

Galileo and Global Warming: Parallels between the Geocentrism Debate and Current Evangelical Skepticism about Anthropogenic Climate Change

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In the face of scientific evidence that the environment is in crisis, studies consistently reveal evangelicals' reluctance to address environmental issues. This tension between science and the church bears surprising resemblances to the Galileo affair of 1633, when the Roman Catholic Church forced Galileo to repudiate his Copernican teachings as heretical. Both conflicts stem from a perceived dearth of evidence, biblical literalism, and complex political factors. This article discusses these parallels between evangelicals' environmental skepticism and the church's condemnation of Galileo and explores what evangelicals can learn from the Galileo affair about how to avoid the mistakes of the past and care for the earth.

Greenhouse gas concentrations are rising.¹ The planet is warming.² The ocean is rising and acidifying.³ Pollution is marring the air we breathe and the water we drink.⁴ Species are going extinct.⁵ God's creation is in crisis.

For many evangelicals, the preceding statements would be classified as scientifically ungrounded alarmism, neo-pagan Earth worship, or simply liberal tree-hugger propaganda.⁶ Despite mounting scientific evidence that human activity is negatively impacting the planet, many evangelical Christians remain apathetic about environmental concerns and resistant to seriously engaging in creation care.⁷ In particular, the idea of anthropogenic, or human-caused, climate change continues to be ignored or invalidated by many evangelical Christians.⁸ Of course, evangelicals are a wide and varied group, so it would be unfair and inaccurate to imply that this trend applies

to every evangelical. We do not intend to discount influential voices such as Francis Schaeffer, Calvin DeWitt, Michael Northcott, and others who have taken strides to challenge the evangelical community to care for God's creation. In general, however, the research indicates that conservative evangelicals in the United States are less likely to accept the evidence for climate change or support environmental action.⁹

This is not the first time that the church has been reluctant to accept the implications of new scientific evidence—a look at

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history reveals significant parallels between modern American evangelicals' skepticism about anthropogenic climate change and the Roman Catholic Church's refusal to accept Galileo's claims that Earth revolved around the sun.¹⁰ Both in Galileo's time and today, much of the tension between the church and the new science was caused by three main factors: a perceived lack of scientific evidence, an insistence on biblical literalism, and complex political divisions. In the remainder of this article, we explore these three parallels and consider what the Galileo affair can teach the church about how it should be responding to climate change.

Telescopes and Thermometers: The Problem of Evidence

The first major parallel between the historical opposition to Galileo's Copernicanism and the current resistance to anthropogenic climate change is the combination of a perceived lack of reliable evidence and a denial of the evidence that exists. Galileo had a preponderance of evidence for the heliocentric, or sun-centered, Copernican model, but his evidence was not entirely incontrovertible.¹¹ To make matters more complicated, Tycho Brahe had proposed a third cosmology that retained an unmoving Earth in the center of the universe but allowed all the other planets to orbit the sun.¹² The Tychonic system was an ideal compromise because it was mathematically equivalent to the Copernican model; it allowed all the benefits of accurate prediction without the troublesome side effects of contradicting a literal interpretation of scripture or breaking with Aristotelian tradition.¹³ Galileo's telescopic observations of the phases of Venus effectively discredited the geocentric, or Earth-centered, Ptolemaic system, but could not distinguish between the Copernican and Tychonic models.¹⁴ In fact, the Copernican system was not conclusively established until the nineteenth century, when precise instrumentation finally allowed observation and measurement of a stellar parallax.¹⁵ In sum, while Galileo had enough evidence to make a strong case for heliocentrism, he could not verify Copernican cosmology beyond reasonable doubt.

The case for anthropogenic climate change lies in a somewhat similar position. There is a strong, even overwhelming, scientific consensus that human

activity is increasing greenhouse gas concentrations in the troposphere and driving climate change, but the evidence leaves at least some room for skepticism. One difficulty is that just as the Copernican model was not incredibly intuitive—it certainly does not feel as if Earth is hurtling through space to orbit the sun—climate change may not be immediately obvious to the casual observer. According to a 2014 study by Jones, Cox, and Navarro-Rivera, when climate change skeptics in the United States were asked why they did not believe in global climate change, 33% replied that it was still cold outside.¹⁶

Another obstacle to the acceptance of anthropogenic climate change comes from alternate theories of what is causing the observed rise in temperature. For example, in the same study, 12% of climate change skeptics cited conflicting or insufficient scientific evidence, 18% claimed that temperature varies naturally, and 4% advanced some alternate scientific explanation.¹⁷ These claims of natural explanations for warming trends are reminiscent of the compromise of the Tychonic model. Just as Tycho's theory accounted for telescopic observations without removing Earth from the center of the cosmos, the current attempts to naturally explain climate change acknowledge the observed warming trend without accepting that human activity is the underlying cause.¹⁸

Perhaps the most troublesome obstacle—and the biggest parallel to the Galileo case—is the extent to which nonscientific factors cause skeptics to ignore or downplay the evidence that is available. In Galileo's case, two of his more unreasonable opponents—natural philosophers Cremonini and Libri—refused even to look through the telescope because they claimed God did not intend for humans to have telescopic vision.¹⁹ While most modern denials of climate science are not so flagrant or absurd, it is fairly common for people's nonscientific beliefs to shape the way they view the scientific evidence for climate change. For example, Jones, Cox, and Navarro-Rivera found that 61% of Democrats thought that the majority of scientists believe in anthropogenic climate change, while only 34% of Republicans agreed.²⁰ Different groups of people theoretically have access to the same scientific information, but, as discussed in the remainder of this article, their preconceived notions about scriptural interpretation and politics can affect how they perceive the evidence of climate change.

People of the Book: Biblical Literalism

One of the most obvious parallels between the Galileo affair and the climate change debate is the connection to a literal view of scripture. On the surface, the Roman Catholic Church's resistance to Copernicanism was rooted in literal scriptural interpretation. Passages such as Joshua 10:12-13 and Psalm 96:10, when taken at face value, portray a stationary Earth and a moving sun. Thus, in 1616, several years before the Galileo affair, the Congregation of the Index issued a declaration condemning Copernican cosmology as "false and completely contrary to the Holy Scriptures."²¹ Copernicus's writings were suspended until corrected, and Galileo was forbidden to "hold, defend, or teach" heliocentrism.²² Galileo, however, continued to present evidence for Copernicanism and attempted to reinterpret scripture to remove the conflict between the Bible and the Copernican model.²³

Under normal circumstances, Galileo's attempts at hermeneutics may not have caused much of a stir, but in the aftermath of the Protestant Reformation, the Roman Catholic Church took a very conservative stance on biblical interpretation, prohibiting any reading that was "contrary to the unanimous agreement of the Fathers."²⁴ Thus, when Galileo dared to reinterpret scripture to fit his scientific observations, he was arrested on the charge of "vehement suspicion of heresy," forced to repudiate his heliocentric teachings, and sentenced to house arrest for the remainder of his life.²⁵ Clearly, a literal reading of scripture posed a major obstacle to Copernican cosmology.

Although (to the authors' knowledge) no church has officially declared belief in anthropogenic climate change to be heretical, some of evangelicals' resistance to accepting and acting on climate science appears to be linked to a literal reading of scripture. In 1989, Eckberg and Blocker conducted random phone interviews of adults in Tulsa, Oklahoma, and found that a more literal view of the Bible predicted lower concern for the environment, independent of any background variables or other measures of religious involvement.²⁶ Schwadel and Johnson's analysis of General Social Survey data from 1984 to 2012 indicated that a literal interpretation of the Bible was the most significant factor in evangelical Protestants' reluctance to support environmental spending.²⁷ Arbuckle and Konisky evaluated data

from the 2012 Cooperative Congressional Election Study and found that evangelical Protestants from denominations with a commitment to biblical literalism expressed lower levels of environmental concern.²⁸ Perhaps most tellingly, Kilburn's analysis of the 2008 American National Election Survey revealed that biblical literalism correlated with both lower environmental concern and skepticism over anthropogenic causes of climate change.²⁹ In sum, a literal view of scripture seems to incline evangelical Protestants to be less concerned about the environment, less likely to support spending on environmental initiatives, and more skeptical about anthropogenic climate change.

In the case of Galileo, it is easy to see how a literal reading of passages such as Joshua 10 influenced the church to condemn Copernicanism as heretical, but in the present environmental debate, the connection between biblical literalism and climate change skepticism is not quite as direct or obvious. Granted, it is possible to interpret scripture in a way that precludes climate change. For example, skeptics claiming to provide biblical perspective on the issue of climate change often cite Genesis 8:22 ("As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease") to support the claim that humans could not possibly upset the God-ordained rhythms of cold and heat.³⁰ Primarily, however, the connections between a literal view of scripture and a lack of environmental concern appear to flow from three main sectors: dominion theology, premillennial dispensationalist eschatology, and young-earth creationism.

Fill the Earth and Subdue It: Dominion Theology

Some of evangelicals' reluctance to care for the environment appears to flow from a theology of dominion. In the Genesis creation narrative, God creates humans to rule over all the living creatures, tells them to "fill the earth and subdue it," and grants them every seed-bearing plant for food.³¹ Advocates of creation care view this passage as a powerful call to environmental stewardship, arguing that we have a responsibility to care for and protect the gift of God's creation, but the dominion mandate has been interpreted in many ways throughout the centuries.³² Medieval interpretation of this passage "promotes an anthropocentric conception of nature, but it is a conception that takes a passive, interpretive view of the

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world, rather than one that actively seeks its material exploitation."³³ During the thirteenth century, "a new source of knowledge of the natural world arrived in the West," bringing an increased emphasis on "the intellectual mastery of knowledge of living things."³⁴ At that time, therefore, the purpose of creation care was "to serve spiritual and moral requirements" and not merely to promote utility.³⁵ Later, however, the introduction of innovative agricultural machinery in Europe "revolutionized the relationship between human beings and the land that they inhabited."³⁶ By the seventeenth century, the literal interpretation of "dominion over the earth" became "the exercise of control not in the mind but in the natural world."³⁷ Such literal interpretation of Genesis was further supported by the emerging Protestant work ethic, influenced by the Calvinist notions of election.³⁸ Hence, in recent centuries, this passage has too often been used to argue that humans have a nearly unlimited right to domination over the earth and its resources.

In 1967, Lynn White gave a landmark address entitled "The Historical Roots of Our Current Ecologic Crisis," in which he essentially blamed this theology of dominion for precipitating the current ecological crisis.³⁹ White claims that "Christianity is the most anthropocentric religion the world has seen," in other words, that Christianity puts humans at the center of the universe, making Christians believe that "nature has no reason for existence save to serve man."⁴⁰ This anthropocentric mindset, as White argues, permits Christians to feel "superior to nature, contemptuous of it, willing to use it for our slightest whim."⁴¹

In the years since 1967, many researchers have attempted to test White's hypothesis. When Taylor, Van Weiren, and Zaleha conducted a comprehensive literature review of studies on religion and environmentalism between 1967 and 2015, they found support for White's hypothesis through the early 1990s, mixed results in the late 1990s through the early 2000s, and some movement toward environmentalism in recent years.⁴² Other studies show a potential link between biblical literalism and the dominion theology that White criticized. In 2000, Schultz, Zelezny, and Dalrymple surveyed undergraduate social science students in North, Central, and South America and Spain, finding that a literal interpretation of scripture correlated with a more anthropocentric and less ecocentric stance on

environmental issues.⁴³ In other words, the biblical literalists in the study were somewhat concerned about the environment, but mainly because of potential effects on humans.

Meanwhile, Village's 2015 study of churchgoers in the United Kingdom revealed that those with a symbolic view of scripture tended to view nature as a sacrament and were accordingly more concerned about the environment, while those with a literal view of scripture tended to focus on humankind's dominion over the earth and were therefore less concerned about environmental issues.⁴⁴ Studies like these indicate that while White's claim that Christians are directly responsible for environmental degradation may be a bit overblown, there is some evidence that a literal view of the Bible can lead to an overemphasis on dominion and a lack of concern about the earth, and hence, the dismissal of anthropogenic climate change and its consequences.

It's All Gonna Burn Anyway: Premillennial Dispensational Eschatology

Another possible reason for the relationship between biblical literalism and apathy toward environmental issues, including climate change, is found in premillennial dispensationalist eschatology, or the belief that God will suddenly take believers to heaven before the dramatic destruction of the earth. This eschatology flows from a literal interpretation of apocalyptic scriptural passages and often leads to environmental apathy. Spence and Brown explain that a literal interpretation of apocalyptic scriptural passages such as 2 Peter 3:10–11, which predicts the destruction of the earth by fire, easily leads to "environmental fatalism" and a lack of concern for the environment.⁴⁵ According to Truesdale, if the earth is indeed under a "divinely imposed death sentence," it can be difficult to find a reason to care for the environment.⁴⁶ Bouma-Prediger summarizes, "If the earth will be 'burned up to nothing,' why care about it? Why care for something that will be destroyed?"⁴⁷

This connection in people's minds between eschatology and apathy about anthropogenic climate change is supported by empirical research. For example, Barker and Bearce's examination of the 2007 Cooperative Congressional Election Study found that belief in Christ's imminent second coming correlated with lower support for government action to fight climate change, even when controlling

for political party, frequency of church attendance, denomination, other measures of general biblical literalism, media distrust, and other demographic variables.⁴⁸ Barker and Bearce explained this result by positing that believers in a second coming cannot justify large short-term expenditures to avoid long-term catastrophe because they do not believe the earth will be around long enough for climate change to become a major issue.⁴⁹ It seems, then, that biblical literalism counteracts concern for climate change partly because of the literalist eschatological belief that the earth is too short-lived to be worth preserving.

In the Beginning: Creationism and Mistrust of Science

Perhaps the subtlest reason for the connection between a literal reading of scripture and a lack of concern over the environment comes in the form of creationism, especially young-earth creationism. Since many evangelicals take the Genesis creation account literally, they tend to distrust anything—including climate science—that smacks of evolution.⁵⁰ Take, for example, an article entitled “A Proposed Bible-Science Perspective on Global Warming” published in the journal of *Answers in Genesis*, a prominent young-earth creationist group. The author calls the idea of anthropogenic global warming “an offshoot of evolutionary thinking”⁵¹ and reminds his readers that “it must be kept in mind that global warming advocates are predominantly evolutionists.”⁵² In case Martin’s audience missed his point, he reiterates that “global warming is an arena where the battle between biblical truth and evolutionary untruths is currently raging,” firmly cementing the idea that climate change is some sort of unbiblical hoax by atheistic evolutionists.⁵³

While it would be a mischaracterization to imply that all evangelicals, all biblical literalists, or even all creationists would agree with the stance of this *Answers in Genesis* article, this article does not represent an isolated phenomenon. In fact, the correlation between creationism and climate change skepticism is fairly widespread. Using data from the 2007 Pew Research Center survey, Rosenau found a significant correlation between origin beliefs and support for environmental action—proponents of evolution supported stricter environmental legislation, while creationists opposed environmental action.⁵⁴ A third

basis for the correlation between biblical literalism and climate change skepticism, then, appears to be a mistrust of science, a lack of trust that flows from an insistence on creationism.

We the Evangelicals: Political Division

The third major parallel between the Galileo affair and the current environmental debate is the extent to which the scientific and scriptural debate is blurred by political division. While popular thought often portrays the Galileo affair as a straightforward conflict between science and the church, significant evidence suggests that Galileo’s arrest was highly influenced by the social and political climate of the time and had more to do with “political intrigue” than “doctrinal necessity.”⁵⁵ Galileo had unwittingly made enemies of several powerful Aristotelian natural philosophers who resented his new, observation-based methods of science, and some scholars believe that these natural philosophers played a crucial role in Galileo’s arrest.⁵⁶

Even disregarding personal feuds, the Galileo affair was strongly affected by the aftermath of the Protestant Reformation and the Thirty Years’ War. Galileo and Pope Urban VIII had been personal friends, and the Pope had even granted Galileo protection against a charge of atomistic heresy in 1624–1625, so it was completely unexpected and out of character for Pope Urban to suddenly abandon Galileo in 1633.⁵⁷ In the aftermath of the Catholic defeat at Breitenfeld in the Thirty Years’ War, however, the Pope’s pro-France leanings were coming under serious scrutiny, and Urban found himself in a precarious political position.⁵⁸ Pope Urban needed to save face and show that he was “a conservative and authoritative defender of the faith,” and the best way he could do this was to “make an example of someone.”⁵⁹ The fact that the trial was carried out with unprecedented publicity and threats of torture, whereas Galileo was in reality treated very leniently—to the point that an anonymous enemy complained to the Inquisition—supports the theory that Pope Urban was using Galileo as a “pawn in a political game” to keep his own tenuous position secure.⁶⁰ In light of this evidence, it is clear that the Galileo affair was not a simple conflict between science and the church but rather a thorny imbroglio fraught with political intrigue.

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Just like the Galileo affair, the current issue of climate change skepticism cannot be reduced to a simple conflict between science and a literal reading of the Bible. Studies consistently show that political affiliation is a significant and sometimes decisive factor in attitudes toward the environment. Schwadel and Johnson's examination of the General Social Survey from 1984 to 2012 revealed that environmental concern is becoming an increasingly political issue.⁶¹ A 2014 study by Kilburn showed that environmental concern in the United States is now highly politicized, with a majority of Republicans tending to believe that climate change is not caused by humans and is not a cause for concern, and a majority of Democrats tending to believe the opposite.⁶² Similarly, Arbuckle and Konisky's analysis of 2010 Cooperative Congressional Election Study data showed that political affiliation, not theology nor religious practices, was the most significant direct predictor of attitudes toward the environment.⁶³

This increasing political polarization partly explains why evangelicals hesitate to take action to address anthropogenic climate change. At the risk of oversimplifying, in general, evangelicals in the United States tend to identify as political conservatives, and political conservatives do not generally support environmental initiatives. Accordingly, many evangelicals in the United States "view environmentalism as a liberal issue, at best, and anti-Christian at worst" and therefore shy away from environmentalism because they do not want to get drawn into political liberalism.⁶⁴ In their analysis of data from the 1993 General Social Survey, Sherkat and Ellison found that respondents with a commitment to biblical literalism believed in a responsibility to steward the earth, but since they also tended to identify as political conservatives, they expressed lower levels of concern for the environment.⁶⁵ In other words, even though Christians with a literal view of scripture might have been inclined to steward God's creation, they followed the example of their fellow political conservatives and shied away from environmental issues. Greeley, observing this type of phenomenon, goes so far as to say that this connection between biblical literalism and political conservatism explains why biblical literalists tend not to be concerned about the environment.⁶⁶ In addition, conservatives in general tend not to support governmental intervention. Since many proposed solutions regarding climate change may involve national and international governmen-

tal regulations, people therefore have an ideological reason to discredit the science behind climate change due to motivated disbelief.⁶⁷

However, this has not always been the case. Danielsen traces the politicization of environmental concern within the church by analyzing articles that address environmental issues from three Christian periodicals—*Sojourners*, *Christianity Today*, and *World*—from 1984 to 2010.⁶⁸ Danielsen discovered that the three magazines began to diverge in 1995–2004 when the Christian right began to view environmentalism as a "liberal" issue.⁶⁹ By the years between 2004 and 2010, the three magazines were completely polarized, with *Sojourners* and *Christianity Today* calling for concrete political action to fight climate change, and *World* rejecting the evidence for climate change and calling for Christians to refocus on other moral issues such as human sexuality and abortion.⁷⁰ Just as in the Galileo affair, the political issues of today serve to complicate the relationship between the church and science.

Lessons from the Past: A Call to Action

So far, we have discussed several parallels between the Roman Catholic Church's resistance to Copernicanism and many American evangelicals' reluctance to accept climate change science. In both cases, the scientific evidence is compelling but not incontrovertible, much of the church's resistance appears to be rooted in biblical literalism, and the issues are highly politicized. However, a critical aspect in which the two situations differ is the need for action. Copernicanism makes no practical or ethical demands of us—for all intents and purposes, it makes no difference in day-to-day life whether Earth orbits the sun or the other way around. If, however, anthropogenic climate change is an urgent, global issue, then we must take action. As one scholar said when comparing the Galileo affair and the current resistance to accepting the evidence for climate change, we cannot afford to wait another two hundred years for a paradigm shift—we must take action now.⁷¹ In the remainder of this article, we will discuss practical steps evangelicals can glean from the Galileo affair in order to overcome barriers that deter evangelicals from caring for the environment.

*Just the Facts:
Promoting Enquiry and Conversation*

The first lesson evangelicals can learn from Galileo's story is the importance of objectively considering the evidence rather than behaving like the two men who refused to look through Galileo's telescope. Accordingly, one of the first steps in winning skeptical evangelicals over to creation care is simply presenting the scientific evidence regarding climate change, and fostering a spirit of open enquiry. At present, discussions of the environment are notably absent from many churches: a 2008 study found that 64% of churchgoers had never heard a sermon on environmental stewardship.⁷² This is understandable, given the common view that environmental discourse is, at best, a distraction from more familiar American evangelical concerns such as sexual morality and the integrity of marriage, and, at worst, a false religion that Christians should avoid at all costs.⁷³ Yet some voices in the church cogently communicate the urgency of the need for environmental stewardship. Pope Francis's 2015 encyclical, *Laudato Si*, reiterated the importance of "respect for life" and the need for "faithful stewardship."⁷⁴ Similarly, the late British evangelical leader John Stott called climate change the most serious global threat facing our planet.⁷⁵ Evangelicals Katharine Hayhoe, Steven Bouma-Prediger, and organizations such as Young Evangelicals for Climate Action are making a significant impact by communicating with and mobilizing others to understand the imminent danger of anthropogenic climate change.⁷⁶

It is clear that churches have a unique opportunity to foster discussion about how to care for God's earth. Christian higher education, too, provides a natural venue for conversations about creation care. It is important that science courses discuss the chemistry of rising CO₂ levels and the complexities of ecology, that business courses study the economics of climate change, that political science courses brainstorm practical policy measures to reduce CO₂ emissions and pollution in ways that minimize unintended consequences, and that theology courses explore what the Bible says about caring for God's creation. Much progress has already been made in these areas. For instance, Hope College is a pioneer in creation care, implementing sustainable practices campus-wide through course offerings, faculty research, undergraduate internship opportunities, student-led efforts, food services, and office supplies.⁷⁷ These

practices are influencing sustainability initiatives in the college's local community in Holland, Michigan. Similarly, Central College is "a leader in environmental stewardship in Iowa."⁷⁸ The first to receive Leadership in Energy and Environmental Design (LEED) rating in Iowa, Central utilizes green energy practices, provides food and education for the community through its campus garden, and requires every student to take a course in global sustainability.⁷⁹ In California, Santa Clara University created a culture of sustainability with the commitment of the entire campus community.⁸⁰ As churches and colleges expand opportunities for investigation and dialogue surrounding environmental care, these actions will go a long way toward healing the historical rift between many American evangelicals and the environment.

*Hermeneutic of Charity:
Practicing Intellectual Hospitality in
Scriptural Interpretation*

Another significant lesson evangelicals can learn from the Galileo affair is the importance of careful scriptural interpretation. According to Galileo, when his opponents dogmatically insisted on their own particular reading of scripture even when it contradicted science, they inevitably undermined the authority of God's word.⁸¹ For this reason, Galileo strongly cautions against entangling scientific debates with scriptural controversies. Does Galileo's advice mean that Christians should keep scripture and science completely separate, or that the Bible has no bearing on scientific issues? Of course not. When Galileo famously quoted Cardinal Baronio's sentiment that the intent of scripture is "to teach us how one goes to heaven, not how the heaven goes," he was not barring the Bible from scientific discourse, but rather issuing a call to remember that the true purpose of scripture is not to give detailed scientific information, but to draw people to God.⁸²

When Galileo reminded his readers to focus on the main message of God's word rather than getting embroiled in arguments over scientific details, he drew on Saint Augustine's concept of the hermeneutic of charity. Augustine believed that the "twin commandments of charity"—that is, love of God and love of neighbor—ought to be the guiding principles of scriptural interpretation.⁸³ Because of this hermeneutic of charity, Augustine argued that we should love and respect those who disagree with our

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interpretations. In his words, “if we engage in hurtful strife as we attempt to expound [Moses’s] words, we offend the very charity for the sake of which he said all those things.”⁸⁴ In other words, if debates over the meaning of scripture degenerate into dissension and conflict, they miss the entire point of scripture—that is, love of God and love of neighbor.

What would Galileo’s caution in scriptural interpretation and Augustine’s hermeneutic of charity look like when applied to the current evangelical debate over the validity of anthropogenic climate change? First, it would mean American evangelicals having the humility to admit that some readings of passages such as the dominion mandate in Genesis 1 or the eschatological vision in 2 Peter 3 may be flawed or in need of additional nuance. As Steven Bouma-Prediger’s book *For the Beauty of the Earth* points out, it is possible to read these texts in a way that supports an ethic of care for God’s earth. If the conservative, American evangelical community is willing to consider alternate interpretations of such passages, they may find that biblical literalism does not preclude creation care.

Second, a hermeneutic of charity would invite evangelicals to be willing to overlook differences with those who interpret texts such as the creation account in Genesis nonliterally. This may not mean rejecting a literal reading of the Genesis narrative, but it would require abandoning the harsh, divisive rhetoric that views with suspicion anything remotely related to evolution. This would entail letting go of some of the deeply held mistrust of science for long enough to objectively consider the evidence for climate change, and it would also involve overcoming disagreements with non-evangelical Christians and even people of other faiths to partner with them in regard to care for God’s creation.

Out of Many, One: Crossing the Aisle to Care for the Planet

This discussion of overcoming differences leads naturally to the topic of political division. If the role of the Thirty Years’ War in the Galileo affair teaches us anything, it is the danger of allowing our political affiliation to cloud our scientific and theological judgment. Yet many conservative evangelicals in the United States shy away from creation care not because they have solid scientific evidence against

climate change or because they think environmental care is contrary to scripture, but simply because they view the environment as one of the “liberal” issues, among other matters such as governmental intervention and international treaties. If evangelicals are to rise to the task of caring for God’s good earth, they will need to transcend party lines and become willing to partner with those across the aisle to care for our common home. This does not mean that evangelicals must switch parties any more than treating Galileo fairly would have required the Pope to become a Protestant, but it does mean that evangelicals ought to consider environmental initiatives on their own merit, regardless of whether they were proposed by Republicans or by Democrats. If evangelicals can free environmental concern from its association with one end of the political spectrum and be nonpartisan, they will go a long way toward caring for God’s earth and for those who are most vulnerable to the consequences of global climate change.

Concluding Thoughts: A Theocentric Approach to Creation Care

A glance at church history reveals many parallels between the Roman Catholic Church’s resistance to Galileo’s Copernican cosmology and many modern American evangelicals’ reluctance to engage with anthropogenic climate change. In both cases, the tension between the church and science stems from a perceived lack of evidence, a literal view of scripture, and complex political division. The Galileo affair shows that evangelicals who are not supportive of climate change should thoughtfully promote inquiry regarding the scientific evidence, interpret scripture with a hermeneutic of charity, and transcend political divisions in order to avoid the mistakes of the past. Meaningful and effective solutions to global climate change may remain elusive until the church unites to care for God’s creation.

One final word remains to be said about the connection between Galileo and the present climate change debate, and that concerns the proper place of humanity in the universe. Prior to the Copernican Revolution, Earth was thought to be the center of the cosmos, with the sun, moon, and heavenly bodies orbiting our globe. Thus, there is a common misconception that when Copernicus and Galileo proposed that Earth orbits the sun, they dethroned humanity

from the place of honor in the center of the cosmos. In other words, modernity thinks that the shift away from the Ptolemaic model demoted Earth to one insignificant planet among many.

A deeper look at the Medieval understanding of the geocentric cosmos, however, reveals that nothing could be further from the truth. In the Medieval mindset, the center of the universe was not a place of honor, but something akin to a cosmic dump. Everything beyond the moon's orbit was part of the Heavens—shining, light, and unchanging.⁸⁵ Earth, however, was dark, heavy, and subject to corruption, forever excluded from the heavenly spheres.⁸⁶ In Dante's *Divine Comedy*, the exact center of the universe—the ninth circle of the Inferno—was reserved for Satan himself and the vilest of traitors.⁸⁷ Clearly, in the Medieval understanding, the center of the cosmos was no place of honor.

Thus, when Copernicus and Galileo showed that Earth orbits the sun, they were not removing humanity from the throne of the universe, but rather elevating Earth to the status of one of the heavenly bodies.⁸⁸ Yes, we were one planet among many, but we were finally granted a place among the stars. When the Copernican revolution put Earth in its proper place, it was not a demotion, but a promotion.

The Galileo affair has much to teach us about who or what is the metaphorical center of the universe today. Terms such as anthropocentrism (human concerns have priority over other forms of life), biocentrism (all of life is at the center), ecocentrism (the interconnected ecosystem takes precedence), and a multitude of other “-centrism” abound in climate change debates, indicating that one of the primary questions of creation care is who occupies the center of the universe. As discussed earlier, an anthropocentric approach is potentially problematic, because it tends to interpret humanity's God-given dominion as a right to domination and overlooks the fact that humans are fellow creatures with all of creation.⁸⁹ Anthropocentrism puts humans at the center of the universe, essentially usurping God's throne. A biocentric or ecocentric approach, on the other hand, tends to be a nonstarter for many evangelicals in the United States, because it too often places human life on the same level as animal and plant life and forgets that humans occupy a special place in creation as God's image bearers.⁹⁰ In the eyes of many evangeli-

als, ecocentrism and biocentrism put nature itself at the center, dethroning both humanity and God. Perhaps, to address the misconception that caring for the environment is a liberal or pantheistic notion, a theocentric approach—putting God in the center—is necessary as the ultimate motivation for creation care.

Among evangelicals, there appears to be significant concern that if we abandon an anthropocentric stance on the environment, we humans will lose our central place of honor in the community of life and become just one organism among many. But could it be that just as in the Copernican Revolution, a shift away from humanity being the center of the cosmos is not a demotion but a promotion? Could it be that putting God at the center, making God the sun around which our debates orbit, would make everything else fall into its proper place?

As many of the frontrunners of the creation care movement have proclaimed, evangelicals must pursue a theocentric approach to creation care, an approach that puts God—not humans or animals or ecosystems—at the center of our environmental discourse. This shift away from narrowly focused anthropocentrism is actually a promotion to humans' intended place as God's cocreators. As cocreators, humanity is called to cultivate a flourishing future for this earth.⁹¹ The Apostle Paul describes in Romans 8:9–22 that all creation groans as it waits for God's children to rise to their ultimate calling to participate in the redemption of the created world.⁹² As cocreators, humans are intended to partake in the redemptive work of God—first, as creatures who stand in need of redemption, and then, as coredeemers who share the conviction and ability to modify, domesticate, and reshape the environment.⁹³ Such a holistic approach harmonizes interactions of life forms—humans, animals, and plants—into a thriving community of life.⁹⁴ But most importantly, it recalls that the true reason Christians should care for creation is out of love for God and neighbor. As Francis Schaeffer, one of the pioneers of the creation care movement, so beautifully wrote, “Loving the Lover who has made it, I have respect for the thing He has made.”⁹⁵ Nearly four centuries after the Galileo affair, will evangelicals who dismiss anthropogenic climate change heed the lessons of the past, transcend their divisions, and put God in the center in order to care for creation?

Acknowledgments

The authors would like to thank Professor John Hedley Brooke for his help in the revision process, Dr. Bethany Sollereeder for her invaluable assistance in finding resources on Galileo, and Jaclyn Warwick, Isaac Aday, and Julianne Johnson for their insightful feedback in the preparation of this manuscript.

This research is sponsored by a grant given by *Bridging the Two Cultures of Science and the Humanities II*, a project run by Scholarship and Christianity in Oxford, the UK subsidiary of the Council for Christian Colleges and Universities, with funding by Templeton Religion Trust and The Blankemeyer Foundation. ∞

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Do we have any energy source that is available 24 hours every day, releases no CO₂ into the atmosphere, and does not kill birds? Yes, nuclear fission. Then why do Sweden and France rely on it, but Germany is trying to phase it out to zero? Can we justify burying nuclear waste for thousands of years? Are there security risks? Will fusion ever be less than a few decades away? What insights might Christian perspectives bring to the table?

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Readers are encouraged to take up one of the insights or questions, or maybe a related one that was not mentioned, and draft an article (typically about 5,000–8,000 words) that contributes to the conversation. These can be sent to Dr. Kaita at kaita9094@gmail.com. He will send the best essays on to peer review and then we will select from those for publication in a theme issue of *Perspectives on Science and Christian Faith*.

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