsibilities. Just as important has been the efforts to bring the topic into public debate and advocate for change. More work is needed in all these areas.

We are in a race against time to successfully develop and implement eco-ethics. Climate change is a global problem. Solving this problem will require all communities to work together, even rival academic disciplines. Nonetheless, this will not be easy, given the way different disciplines view the world. For a Biology-Theology-Ethics-Economics dialogue to actually proceed and work, the scholars involved would need to be willing to approach the process with some humility. It can be helpful to be open about the intellectual history of ideas and theories – especially on points of disagreement – and to examine the historical context that gave rise to those ideas and theories. Attention will need to be given to the role values play within academic work, especially when those values are masked by claims of objectivity.

In the face of environmental crisis, it is imperative that academic work support actions for real change in the world. The degree to which interdisciplinary work especially helps bring about needed change in the world is unknown, but I believe that the act of breaking down artificial barriers and beginning a broader conversation about the issue is directionally correct. We must, of course, take it further. Yet, as we see from Cobb's work, the conversation has already be a long one; *Liberaton of Life* was published 38 years ago. How do we move forward with action, even as the conversation is continuing? In the final section, I propose reclaiming Christian asceticism as a framework for such action.

Christian Asceticism

[A]ll of us are deeply frustrated with the stubborn resistance and reluctant advancement of earth-friendly politics and practices. Permit us to propose that the reason for this hesitation and hindrance may lie in the fact that we are unwilling to accept personal responsibility and demonstrate personal sacrifice. In the Orthodox Christian tradition we refer to this “missing dimension” as ascesis, which could be translated as abstinence and moderation, or – better still – simplicity and frugality.... This may be a fundamental religious and spiritual value. Yet it is also a fundamental ethical and existential principle.

– HAH Ecumenical Patriarch Bartholomew I ²⁷

“I am convinced that the working out, and practical application, of an ascetical discipline which is realistic and relevant is among the most urgent needs of the Church at this time.”

– J.N.D. Kelly²⁸

“thousands ... seek a spiritual home and habitat beyond global consumerism ... [and] may chose retrieval, continuation, or reformation of some ancient or newborn religious asceticism.”

–Larry Rasmussen ²⁹

“But as we face the fact of the finitude of the world’s resources and the frightening pollution that is being caused by the present pace of production and consumption, we must move forward to a new asceticism, an ecological asceticism. We must find ways of reducing our destruction of the environment and of making irreplaceable resources last longer. Where shall we begin?”

– John Cobb³⁰

John Cobb has been writing on the environment for decades. These two books themselves date back 38 years. Change has been slow. The crisis worsens. There are many arenas in which change is needed – public policy, institutions, business, academia, and the household. As noted in

²⁷ Ecumenical Patriarch of Constantinople Bartholomew I, “Preface,” in *Sacred Commerce : A Conversation on Environment, Ethics, and Innovation*, ed. John Chryssavgis and Michele L. Goldsmith (Brookline, Massachusetts: Holy Cross Orthodox Press, 2014), viii–ix.

²⁸ J.N.D. Kelly, *The Motive of Christian Asceticism*, Hale memorial sermons (Evanston, IL: Seabury-Western Theological Seminary, 1964), 5.

²⁹ Rasmussen, *Earth-Honoring Faith*, 240.

³⁰ John B. Cobb, *Is It Too Late?: A Theology of Ecology*, Revised edition. (Denton, Tex: Environmental Ethics Books, 1995), 36.

the quotes above, there is need and opportunity for personal change. I propose asceticism as an important next step for eco-theology generally, and for Cobb's work specifically. Reclaiming the ancient tradition of Christian asceticism provides a practical foundation for acting upon some of the issues and ideas brought forth by Cobb in these two books.

What is asceticism?³¹

The difficulty of defining the term 'asceticism' is well known to scholars. One difficulty comes from extremely negative assessments of asceticism in the modern period. These negative assessments are often based on understandings of asceticism that are overly focused on renunciation to the detriment of other types of practices, so much so that asceticism is sometimes equated with renunciation. While the 'negative' practices associated with renunciation have an important place within Christian asceticism, so do 'positive' practices – i.e. the taking on of new activities. Any understanding of asceticism should reflect this balance. The equation of asceticism with renunciation may be related to an unhelpful conflation (or near conflation) of Christian asceticism with monasticism. Monasticism, as a particular institution within which to practice Christian asceticism, stands alongside older forms, most notably what I will call 'domestic asceticism' – the ascetical practices found within family households. It is of significant importance to include domestic asceticism within the purview of the study of Christian asceticism and especially for this project.

In lieu of offering my own definition to the collection put forth by various scholars, I will rely on a basic definition of the underlying Greek term, ἄσκησις (*ascesis* or *askesis*), meaning 'exercise, training, practice, but also the practice of something, or a mode of life'; also, based on an even earlier meaning of the term, 'to fashion or craft'.³² The term is borrowed from the athletic realm and connects us to New Testament metaphor that depicts the Christian life as running 'the good race.'³³

³¹ Much of this section is extracted from Ann Woods, *An Ancient Voice in the Contemporary Wilderness: Reclaiming Asceticism as a Christian Response to Climate Change* (Dissertation, 2017).

³² Henry George Liddell, *An Intermediate Greek-English Lexicon, Founded upon the 7th Ed. of Liddell and Scott's Greek-English Lexicon* (Oxford: Clarendon Press, 1889), 124.

³³ For example: Gal 5:7, 2Tim 4:7, Heb 12:1, 1Cor 9:24-27.

I supplement the lexicon definition with a fuller *description* of Christian asceticism, as I both understand and will make use of the tradition. My research seeks a vision of Christian asceticism interpreted for our current context of the ecological crisis. I offer the following as a beginning of the descriptive task.

Christian asceticism is a historical tradition within the church existing in response to the universal invitation to the gift of holiness and communion with God, which is accepted through a life of intentional, self-disciplining, embodied practices, sustained by participation in the Body of Christ within the life of His Church, made manifest in relationships grounded in Christian love and seeking the perfecting fulfillment of the Christian person and all creation.

I would add that I understand Christian asceticism to characteristically be: 1) both teleological and transformative, 2) responsive to context, 3) a matter of personal choice and responsibility, 4) attentive to relationships, 5) a communal activity, and 6) constitutive of integrated practices. These six aspects are contained, or at least suggested, in my previous short description.

Asceticism, as noted above, consists of various practices. Traditional ascetical practices are easily recognized: prayer, fasting, charitable giving, worship, scripture study, etc. However, the contextual nature of asceticism allows for new practices to develop. In the modern world, some of these new practices are particularly focused on community and economic issues, and may also be useful for addressing environmental issues. These types of practices connect action to the ideas discussed above and in Cobb's books. They are ways of not being *homo economicus*; of rejecting chrematistic living; of valuing and building community; of withdrawing from systems of structural injustice; of caring for Creation; of being the change needed in the world.

Economic Practices

Contemporary Christian thought has identified that the accumulation of wealth is negative to the spiritual wellbeing of the wealthy and represents a broken relationship between the rich and the

poor. Our economic transactions are characterized by a sense of detachment between the producers and the consumers; we do not usually even know who makes our stuff, and yet the economic decisions made on a daily basis have social implications.³⁴

This critique of consumerism has included looking for new ways of structuring economic interactions and relationships; for example, William Cavanaugh argues that “Christians themselves are called to create concrete alternative practices that open up a different kind of economic space – the space marked by the body of Christ.”³⁵ These alternative practices must reconnect the buyer with the maker and must establish a relationship marked by justice and love. The examples presented below will take a deeper look at contemporary Christian practices to create more just economic relationships; specifically, I will look at two areas of contemporary ascetical practices around consumption – ethical consuming and simplicity as a lifestyle choice.

Ethical Consuming

A growing trend in contemporary ascetical disciplines, both Christian and non-Christian, is to take responsibility for the consequences of one’s spending choices. A central concern is understanding purchasing as being part of a relationship, and then asking if the relationship is marked by justice and Christian love. Practitioners who reevaluate their spending choices through this lens may be moved to support a particular product or business based on the compatibility of the product with one’s own ethical values. The opposite, choosing to avoid a product or business – to boycott – is also possible but will not be covered here. The transformative potential of selective consumption, including non-consumption, is not limited to the realm of goods and services. The

³⁴ Gregory Jensen, *The Cure for Consumerism*, Orthodox Christian Social Thought 2 (Grand Rapids, MI: Acton Institute, 2015), 141; Cavanaugh, *Being Consumed : Economics and Christian Desire*, xi. See also Cloutier who, through the words of Pope John Paul II, identified consumers as ‘indirect employers’ when purchasing goods and services, and thus have the same moral obligations to offer fair pay. Cloutier also calls for the inclusion of economic activities within the ‘universal call to holiness’ of *Lumen Gentium*. David Cloutier, *The Vice of Luxury: Economic Excess in a Consumer Age* (Washington, D.C: Georgetown University Press, 2015), 10–11.

³⁵ Cavanaugh, *Being Consumed : Economics and Christian Desire*, viii.

logic of ethical consumption also extends to ethical or socially responsible investments and to divestment campaigns. Examples of ethical shopping abound and focus either on producing a more ethical product or on the wellbeing of the producer; many cases offer some combination of these both. Ethical shopping can be a way for Christian practitioners to create the new economic space referenced by Cavanaugh or it can be a way to pressure businesses to change their products or production processes; again, in some cases, it may be both.

The category of ethical consumerism is dominated by the term “fair trade.”³⁶ This is the purchasing of goods and services chosen out of concern for the ethical treatment of the producer, a concern typically focused on livable wages and safe working conditions. Fair trade usually facilitated by nonprofit organizations that seek to help a group of poor producers by establishing a market for their goods, such as handcrafts or agricultural products, usually for purchase by people outside the immediate communities of the producers. These organizations help establish a more equitable relationship between producers and purchasers (while also eliminating profit grabbing “middle men”), allowing for more favorable wages and working conditions. A well-known example in this category is fair trade coffee; various organizations supply coffee that is sustainably grown and that provides a livelihood for impoverished and marginalized growers.³⁷ Fair trade has also expanded to include a wide range of offerings.

Ethical shopping can also be directed at categories instead of specific products, such as campaigns advising consumers to buy local goods, the Blackout Friday campaign (asking consumers to only shop black owned business on the day after Thanksgiving), as well as the various

³⁶ The term “fair trade” has come to refer to this general concept but at the same time, it is the name of a number of non-profit organizations dedicated to furthering this type of ethical consumption. A pioneer in the field was the “Home | Fairtrade Foundation,” accessed August 11, 2017, <http://www.fairtrade.org.uk/>. For an American example, see “Fair Trade USA | Every Purchase Matters,” accessed August 11, 2017, <http://fairtradeusa.org/>. Global organizations include the “World Fair Trade Organization,” Text, *World Fair Trade Organization*, accessed August 11, 2017, <http://wfto.com/>.

³⁷ See “Coffee | Fair Trade USA,” accessed August 12, 2017, <http://fairtradeusa.org/products-partners/coffee>; “Grounds for Change Fair Trade Coffee,” accessed August 12, 2017, <http://www.groundsforchange.com/learn/index.php?>

longstanding campaigns urging consumers to buy American goods.³⁸ The variety of organizations and campaigns within the movement points to the vigor and adaptability of this modern practice. Yet these options are still too few to accommodate all potential practitioners. The movement to create “new economic spaces”, as Cavanaugh suggested, is still in its infancy and doubts remain as to how widespread and influential it can be. It may prove more effective to pair ethical shopping with an overall reduction in purchasing – an option explored below.

Simplicity

The complexity of choices facing practitioners wishing to establish justice within their economic relationships leads us to the idea of simplicity. Here, economic practices merge into a full way of life, a deepening of practices. Simplicity is much talked about in contemporary culture, both Christian and non-Christian. In some usages, it is almost reduced to a design aesthetic, a visual decluttering of our living and working quarters. Sometimes also known as minimalism, it can be an aggressively legalistic limitation of property. However, Christian simplicity demands that this lessening of excess be grounded in Christian faith. Many think of simplicity as a reduction—a letting go—but it is not intended to leave the practitioner empty. The purpose of *kenosis* is always to make room for God to enter.

Collaborative Communities

The ascetic practitioner benefits from engaging in practices alongside a community of similarly minded (and similarly practicing) people. Churches today often have a wide range of parish organizations, such as committees, ministry groups, community organizations; these may act as collaborative communities for practitioners. A number of denominationally affiliated groups may also be potential communities for engagement of Christian disciplines, as may national or

³⁸ For an example of a buy local campaign, see “Why Buy Local? | Sustainable Connections,” accessed August 12, 2017, <https://sustainableconnections.org/why-buy-local/>. On buying American goods, see “Made in the USA | Be American. Buy American.,” accessed August 12, 2017, <http://madeintheusa.com/>. For Blackout Friday, see “Blackoutfriday,” *Blackoutfriday*, accessed August 12, 2017, <https://blackoutfriday.org/>.

international church-affiliated organizations that are focused on a particular ministry, often charitable work or social justice. Online or virtual communities can also provide a supportive environment for a Christians engaged in ascetical disciplines. Naturally, such communities take on a different nature. On the one hand, it may be easier for practitioners to find like-minded people engaged in or willing to engage in shared disciplines. Such connections may be passive or one directional – for example, reading a blog or following a twitter account, but they can take on a more active and interactive form.

A more intensive form of collaborative groups is the intentional community. Typically, but not always, a residential community, the group attends directly to the formation of community, developing structure and shared experiences; it is not a coincidental cohabitation. Examples of intentional communities exist from throughout Christian history, such as the ascetic households of Sts. Basil and Makrina; monasteries are another example. In the more contemporary period, an important example is known to us through the writings of Dietrich Bonhoeffer; in 1935 he took charge of a secret seminary for the Confessing Church where he shared a common life with the 25 students. Although the seminary would not last long, his reflections on the experience of living a shared Christian life, published later, would have a lasting influence.³⁹

Asceticism as Creation Care

The previous examples have set the stage for presenting ecologically oriented ascetic practices that serve as a Christian response to climate change. Climate change is one of many circumstances in which the Christian ascetic may seek transformation through growth in holiness and communion with God within a deepening of ascetical practice. This response to climate change will involve continued use of old practices, often adapted to the new situation, and the creation of new practices. The resulting asceticism will be a holistic expression of Christianity, incorporating a

³⁹ Dietrich Bonhoeffer, *Life Together*, trans. John W. Doberstein, 1st HarperCollins gift. (San Francisco: HarperSanFrancisco, 1993).

variety of types of practices that work together to inform and sustain each other. This asceticism will be a life of true human flourishing, reconciled to all creation and leading to union with the Creator.

The practices fall into two broad, interrelated categories: those that are directly responding to climate change and others that are more foundational, supporting the direct practices. The role of foundational practices is too easily overlooked – the presence of these practices is largely what separates Christian (or more generally, religious) asceticism from secular attempts to personally respond to climate change. Therefore, I will start with them; indeed, the practitioner would be wise to do like-wise, in order to establish a firm foundation for the direct practices. Foundational practices are diverse, varying according to the individual practitioner. They may include prayer, fasting, almsgiving, worship, scripture reading, spiritual reading/study, silence, the receiving of sacraments, following the church calendar, and the keeping of feasts. With each of these disciplines, the practitioner should seek to adapt them to address environmental concerns. Pray for Creation, fast from meat and plastic, financially support environmental work, include Creation in corporate worship, find scriptural passages that speak about Creation, read works of eco-theology, sit silently in a natural setting, etc. The adaptation of these traditional practices to address environmental concerns is the basis of a conversion to an ‘earth honoring’ Christian faith that will motivate and sustain practices that more directly address climate change.⁴⁰

Direct practices

Direct practices are the ascetic disciplines that have the potential to immediately address environmental concerns or aspects of climate change. Speaking specifically about climate change as an example, we see that the direct practices aim at reducing atmospheric carbon and at alleviating the impacts of the global warming caused by the already high carbon levels. The suggested

⁴⁰ Earth Honoring Faith is a term borrowed from Larry Rasmussen. Rasmussen, *Earth-Honoring Faith*.

disciplines will include mitigation, adaptation, and reparation efforts that can be practiced at the household level.

Mitigation Practices

Most mitigation efforts are aimed at reducing the emission of warming agents, especially forms of carbon.⁴¹ The number of potential practices in this group could be quite large. I will limit suggestions here to those practices that reduce carbon emissions in three key categories: housing, transportation, and food. The overall scheme is to first engage in conservation of energy –using less – while also obtaining the energy consumed from low carbon producing sources.

The first step in mitigating carbon emissions within practitioners’ homes is to conduct a carbon footprint survey; this will allow practitioners to make informed decisions concerning practices. The first principle of mitigation for housing is conservation; practitioners should look for ways to use less energy. Heating and air conditioning are major users of energy in most homes, so reducing energy used for these purposes can be significant.⁴² In addition to using as little energy as possible, practitioners should consider the source of the electricity they consume. For some practitioners, it may be feasible to generate their own electricity by installing solar panels or wind turbines at their homes. Others may choose to switch to purchasing ‘green energy’ – electricity generated from renewable energy sources such as solar and wind.

In the realm of transportation, the mitigation of carbon emissions means the practitioners should establish habits of walking, biking, or riding public transportation when possible, and

⁴¹ The preserved January 2017 US EPA website was consulted for this section. U.S. Environmental Protection Agency (historical web page), “What You Can Do: At Home,” Overviews and Factsheets, accessed August 24, 2017, https://19january2017snapshot.epa.gov/climatechange/what-you-can-do-home_.html. For a general overview of practices, see also “Mercy2earth | Mercy2Earth - 30 ACTS,” *Mercy2earth*, accessed August 25, 2017, <http://www.mercy2earth.org/join>.

⁴² U.S. Department of Energy, *Energy Efficiency Trends in Residential and Commercial Buildings*, 2008, accessed August 20, 2017, https://www1.eere.energy.gov/buildings/publications/pdfs/corporate/bt_stateindustry.pdf.

generally minimize the frequency and length of trips taken by car. When purchasing a car, a low or zero emissions option – such as an electric plug-in, hybrid, or hydrogen vehicle – is to be preferred, keeping in mind that using electricity to charge plug-in cars is only sustainable if that electricity is generated from renewable sources.

The mitigation of warming agents from food supply chains involves looking at both how food is produced and how far it travels to reach consumers. Probably the most important food-related practice for the benefit of mitigating greenhouse gas emissions is to eat less meat. The Environmental Working Group’s report on meat and dairy found that “lamb, beef, cheese, pork and farmed salmon generate the most greenhouse gases.”⁴³ A compromise option is to have meatless days. This trend is popularly tied to Mondays for the alliterative effect, however Orthodox Christian fasting rules have historically designated Wednesdays and Fridays as not only meatless, but also fish, egg, and dairy free. The practice of giving up meat, even for one day a week, could have significant mitigation value. “If everyone in the U.S. ate no meat or cheese just one day a week, it would be like not driving 91 billion miles – or taking 7.6 million cars off the road.”⁴⁴

Another practice concerning food is to go local; this echoes suggestion made by Daly & Cobb. Practitioners may make use of a system of five ‘foodshed zones’ to prioritize food sources.⁴⁵ Foodshed zone 1 is the consumer’s own yard and garden, and should be the first priority as a food source and could include limited varieties of animals, such as chickens and rabbits. Substantial home food production, in the modern day equivalent of Victory Gardens, can both mitigate emissions and

⁴³ Environmental Working Group, *Meat Eater’s Guide to Climate Change + Health*, 2011, 4, accessed August 24, 2017, <http://www.ewg.org/meateatersguide/a-meat-eaters-guide-to-climate-change-health-what-you-eat-matters/>. The greenhouse gases under consideration include not only carbon based gases, but notably also methane, as many farm animals produce copious quantities of methane, which is particularly damaging to the climate.

⁴⁴ *Ibid.*, 12.

⁴⁵ Toby Hemenway, *The Permaculture City: Regenerative Design for Urban, Suburban, and Town Resilience* (White River Junction, Vermont: Chelsea Green Publishing, 2015), 108–121.

act as an adaptation strategy that hedges against interruptions in food production and rising food prices. McKibben emphasizes the benefits of gardening and notes, quoting a study, that the availability of land (yards) in residential areas, especially suburbs, means that home gardens can “realistically provide around 50 percent’ of the food they need, acting ‘as a localized buffer against disruptions, and providing a high percentage of vitamins, minerals, flavor, and culturally important foods.”⁴⁶ Similar gardens located outside of the practitioners’ yards represent Hemenway’s Foodshed zone 2; these are various community gardens located on nearby vacant lots, schoolyards, and church properties. Urban food foraging is also included in this zone.

As food production moves away from the practitioners’ own labor, we have the remaining three zones. Foodshed zone 3 comprises other local food sources such as farmer’s markets and community supported agriculture programs. Zone 4 contains grocery stores that are locally owned and that carry locally produced foods. Zone 5 sources are large regional grocery store chains. As practitioners move down the foodshed zones, there is an increased carbon footprint in both production and transportation of the foods. Not mentioned in Hemenway’s hierarchy is also the need to prioritize, within zones 4 and 5, regionally and nationally produced foods over those imported from further away.

This overview of mitigation practices concerning housing, transportation, and food is necessarily incomplete. Practitioners must discern their own rule of practices, which may include ideas not listed above.

Carbon Sequestration

⁴⁶ Jeff Vail, “A Resilient Suburbia” quoted in Bill McKibben, *Eaarth : Making a Life on a Tough New Planet*, 1st ed. (New York: Time Books, 2010), 178 See footnote 59.

Carbon sequestration is the process of trapping atmospheric carbon so that it no longer contributes to global warming; these traps are usually known as carbon sinks. The most common such entities are trees, forests, and soil; in the future, some new technologies may become available as additional options. Unfortunately, deforestation is currently reducing the quantity of active carbon sinks; practitioners may engage ethical shopping practices to avoid buying products that contribute to deforestation (such as some brands of palm oil) or to purchase products that particularly help reforestation efforts (such as shade grown coffee.) Christian practitioners may contribute to reforestation efforts by planting trees at home, at church, and by supporting local urban reforestation projects.

Adaptation

In the scientific literature, adaptation is mostly conceived of as a practice for communities – especially local governments; however individual practitioners may choose to become involved in such efforts, both in their own homes and in their communities. Practitioners can work to adapt their homes to better deal with the impacts of climate change by a variety of means. One example is planting trees to shade a home during the hot summer months (which would also support carbon sequestration efforts.) Other examples include specialized landscaping, gray water systems, and green roofs. Urban forests have proven to be beneficial in alleviating impacts of heat waves, which are predicted to increase due to climate change; practitioners should especially support efforts to plant trees in poor neighborhoods where residents have fewer resources for dealing with high temperature levels.⁴⁷

⁴⁷ For more on urban forestation efforts, see “Benefits of Urban Greening,” *Friends of the Urban Forest*, accessed August 24, 2017, <https://www.fuf.net/benefits-of-urban-greening/>. For examples of urban forestry being introduced into low income neighborhoods in Louisville and Cleveland, see Laura Bliss, “To Fight Urban Heat, Louisville Is Appealing to a Higher Power,” *CityLab*, accessed August 24, 2017, <http://www.citylab.com/cityfixer/2017/02/louisville-is-beating-the-heat-with-spirituality/515880/>; Lynn Freehill-Maye, “Cleveland’s Surprisingly Green Climate Buffers,” *CityLab*, accessed August 24, 2017, <http://www.citylab.com/cityfixer/2017/01/clevelands-surprising-climate-buffers/512441/>.

Reparations

In recent years there have been an increasingly loud demands that the richer nations of the world pay the poorer nations reparations for climate change impacts and risks.⁴⁸ Climate reparations, and the related notion of climate debt, rest on the polluter pays principle; this is to say, that those countries that contributed the most to global warming should pay damages to countries that are disproportionately suffering the ill effects of climate change. Reparations would be a government to government payout, if it were to ever happen, which is uncertain; estimates for climate reparations run into the hundreds of billions of dollars. Christian practitioners could take personal responsibility for their own undue contributions to climate change by financially supporting those in need. Practitioners could donate to directly support climate refugees through appropriate non-profit organizations, or they could purchase products from these populations – another example of “climate fair trade”. Practitioners can also look for opportunities to assist climate refugees arriving into their own communities, either through donations or volunteer service.

In addition to the human victims of climate change, there are also victims among the animals and plant species; the idea of reparations also applies to these populations. Affected species could benefit from the restoration of habitat or by other means to help them adjust to anthropogenic climate change. Practitioners could do some of this themselves by providing habitat on their own property or they could contribute to local efforts to preserve or restore significant wilderness areas for affected animal and plant populations.

This has only been a summary of possible practices that directly respond to climate change; as noted before, practitioners must discern their own rule of practices. Particular circumstances will

⁴⁸ For more on climate reparations and climate debt, see “Climate Reparations—A New Demand | National Association of Scholars,” accessed August 25, 2017, https://www.nas.org/articles/climate_reparationsa_new_demand; “Climate Change Reparations: What Does the US Owe?,” *MSNBC*, last modified December 2, 2015, accessed August 25, 2017, <http://www.msnbc.com/msnbc/climate-change-reparations-what-does-the-us-owe-1>; Cynthia D. Moe-Lobeda, “Climate Change as Climate Debt: Forging a Just Future,” *Journal of the Society of Christian Ethics* 36, no. 1 (Spring/Summer 2016): 27–50.

provide opportunities for one practitioner not available to another. Over time, new needs may arise. It is essential that practitioners keep themselves informed by reading reports such as regularly published by national and international entities.⁴⁹ They should also be engaged in their local communities. Practitioners who are well informed about climate change, and committed to a life of Christian domestic asceticism will find the practices that put all the pieces together for them. This allows the practitioners to move ahead with change in the personal lives while waiting for changes in other arenas such as business, government, and academia. Indeed, the experience of engaging in ascetical practices may be the catalyst for personal transformation, often in unexpected ways.

Conclusion, or more questions?

The work of John Cobb has spanned many decades and has often been groundbreaking. It is a great testimony to the quality of his scholarship that it can still inspire and challenge readers today. Yet, the work is dynamic enough to be brought into new conversations and situations. It presses the issues forward. My response here only scratches the surface. I look forward to our discussion.

⁴⁹ For example, National Academy of Sciences, *America's Climate Choices: Report in Brief* (Washington, D.C.: National Academy of Sciences, 2011); IPCC, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva, Switzerland: IPCC, 2014), accessed November 15, 2016, <http://ar5-syr.ipcc.ch/>; U.S. Environmental Protection Agency (historical web page), "What You Can Do about Climate Change," Overviews and Factsheets, last modified August 24, 2017, accessed August 24, 2017, https://19january2017snapshot.epa.gov/climatechange/what-you-can-do-about-climate-change_.html; U.S. National Climate Assessment, *Climate Change Impacts in the United States: Overview* (U.S. Global Change Research Program, 2014), accessed November 15, 2016, <http://nca2014.globalchange.gov/node/1954>; "Paris Agreement under the United Nations Framework Convention on Climate Change," 2015; World Bank et al., *Shock Waves : Managing the Impacts of Climate Change on Poverty. Overview.* (Washington, D.C.: World Bank, 2016).