

Reading Scripture with a Scientifically Informed Hermeneutic

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I. Introduction

When I consider the topic of this year's Institute, I notice areas where various sciences could guide our Wesleyan response. However, Christianity has had a contentious relationship with scientific knowledge where it has challenged the knowledge in the biblical text.

Following the Church's disputes with Galileo (early 17th century), one would think that the Church would have come to terms with the idea that the scientific ideas in the Bible could be challenged by further scientific investigation, but that was not the case. The archaeological discoveries in the 19th century led to further debates about the "accuracy" of Scripture as did the continuing development of scientific knowledge, such as Charles Darwin and development of the ideas of natural selection and evolution. On one side of this debate orthodoxy becomes the test of scientific merit. My focus is on the other side of the debate. If we accept modern scientific knowledge, how do we engage both it and the biblical text? If we are to "bring glad tidings of salvation in an age of crisis," I believe we *have* to do this work because younger people, who are especially concerned with climate issues, will demand it of us. In addition, in my experience many people also reject belief in a literal reading of the Bible. They are willing to engage Scripture deeply, but not if they must believe it literally.

My college degree is in Physics with a specialization in Earth Sciences. While I was raised in the UMC, I inhabited the world of science long before I wandered into the world of biblical studies. My experience as a scientist is part of what I bring to this conversation. I believe it could be "glad tidings" to know that "reason" is welcome in interpreting the Bible. That has certainly been my experience.

It is no secret that the Bible partakes of the knowledge of antiquity, much of which is outdated and irrelevant today. I would tell students that just as warfare and patriarchy are givens in the biblical world, so also is the ancient view of how the world worked. We have to accept that sometimes the Bible is a very, very old book, at least when it comes to what we understand to be scientific knowledge, and go from there to consider how to engage the text. I want to explore three areas as examples of where I find the literal reading of the text to be problematic from a scientific standpoint: Those are the 3-tiered universe, the new creation, and “acts of God” (natural phenomenon) as expressed in Wisdom of Solomon. There are obviously other areas as well. I will mention a few more at the end.

II. Three-Tiered Universe

Everyone in antiquity believed in a 3-tiered world, based upon what they could observe. There is heaven/sky above, where God is presumed to dwell, the earth beneath the sky, inhabited by humans and other creatures, which is held up by pillars/foundations (e.g., Job 38:4; Pss 18:15; 102:25; 104:5; Isa 48:13; Jer 31:37). It is easy to observe what is above us and the surface where we reside. Although unable to peer beneath the earth’s surface, something must have been holding up the land. While details vary across cultures, such as the land being supported on the back of a turtle instead of pillars, the three levels are consistent.

One would think that we dispensed with this view in the 17th century. Yet we center it every time we pray the Lord’s prayer, “Our Father, *who art in heaven.*” We also see this implicitly acknowledged every time an athlete looks up and points to the sky, presumably to thank God for their accomplishment. Due to the imaginations of apocalyptic writers, Dante, and Milton, Christianity developed a larger understanding of heaven and transformed the area under the earth

into hell.¹ With the invention of the telescope, the advent of space flight (which allows us to put telescopes beyond the distortions of earth's atmosphere), and knowledge of the ways energy is transmitted through different substances, from a science perspective a 3-tiered universe makes no sense. Astronomers estimate there are between 100 and 200 *billion* galaxies in the universe. Below is a relatively well-known image from the Hubble Telescope of a very tiny area of space that is estimated to contain thousands of galaxies.²



If God is in Heaven, exactly where is that? Just where is “heaven”? Have the Hubble or James Webb telescopes discovered such a place? What does it mean to pray to a Sky God?

The idea of hell as a fiery, hot place is probably derived from observation of volcanic activity. Unlike space where we can observe objects thousands of light years away, peering into the interior of the earth 1,000 miles down, is much more challenging. It took the ability to measure seismic waves and how they move through different substances to gain more knowledge. Magma,

¹ I will not consider what science does or does not say about life after death, though that is also an area for discussion.

² <https://www.space.com/25303-how-many-galaxies-are-in-the-universe.html>

the molten rock that erupts from volcanoes, originates in the earth's upper mantle. A new study suggests there is a solid iron core (about 400 miles across), surrounded by a solid outer shell of iron-nickel.³ Click [here](#) for images of a cross section of the earth. Neither the upper mantle nor the earth's core are places of torment for ungodly souls.

A concurrent issue to the idea of God in the Sky is that it anthropomorphizes God. God is a (male) person, depicted in the Bible as sitting on a throne up above (Pss 11:4; 103:19; Isa 6:1; 66:1; Matt 5:34; 23:22; Acts 7:49; Rev 7:10). I had many students who did not conceive of God as a separate being apart from themselves.⁴ Maybe because they were raised on Star Wars movies, many of my younger students did not envision God as a “person,” but more like The Force. “It’s an energy field created by all living things. It surrounds us and penetrates us; it binds the galaxy together.”⁵ Star Wars fans are more likely to say, “May the Force be with you,” rather than, “May the Lord be with you.”

Panentheism is a theological move away from the idea of God up in heaven. The term is an invention of the last two centuries but can be applied to views prior to that time. It is a complex theology developed by a wide variety of theologians.⁶ Diana Butler Bass uses this illustration to define panentheism, “God is not a tree; a tree is not God. But God is with the tree; and the tree is with God.”⁷ Sallie McFague’s definition is, “Everything that is, is in God and God is in all things and yet God is not identical to the universe, for the universe is dependent on God in a way that God is

³ https://www.cnn.com/2023/02/21/world/earths-core-iron-metallic-core-scn?cid=ios_app

⁴ In Sermon 64, “The New Creation” (see III. below), ¶5, Wesley writes about the third heaven, “which is usually supposed to be the more immediate residence of God; *so far as any residence can be ascribed to his omnipresent Spirit, who pervades and fills the whole universe.* (emphasis mine) It is here (if we speak after the manner of men [sic]) that the Lord sitteth upon his throne.”

⁵ Obi-Wan Kenobi explaining the Force to Luke Skywalker in *Star Wars: A New Hope* (1977).

⁶ A good overview of panentheism and its central themes is Michael W. Brierley, “Naming a Quiet Revolution: The Panentheistic Turn in Modern Theology,” in Philip Clayton and Arthur Peacocke, eds., *In Whom We Live and Have Our Being: Panentheistic Reflections on God’s Presence in a Scientific World* (Grand Rapids, MI: Wm. B. Eerdmans, 2004), 1-15.

⁷ Diana Butler Bass, *Grounded: Finding God in the World—A Spiritual Revolution* (New York, NY: HarperOne, 2015), 39.

not dependent on the universe.”⁸ Bass and McFague disagree as to whether the preposition should be “with” or “in.” Panentheism, like feminist theology, emphasizes interrelationship and interdependence between God and all parts of the cosmos. A panentheistic wording of the Lord’s Prayer Lord’s might be, “Our God,⁹ who exists in all places and is with us in every moment.”

Panentheism is not entirely antithetical to the Bible. Texts that lean in this direction include Ps 139:7-16; Sir 24:3-6; Wisdom 1:7; 7:24, 27; Col 1:16-17, and there may be others. Nor is it entirely antithetical to John Wesley, who was a keen observer of nature.¹⁰ He believed that Christians were called to “see the Creator in the glass of every creature” and to “use and look upon nothing as separate from God.”¹¹ Because Wesley believed this, Theodore Runyon writes that we can say, “When we deal with the earth and its resources, and when we deal with our fellow creatures, we are dealing with God.”¹²

A possible Wesleyan wording of the Lord’s Prayer might be, “God the Light that enlightens everyone who comes into the world...” Or we might take to heart the last line of “O For a Thousand Tongues to Sing” and “own that love is heaven.”¹³ “Our Mother and Father who is made known to us in Love...”

III. The New Creation

The second topic I want to explore biblical views of a “new heaven and a new earth” (Isa 65:17; 2 Pet 3:13; Rev 21:1). There are numerous biblical texts that long for a transformed world (Isa 11:6-9; 61:1-4; 65:17-25; Ezek 47:1-12; Rev 21:9-27) and transformed humanity (Isa 2:2-4; Jer 31:31-

⁸ Sallie McFague, *The Body of God: An Ecological Theology* (Minneapolis, MN: Fortress Press, 1993), 149-150.

⁹ Father language for God is a separate discussion.

¹⁰ It may be the case that a new age requires a new theology, whether it can be traced to the Bible or to Wesley.

¹¹ Sermon 23, “Upon Our Lord’s Sermon on the Mount III.” (§11) <https://wesley.nnu.edu/john-wesley/the-sermons-of-john-wesley-1872-edition/sermon-23-upon-our-lords-sermon-on-the-mount-discourse-three/>

¹² Theodore Runyon, *The New Creation: John Wesley’s Theology Today* (Nashville, TN: Abingdon Press, 1998), 207.

¹³ The hymn is excerpted from Charles Wesley’s poem, “Glory to God, and Praise and Love” (1739). The phrase “and own that love is heaven” is also the last line of the poem.

34; Ezek 36:25-27; 2 Cor 5:15-16; Eph 2:13-16; 4:22-24; Col 3:8-11). From a scientific perspective, the question is how much transformation is possible?

New Creation was of interest to John Wesley. His sermon, “The New Creation,” specifically imagines what this new creation would look like.¹⁴ Wesley wrote this in 1782, nine years before his death. James F. Pedlar considers this sermon to be a part of Wesley’s “mature vision of a new creation.”¹⁵

Pedlar (p. 55) describes Wesley’s concrete description of the new as “fanciful and idiosyncratic.” It is that. I confess I giggle my way through the sermon. From a scientific perspective we might have to invoke multi-verses or alternate universes, because what he describes can’t possibly exist in this universe. Here is some of what Wesley envisioned.

- There will be no blazing stars (meteors), comets, or eccentric orbits because in the new heaven “all will be exact order and harmony.” (§8)
- In the region of air there will be no hurricanes, furious storms, or destructive tempests. The air will be light, fair, and serene. (§9) Throughout, Wesley makes the new earth sound like a lovely spring day in the English countryside.
- The elements will change as to their quality, not their nature. Fire will destroy no more (after first destroying the lower levels of heaven and the earth. (§6, 7). It will retain its vivifying power but divested of its power to burn. (§10)
- There will be no more rain (referencing Gen 2:5-6). There will be no more clouds or fogs, but one bright, refulgent day. Much less any poisonous damps or pestilential

¹⁴ Sermon 64 *. You can read it online [here](https://wesley.nnu.edu/john-wesley/the-sermons-of-john-wesley-1872-edition/sermon-64-the-new-creation/): <https://wesley.nnu.edu/john-wesley/the-sermons-of-john-wesley-1872-edition/sermon-64-the-new-creation/>

¹⁵ James E. Pedlar, “His Mercy is Over All his Works;’ John Wesley’s Mature Vision of New Creation,” *Canadian Theological Review* 2 (2013): 45-56.

blasts. No Sirocco in Italy; no parching or suffocating winds in Arabia; no keen north-east wind in England. Only pleasing, healthful breezes. (§11)

- Water will be clear and limpid in every part of the world. As in Paradise, there will be various rivers gently gliding along, for the use and pleasure of both [humans] and beasts. Referencing Gen 1:9, the sea will return to its primitive bounds and appear on the surface of the earth no more. There is no more need for the sea. (No beaches!! Does this also mean no seafood?) Every part of the earth will produce whatever its inhabitants want. And my favorite part – because humans will now be equal to angels, we can simply teleport ourselves to any part of the planet! (§12)
- There will be no more extreme temperatures (hot or cold), but it will be just right. (§14)
- There will be no more earthquakes or volcanoes, no deserts, no mountains, no bogs. Gently rolling hills and dales are not blemishes, but beauties. (§15)
- There will be no thorns, briars, bristles, weeds, nor any poisonous, hurtful, or unpleasant plant. Every plant will be conducive either to our use or pleasure. The earth shall be a more beautiful paradise than Adam ever saw. (§16)
- The transformation of animate nature will be even more amazing than the transformation of inanimate nature. The necessity that some animals must eat (cause pain) to other animals in order to survive will be eliminated. (Thus, no food chain and no nature “red in tooth and claw.”) No creature will kill, hurt, or give pain to any other. Creatures will lose their ability to inflict pain—snakes have no venom, lions have no claws, etc. Nor will they have any instinctual inclination to do so. Here Wesley draws from Isaian images of the peaceable kingdom (Isa 11:6-9; 65:25). (§17)

- The most glorious change will be in humanity. We will attain a state of holiness and happiness. There will be no death, sorrow, pain, sickness, etc. And, of course, no more sin! Rather a deep and uninterrupted union with God. (§18)

Wesley's vision of the new creation is an aspect of his theodicy. The pain and suffering of animate creation and the "natural evils" of inanimate creation (such as earthquakes and hurricanes/typhoons/cyclones) are a consequence of "The Fall," and not a part of God's *original design* (my emphasis) for creation.¹⁶ Thus, the "remedy of salvation is sufficient to not only cure all these evils but to restore creation to a *greater* (emphasis original) state than originally intended."¹⁷ Whether it is earthquakes, the food chain, death, or human misbehavior, Wesley viewed them as bugs to be fixed rather than as a feature of the system of creation.

This is where science departs from Wesley's, and the Bible's, view. Wesley wrote prior to theories of evolution¹⁸ or plate tectonics. We now know that earthquakes arise from movement along faults within the earth. They release of pressure (energy) that builds up from the movement of the earth's tectonic plates. We now know that hurricanes/typhoons/cyclones are a mechanism that moves heat around the oceans, to balance an overabundance of heat in tropical regions and a deficit at higher latitudes.

Evolution explains why venom, claws, and incisor teeth evolved. Biotic life, from a blue whale to one-celled algae, all need food (energy) to survive. The food chain explains how this occurs throughout ecosystems. The point is that how the world works is not the result of sin but is actually the "original design" for creation.

¹⁶ Genesis 2 is Wesley's blueprint for his understanding of God's "original design for creation."

¹⁷ Pedlar, 53.

¹⁸ Erasmus Darwin, grandfather of Charles Darwin, published his first thoughts on an understanding of biological and geological laws, which denied the operation of supernatural forces in these areas, in 1789 and 1791, at the end of Wesley's life.

I would say that this is also true of human behavior both good and ill. In terms of evolutionary biology, exactly when was there a lone male and female who lived in harmony with God until they went astray and broke that harmony? The Neanderthals? The impulses to tend and care for one another and to do harm to one another are also innate in hominid species.

While it may be comforting to imagine a world without death, such a world would not be *this* world because it would be a world that never changes. The universe operates on change in the form of creation and destruction: stars are born and die, new species emerge, and others go extinct.

This is not to say that there are no lessons we can draw from Gen 2-3 about the nature of creation and humanity. But viewing Gen 2 as God's "original intent" for creation that was broken in Gen 3 such that it needs to be fixed or restored to its original condition (or new and improved version) is not one of them. Earth's original condition was not conducive to bipedalism for the better part of 4.5 billion years!¹⁹

Perhaps none of us envision the new creation in the way that Wesley or the Bible did. So how do we conceive of it? I don't think the solution is to *stop* trying to envision a world other than and better than the world as it currently exists. Science fiction and fantasy writers do this all the time. How might we do this? A first step is to acknowledge that what is often envisioned as the new creation is scientifically implausible, if not impossible. Then we can begin to imagine a new creation that adheres to the laws of nature, even if the amount of transformation may be limited. For example, I ponder whether we may not rid ourselves of our harmful impulses until a new species evolves beyond *homo sapiens*. When I think of Romans 8:19-24, I don't imagine that creation's longing for freedom is about being rid of poisonous invertebrates, predatory vertebrates, bacteria, viruses, earthquakes, or hurricanes. Rather, I imagine creation longing for freedom from human extraction, pollution, and destruction of species. Feminist ecotheologians insist that we start from a

¹⁹ The earth is estimated to be 4.543 *billion* years old and primitive bipedal creatures emerged 6-7 *million* years ago.

place of acknowledging the interconnectedness of *all life*. Humans cannot put themselves above and apart from the rest of creation. *The Book of Discipline* of The United Methodist Church says its mission is “To make disciples of Jesus Christ for the *transformation* of the world” (my emphasis). I think there are numerous ways to consider how we might transform the world in ways that bring about God’s hope for wholeness.

IV. Creation and Justice in Wisdom of Solomon

Finally, I want to consider the view of creation in Wisdom of Solomon 11:4-20; 16:1-19.²⁰ These chapters are a midrashic set of comparisons between Israel’s experience in the wilderness and Egypt’s experience of the plagues. The Hebrews and the Egyptians are stand-ins for the author’s audience (Ioudaioi in Alexandria, Egypt in the first century B.C.E.) and the Ptolemaic rulers of Egypt, respectively.²¹ The argument of these comparisons is that creation itself participates in divine justice by rewarding the righteous and punishing the ungodly. It is not that the “moral arc of the universe bends towards justice” (Martin Luther King, Jr.), but that creation *itself* bends towards justice. “...for the universe defends the righteous” (Wis 16:17).²² The author is trying to encourage his audience: yes, life may be difficult, but in the end, creation (God) will rectify the situation.

How creation does this is by using the same element of creation to reward or punish (Wis 11:5, 16). For example, when the Hebrews thirst, they receive water from a rock. When Egyptians thirst, they are confronted by the Nile filled with blood (Wis 11:4-8). When the Hebrews were hungry, they received quails to eat; when the Egyptians were hungry, they were set upon by odious creations (Wis 16:1-4; probably an echo of the plagues of frogs, gnats, and flies).

²⁰ This section is drawn from my forthcoming commentary on Wisdom of Solomon (Wisdom Commentary Series, Liturgical Press).

²¹ In the commentary I argue for using Ioudai-os/oi and Ioudaismos instead of Jew(s) and Judaism.

²² The author follows the prophetic traditions that interpret natural phenomenon as divine punishment or reward for human behavior.

However, to make this work even the author admitted that creation does this in such a way that nature is behaving very unnaturally. Creation has to exert itself to punish the unrighteous and relax itself in kindness on behalf of the righteous (Wis 16:24). In the climactic scene of the crossing of the Sea, which leads to the Hebrews salvation, but drowns the Egyptians, the author invokes the notion that creation refashioned itself to accomplish this (Wis 19:6) and that the elements changed places with one another, like plucking different strings on a harp to generate a different sound (Wis 19:18).²³

Whatever theological problems the author believed the idea of creation's bent for justice solved, it also creates a set of theological problems when acts of nature are interpreted as divine reward or punishment. We end up with some Christians claiming Hurricane Katrina was God's punishment of New Orleans' sinful lifestyle or claiming that God was watching over them when their house is untouched by a tornado (or fire or flood) while their neighbor's is demolished. Nature does not work that way. Hurricanes and earthquakes do not distinguish between the righteous and the wicked.²⁴ Natural disasters do have an impact on humans, but not in the way suggested by WisSol. Largely because of human created social inequities, we know that environmental devastation tends to fall hardest on poor communities, and women and children, rather than those who created the social inequities.

Even the Bible expressed doubt about WisSol's view of creation by acknowledging that creation is essentially amoral from a human perspective. This is clearly expressed in God's speeches in Job 38-41. For example, it rains where there are no people (Job 38:25-27). Creation has no response to human actions for good or ill. Psalm 104 describes the ecosystems of earth. Creation provides

²³ The key verses from WisSol are included at the end of the paper.

²⁴ This view, and the view of WisSol, is that people are either all righteous or all wicked and one can clearly distinguish between the two groups, which is a fallacy. Each human being is a mix of good and problematic behaviors. We seem to be hard wired to view ourselves as good and benevolent and that life should reward us accordingly. That is, bad things should somehow never happen to good people. This outlook may work for us most of the time, but not all the time.

habitat and sustenance for all creatures, including humans, regardless of whether they are righteous or wicked.

Most important, science challenges this view of creation. James Lovelock considers the amorality of creation vis-à-vis humans. He agrees with the ecojustice principle of interconnectedness. He argues that Gaia (the Greek word for “earth”) consists of a set of interlocking systems that self-regulate and function to maintain an equilibrium within a limited range of parameters that is optimal for life to flourish on Earth, no more, no less.²⁵ Humanity is an integral part of Gaia, but in his view “humans have no special rights only obligations to the community of Gaia.”²⁶ Human actions are making it harder for these systems to remain in equilibrium (climate change). But if humans recognize our obligations to the community of Gaia, we could also work to restore equilibrium.

This does not mean that we cannot find meaningful lessons in the stories of the plagues in Egypt or the trials in the wilderness. But perhaps not the meaning the author of WisSol intends.

V. Further Areas for Exploration

I chose these three areas to consider because they seem relatively straightforward in terms of considering where science might challenge biblical views. But there are many other areas where this conversation should take place. Looking at the list of global challenges in the theme for this year’s Institute, whether it is hard sciences (physics, chemistry, biology, math, etc.) or social sciences (sociology, political science, economics, psychology, etc.), every challenge would benefit from consideration of what sciences might contribute to the discussion.

²⁵ James Lovelock, *The Revenge of Gaia: Why the Earth Is Fighting Back - and How We Can Still Save Humanity* (London: Allen Lane, 2006), 144.

²⁶ Ibid., ix.

I want to speak briefly about the topic of human sexuality. The level of knowledge of reproduction in antiquity was basically a male and female were required for offspring. The Bible uses the word “seed” to designate offspring. In Latin, seed is *semen*. A Roman farmer would have used the word *semen* to talk about planting his wheat crop. The view of antiquity was that a man planted his “seed” in the (hopefully) fertile ground of the woman. They knew women menstruated, but not what it accomplished, which led to the stigmatization of menses.

The first 1500 years of Christian history was dominated by the view of Aristotle. Aristotle believed the woman (or the female animal) provided the ‘matter’ for the baby, through her menstrual blood, while the male’s semen gave that ‘matter’ form, like a seal stamping hot wax.²⁷

In fact, for centuries the belief was that women also had testicles, just that they couldn’t be observed. The whole idea that an egg from the woman might be involved in reproduction didn’t emerge until 1669.²⁸ The actual observation of an egg didn’t occur until 1827. Microscopes first appeared at the beginning of the 17th century, but it wasn’t until 1677 when Leeuwenhoek (leave-en-hook), a draper with a penchant for making his own single-lens microscopes, thought to put his own ejaculation under the microscope. To his amazement, Leeuwenhoek saw there were thousands of tiny “animalcules” (aka ‘spermatozoa’) thrashing about in the sample. Though he did not recognize the significance of that discovery. He didn’t associate them with reproduction.²⁹

For the next 150 years scientists advocated for the “ovist” or “spermist” view, insisting that only one or the other provided the stuff necessary for reproduction. It wasn’t until the early 19th century that there was enough evidence and theory to recognize that BOTH sperm and egg were necessary for fertilization and the fusion of sperm and egg wasn’t observed until 1870.³⁰ And it

²⁷ M. Cobb, “An Amazing 10 Years: the Discovery of Egg and Sperm in the 17th Century.”
<https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1439-0531.2012.02105.x>

²⁸ Ibid., p. 3.

²⁹ Ibid., p. 5

³⁰ Ibid., 6.

wasn't until 1959 that it was determined that the Y chromosome was necessary for a fetus to develop as a male.

This is oversimplified history, but it shows how little we still know about reproductive sex. It was only 154 years ago that we figured out sperm + egg = baby. If it took that long to understand the basics of heterosexual activity, we are only now at the beginning of understanding the biology around homosexuality and other gender expressions. We don't accept today the understanding of heterosexual activity from antiquity, why should we accept their views on other expressions of sexuality? I am of the mind that when it comes to sexual and gender identity, and sexual ethics we should leave the Bible out of the conversation. Which doesn't mean that we don't desperately need to have discussions around sexual ethics, which we do. And in that area, I'm more inclined to listen to psychologists and ethicists than the biblical text. But from a scientific perspective, what Leviticus or Romans might or might not say about same sex relationship, doesn't offer useful information except perhaps from an historical perspective of what people believed back then.

VI. John Wesley – A Third Way?

It may sound as if I don't find much meaningful in the Bible, which is hardly the case! But I look for meaning and illumination in other ways. And I like to think of myself as being a good Wesleyan in my approach. John Wesley was a keen observer of the scientific endeavors of his time. He read widely in the area of "natural philosophy," the natural sciences, which made him aware of the views of those who doing the inquiry into the workings of creation. Wesley has been criticized for being anti-intellectual and anti-science, particularly his critiques of Isaac Newton. J. W. Haas, Jr. argues that Wesley's understanding of the relationship between faith and science was much more complex

when his works are looked at as a whole and not just the most offensive statements from a scientific point of view.³¹

Wesley wrote a 2-volume work, *Survey of the Wisdom of God in the Creation: or a Compendium of Natural Philosophy* (1763). He added a third volume in 1770, and it grew to five volumes by 1777.³² This work basically describes the contemporary state of knowledge about the natural world in his day. “For Wesley, the *Survey* provided a ‘short, full, plain account of the visible creation, directed to its right end: not barely to entertain an idle barren curiosity; but to display the invisible things of God, his power, wisdom and goodness.’”³³ It hard to make the case, based on the *Survey*, that Wesley was anti-science in a strict sense. In fact, Wesley appears to embrace wisdom and truth wherever it may be found.

However, Wesley was also not a literalist when it came to science and the Bible.

“As for those scriptural expressions which seem to contradict the earth’s motion, this general answer may be made to them all, that, the scriptures were never intended to instruct us in philosophy, or astronomy; and therefore, on those subjects, expressions are not always to be taken in a literal sense, but for the most part, as accommodated to the common apprehension of [hu]mankind.”³⁴

In other words, it would make no sense for God to reveal plate tectonic theory to the biblical authors of the Iron or Roman Ages, when they did not have the capacity to comprehend the science.

³¹ J. W. Haas, Jr., “John Wesley’s Views on Science and Christianity: An Examination of the Charge of Antiscience,” *Church History* 63 (1994): 378-392.

³² The volumes can be found online [here: https://wesley.nnu.edu/john-wesley/a-compendium-of-natural-philosophy/](https://wesley.nnu.edu/john-wesley/a-compendium-of-natural-philosophy/)

³³ Haas, 383.

³⁴ Mark H. Mann, “Wesley and the Two Books: John Wesley, Natural Philosophy, and Christian Faith,” p. 25 in Matthew Nelson Hill and William Curtis Holtzen, eds., *Connecting Faith and Science: Philosophical and Theological Inquiries* (Claremont, CA: Claremont Press, 2017; pp. 11-30).

Historically the Methodist/Wesleyan traditions have not treated the Bible as authoritative on matters of science, history, and medicine. One thing Wesley urged was that we acknowledge the limits of our knowledge, whether that is spiritual knowledge or scientific knowledge. In writing about gravity he said, “We ask what this gravity is. What is this secret chain by which all parts of the universe are so firmly and durably connected? ... What is this attraction, this tendency in every natural body to approach to every other? We know it is the law of nature; it is the finger of God, and here our knowledge ends.”³⁵ Today we know more about gravity and how it works, but physicists still have not figured out how all the physical forces of the universe work together.

Might this caution on the limits of knowledge in science apply as well to matters of faith? For example, while there are many explanations for theodicy, there is no theological framework that explains all forms of suffering in relationship to God. We know in part ...

I am advocating for us to consider that faith and science do not have to be adversaries. Acknowledging that in scientific areas the Bible may be a very old book is not saying there is no truth or meaning to be found in the Bible. Nor do we have to say that every jot and tittle in the Bible must be “scientifically accurate” for the Bible to hold truth and meaning. The scientific world gives us a way of seeing and thinking about all of life, including the natural world. The same is true of the life of faith. Our experience of the Divine gives us a way of seeing and thinking about all of life, including the natural world. Perhaps our aim might be to multicultural – at home in both worlds while recognizing they are not identical and each has strengths and weaknesses.

VII. Queries

What are your beliefs about the relationship of the Bible and science?

Where do you see possibilities? Where do you see pitfalls?

³⁵ Haas, 385.

What perspective do you bring to the conversation?

Does this conversation offer “glad tidings of salvation in an age of crisis?”

KEY VERSES IN WISDOM OF SOLOMON

“For through the very things by which their enemies were punished, they themselves received benefit in their need” (Wis 11:5).

“... so that they might learn that one is punished by the very things by which one sins” (Wis 11:16).

“For—most incredible of all—in water, which quenches all things, the fire had still greater effect, for the universe defends the righteous” (Wis 16:17).

“For creation, serving you who made it, exerts itself to punish the unrighteous and in kindness relaxes on behalf of those who trust in you: (16:24).

“For the whole creation in its nature was fashioned anew, complying with your commands, so that your children might be kept unharmed” (19:6).

“For the elements changed places with one another, as on a harp the notes vary the nature of the rhythm, while each note remains the same. This may be clearly inferred from the sight of what took place” (19:18).