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Miracles, Science, or Both?

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Abstract

What is a miracle? What is science? Do miracles cease to be exciting when a scientific explanation is found? Does an event, explainable by science, undermine the power of the Divine? This work investigates the tension that we have created between divine action and natural law, using the medieval Eucharist experience and related scientific findings as an example of this tension.

Science, Miracles, or Both?

What is a miracle? Consider the following frequently-used definitions: “a surprising and welcome event that is not explicable by natural or scientific laws and is therefore considered to be the work of a divine agency” (“Miracle”) or “an event which the forces of nature – including the natural powers of man – cannot of themselves produce, and which must, therefore, be referred to a supernatural agency” (Fisher). These definitions fall short; as we will see later on, they enforce a dichotomous relationship between the divine and the natural as explained by science.

What is science? Science is often described in some variation of the following: “the intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation and experiment” (“Science”) or “an intellectual activity carried on by humans that is designed to discover information about the natural world in which humans live... an ultimate purpose of science is to discern the order that exists between and among the various facts” (Gottlieb). These commonly-used definitions of science also fall short; they limit scientific discovery to the earthly, failing to acknowledge the revelation of the divine through natural law.

In our experience of the created world, is the power of God undermined when natural law explains a phenomenon? Is there really an objective distinction between miraculous and non-miraculous events? Can science speak to matters of the supernatural, and can faith speak to matters of the natural?

Miracles in the context of the New Testament

In his essay, *The Long Shadow of David Hume* (David Hume was a Scottish thinker who absolutized science and argued against the validity of miracles in the Bible), Ard Louis notes that the New Testament uses any or a combination of the following three words when referring to a miraculous act: “*teras*,” which is Greek for wonder or spectacle; “*dunamis*,” Greek for power; and “*semeion*,” Greek for sign. In Acts 2:22, we see a combination of the three forms of the word: “Fellow Israelites, listen this: Jesus of Nazareth was a man accredited by God to you by miracles [*dunamis*], wonders [*teras*], and signs [*semeion*], which God did among you through him, as you yourselves know.” *Teras*, however, which means spectacle or wonder, is never used by itself; it is always used alongside *dunamis* and/or *semeion*. This principle suggests that the miracles of Jesus served a higher purpose; they were not merely a spectacle to be enjoyed (Louis).

The relationship between miracles and natural law

Louis goes on to explain that miracles are not isolated events, but occur against the backdrop of the natural world. He writes, “In this context, it is illuminating to see how the Bible describes God’s action in the natural world,” using Psalm 104 to illustrate his point. Psalm 104 shows nature’s existence *alongside* the working hand of God. In verses 19-21 we read, “[19] He made the moon to mark the seasons, and the sun knows when to go down. [20] You bring darkness, it becomes night, and all the beasts of the forest prowl. [21] The lions roar for their prey and seek their food from God.”

One part of each of the above verses acknowledges God’s direct action, while the other part of the verses highlights the natural properties that are at work. One of the most striking features of this psalm is the grace and ease with which the psalmist transitions between the hand

of God and the laws of nature. This feature brings us to the conclusion that natural law and the divine are two dimensions of the same phenomenon; natural law is a predictable, more regular expression of divine will. The definitions of miracle and science presented earlier put the divine and the natural in two different realms when really, they are two sides of the same coin. St. Augustine sums up this principle succinctly, saying, “Nature is what God does.” If nature is what God does, then we can redefine science to mean the study of what God does.

Stanley Kruis in his thesis, *Toward a Theology of Miracles: Reformed and Third Wave Contributions*, writes, “Miracles basically are events which amaze people because they seem impossible. God has created our earth full of amazing possibilities waiting to be discovered and used by humans” (73). When seen in this light, miracles can be considered natural events that the human mind has not yet fully understood and are thus not explainable by the order and model systems that we have imposed on creation. Until the 1400s, the idea of organisms unidentifiable by the naked eye being the causal agents of disease was ludicrous. Bacteria and viruses are responsible for many important processes in our environment, much more than we give them credit for. Yet, because people centuries ago did not have the tools to observe and understand the microscopic world, people disregarded their existence. Existing paradigms at any given time affect a society’s experience and interpretation of reality. Kruis continues, “It is helpful to realize that natural laws simply describe and systemize observations made about the natural world. They cannot ultimately determine what can and cannot happen in the cosmos” (73).

Therefore, if an event is observed that defies what humans have come to accept as natural law, we have three choices, according to Kruis: “1) Deny the reported occurrence, 2) Consider the occurrence an exception, apparently caused by something outside of nature, or 3) Use the reported occurrence to reformulate the natural law” (74). Although many a scientist would

gravitate toward the first option, the third option should be paramount because we falsely champion science when we assume that “it can fully and infallibly define nature’s functioning by its formulations of natural laws” (74). Human-formulated laws of nature are descriptive; the Creator’s sustaining will is prescriptive (Wright 21).

The creation itself holds possibility for the miraculous. Johann Diemer in *Nature and Miracle* asserts that positing the divine and supernatural as an explanation for miracles takes away God’s involvement in natural occurrences, giving him credit only for those events that are unexplainable by natural law as understood by man (Diemer 21). Our understanding (or lack thereof) should not and cannot be the criterion for defining phenomena as miraculous or natural. Wright in *Biology Through the Eyes of Faith* points out that natural law is but a *description* of what we see, at best a “tentative approximation of reality” (Wright 21). That some things (i.e. miracles) do not lend themselves to any of our descriptions does not necessarily remove them from the realm of the natural. While we may refer to repeatable phenomena as “laws,” we do ourselves a disservice when we attribute infallibility to scientific models.

Case Study: The Eucharist and *S. Marcescens*

Not every mystery is a miracle (Geisler 47). The early church’s response to an anomaly of the Eucharist (also known as the Lord’s Supper or Holy Communion) celebration is an illustration of Geisler’s claim. Because of the belief that the Eucharist is the “true flesh of our Savior Jesus Christ,” participation in the Eucharist was considered a pure, sacred, and sacrificial act not to be taken lightly. Eucharist teaching was articulated in the second and third centuries by many teachers including Tertullian, Clement of Alexandria, Origen, and Cyprian of Carthage. Justin Martyr explains in his First Apology 66,

For not as common bread nor common drink do we receive these; but since Jesus Christ our Savior was made incarnate by the word of God and had both flesh and blood for our salvation, so too, as we have been taught, the food which has been made into the Eucharist by the Eucharistic prayer set down by him, and by the change of which our blood and flesh is nurtured, is both the flesh and the blood of that incarnated Jesus. Knight.

Centuries after the aforementioned church fathers articulated their firm belief in the Eucharist, Venetian chemist Bizio discovered and identified *Serratia marcescens* as the cause of a polenta (an Italian cornmeal porridge) contamination. What the medieval church believed to be the blood of Christ was what scientists believed to be the red pigment prodigiosin, produced by the bacterium *Serratia marcescens* (*S. marcescens*). *S. marcescens* thrives in the humid conditions that the communion bread was found in - drawers in the church sanctuary (Gillen and Gibbs).

The tension between miracles and science exists because of the seeming discrepancy between what we believe and what we actually experience. Our paradigm today, influenced greatly by advances in science and technology, cause us to categorize events as *either* scientific (earthly, natural, under human control) *or* miraculous (supernatural, divine, under God's control). On the contrary, the paradigm of generations before ours had less dependence on science, and thus an increased likelihood to associate their experiences with religious practices. The people who participated in the Eucharist experienced it in a particular way. They saw this red pigment and had a powerful, deeply spiritual experience that they understood as transubstantiation. The following questions arise: Should that experience, as they had it, be invalidated by the fact that the red pigment might have been bacteria? Would God's use of bacteria make the Eucharist experience less legitimate than if it was the literal blood and body? Put in a different, analogous context, can poetry convey the same truths as a fable or a short story? Should a playwright disregard truth in a short story because a short story is a different

form of literature? Should a lack of belief in transubstantiation (due to the finding that *S. marcescens* is at work) undermine the meaning of the Eucharist?

Natural law, when viewed in opposition to God's miracles, renders the aforementioned Eucharist experience senseless. Natural law, when viewed through the eyes of the writer of Psalm 104, lends a fair amount of validity to the early church's claims of the Eucharist. When Jesus broke the bread he said, "This *is* my body" and about the wine, "This *is* my blood." Here, too, we see a reinforcement of the relationship between the natural (the physical substance of bread and wine) and the religious (the celebration of the Lord's Supper). That there exist important aspects of Christianity that require faith in the unseen does not render that which we can see (nature) less important.

Unnecessary Tensions and False Dichotomies

The arguments of science vs. religion, miracles vs. nature, faith vs. evidence, spirituality vs. reality, (or whatever name one gives to these "contradictions") exist because we, by putting greater importance on one of the two, have created this dichotomy. Hence, the natural world becomes the only way of knowing for some, and religion becomes the only way of knowing for others. Our framework for understanding the world forces us to interpret events as either miraculous or natural. If miraculous, then God is involved. If natural, then God is not (or less) involved.

This perspectival bias on the part of believers can lead them to shy away from science under the assumption that understanding nature will perhaps cause them to think less of God. Such logic is flawed. A perspectival bias on the part of those who denounce the power of the divine can lead them to have such dependence on science that they denounce the possibility that

even if a higher being does exist, he does not (and cannot) work through nature. This logic, too, is flawed. Our ability (or lack thereof) to see God at work influences the way we experience reality.

Contrary to popular opinion, science does not destroy miracles; rather, it points to them. Scientific evidence does not eliminate them; it naturally evokes them. For the very principle of regularity on which science is based calls for an intelligent cause beyond purely natural processes for the first living thing and the entire cosmos. Geisler 42.

These people were attempting to understand their practices and their world in light of what they believed. We too, today, although we live in much different times (more scientific), are also trying to understand our world in light of what is important to us. Science is important to the scientist; therefore, he or she will attempt to understand the world through the eyes of science, through the eyes of that which we accept as true (in this case empirical evidence).

Perhaps our focus should be more (or at least equally) on *why* God is working in any given way as opposed to fixating on *how* he is choosing to do that which he is doing. Science is concerned with the “hows,” and while that is a noble and stewardly approach to the rest of creation, sometimes God simply wants our attention. Miracles in the Bible often occurred as a deviation from the ordinary to get people to turn their attention to God (Louis). Ideally,

Whether it is a matter of timing or of an absolutely unique event, a miracle is as much a manifestation of God’s power over nature as are the day-to-day occurrences with which we are familiar. There is no point asking *how* God did it; it is a mystery...Our focus instead should be on *why* he chose to use his power in this way, on how the miraculous event served his purposes. Wright 23.

God is not limited by natural processes – certainly not by our definition and categorization of them. God demonstrates his power both in ways that fit our current models and in ways that we cannot understand (Geisler 15). In either case, He accomplishes a purpose. It is worthwhile to give attention to God’s ends, rather than fixating only on His means.

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