FAITH AND SCIENCE IN A SKEPTICAL AGE

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EXTRATERRESTRIAL LIFE

During the late-sixteenth century, the Dominican monk Giordano Bruno suggested the probability of numerous worlds inhabited by various extraterrestrial beings. On February 17, 1600, the Inquisition saw fit to burn him at the stake. Over four hundred years later, many scientists now agree with Bruno. What would it mean to our understanding of God, creation, and humanity if life, even in simple forms, exists on other planets? From a scientific point of view, what would constitute enough proof to establish the fact of extraterrestrial life?

Many people are fascinated with the idea of extraterrestrial life. For example, Carl Sagan remarked that it would be a great waste of space if life existed only on Earth. The 1997 film Contact, based on a fictional account of contact between humans and an advanced extraterrestrial civilization, included the same assertion. When Entertainment Tonight interviewed filmmaker M. Night Shyamalan concerning his film Signs, Shyamalan stated that it is highly improbable for Earth to be the only planet supporting life. Even Microsoft founder Bill Gates once remarked in the New York Times (February 10, 1999) that the universe quite likely teems with life.

Interest in extraterrestrial life as a scientific issue began during the seventeenth and eighteenth centuries. For example, in 1794, the American author and revolutionist Thomas Paine (1737–1809) wrote in The Age of Reason that the existence of extraterrestrial beings inhabiting other worlds or planets would render Christianity ridiculous and unbelievable. (It was thought that scientific interest in extraterrestrial life would raise serious questions concerning the significance of Christian ideas about God, human beings, sin, and Christ.)

Reasserting Thomas Paine’s charge, Roland Puccetti (in his 1968 book Persons: A Study of Possible Moral Agents in the Universe) argued that roughly $10^{18}$ ($1,000,000,000,000,000,000$) sites of possible extraterrestrial life exist in the galaxy. On account of this, he said, the ideas of sin and redemption are absurd since, obviously, God in Jesus Christ could not have redeemed all existing creatures, earthly and extra-earthly. Puccetti concludes that modern scientific research into extraterrestrial life decisively shows the inadequacy of Christianity.

How Christians should deal with the question of extraterrestrial life will be investigated in some detail later on. Meanwhile, we should realize that Christians have wrestled with a similar problem before. When explorers in
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the fifteenth and sixteenth centuries discovered new varieties of human life on other continents, they had to ask themselves whether the Bible applied to these newly discovered beings.

We need to consider how Paine’s or Puccetti’s arguments, presented very briefly above, might be flawed either in their logic or in their underlying assumptions. An argument’s validity rests on its assumptions. If its assumptions are true, then the argument can lead to true conclusions, although such an outcome is not assured. If the assumptions are false, then the conclusions will be false.

Typically, arguments against Christianity regarding extraterrestrial life follow these lines: (1) The Bible does not speak of life on other planets. (2) The Bible informs us that sin affects the Earth, not other planets. (3) The restoration brought about by Jesus is valid only for humans, other earthly creatures, and the Earth itself. Hence, the Earth-centered worldview of the Bible does not accommodate modern scientific knowledge of the universe, and Christianity must be found irrelevant in light of modern scientific knowledge. But there are problems with this line of reasoning!

Here are some of the fallacies with this kind of science versus Christianity approach: (1) That the Bible does not speak of extraterrestrial life does not mean that the Bible asserts that it does not exist. The Bible is not a zoological or biological textbook! (2) The Bible informs us that all of creation is under a curse since the fall of Adam and Eve. “All of creation” has universal implications. (3) Likewise, Jesus’ work of reconciliation was for the entire cosmos, or universe (see 2 Corinthians 5:19, where the Greek word kosmos is usually translated as world).

Possible but Not Probable

Discovery of extraterrestrial life would certainly be highly significant. However, the imagination of science fiction authors and our fascination with discovering new things should not outweigh careful and factual investigation. This sort of careful investigation should also characterize our thinking about how the discovery of extraterrestrial life would affect Christian theology.

As you consider various arguments about whether life exists on other planets, recognize that these arguments are based on calculations and not on data. Though calculations and theoretical models can be helpful for setting up an experiment, they are not scientific data. Remember: science depends on observation, not speculation.

Because calculations about the possibility of life on other planets are so popular, let’s review a few of the arguments. Assumptions about extraterrestrial life rest on the idea that conditions to sustain life exist elsewhere within the universe. Life somehow, either through space travel or through the pro-
cess of evolution, took hold and thrived in extra-earthly habitats. (Notice that this neglects the question of where or how life originated in the first place!)

The delicate nature of life presents difficulties for this opinion. Astronomer Hugh Ross determined a numerical figure for the probability of life outside Earth. Taking into account about forty conditions necessary to sustain life, such as chemical composition and physical conditions, Dr. Ross calculated the probability of all these conditions occurring on a single planet. He ended up with the following figure: one in 1,000,000,000,000 (10^{12}) planets in the universe contain the biological requirements necessary to sustain life. Hence, the possibility that life exists on other planets remains very slim.

The father of SETI (Search for ExtraTerrestrial Intelligence) science, Frank Drake, developed a mathematical formula that allegedly measures the potential number of intelligent alien civilizations: \( N = R^* \times F_p \times N_e \times F_l \times F_c \times L \). The problem with the Drake equation is that each variable remains speculative at best. In spite of the weight of mathematical and biological evidence against the probability of extraterrestrial life, Roland Puccetti argues that roughly ten sites within the universe may contain extraterrestrial life, basing his figure of ten sites for possible extraterrestrial life on Drake’s formula. Yet the formula itself is based on huge assumptions. You see the problem—piling assumption on top of assumption can never reach the level of fact.

The calculations show the improbability of extraterrestrial life, but this does not mean there are no extraterrestrial creatures. It does mean, though, that conclusions in support of the existence of extraterrestrial life are presumptuous. We cannot state that such life exists. Likewise, we cannot say that it does not exist.

Our attitude toward methods of discovering extraterrestrial life should remain critical. We can affirm, like Carl Sagan, that there appears to be a lot of potential for life because of the sheer size of the universe. However, because life itself is rare, we should not jump to conclusions. Sagan himself, who authored the novel on which the movie Contact was based, states that the best of our critical thinking skills and a healthy skepticism should guide the search for extraterrestrial life. This from a huge proponent for the possibility of extraterrestrial life!

Just as the search for extraterrestrial life must employ a careful and reasonable method of investigation, Christian reflection on the possible discovery of extraterrestrials should be carefully and biblically informed.

When Thomas Paine and modern scientific authors (e.g., Roland Puccetti) state that theologians largely ignore extraterrestrial issues and that Christianity fails to incorporate extraterrestrial life into its worldview, they speak without investigating the evidence. To begin with, theologians and philosophers throughout Christian history have wrestled with the idea of extrater-
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Extraterrestrial life and its implications for Christian teaching. For example, Steven Dick has written an informative book that surveys the debates concerning extraterrestrial life—*Plurality of Worlds: The Origins of the Extraterrestrial Life Debate from Democritus to Kant.*

Those who argue that Christian theology fails to treat the question of extraterrestrial life, as well as those who claim that the Bible does not speak at all to this issue, fail to thoroughly comprehend Christian theology and the Scriptures. The following sections examine the relationship between the Bible (and Christian theology) and the potential discovery of extraterrestrial life.

It is important that Christians adopt careful attitudes about the search for extraterrestrial life. Christians must read the Scriptures correctly and understand the full implications of the Bible’s teachings. In other words, the Scriptures must inform our worldview. We should not impose our worldview on the Bible.

The Bible teaches that God fills all things. It describes angels as coming and going from heaven. (This does not mean that we should regard God or the angels as extraterrestrial life, as that phrase is typically used.) Otherwise, we would be hard-pressed to find a biblical passage that supports belief in life outside the planet Earth. This does not mean that the Bible denies the existence of such life. It is silent on this entire issue of our understanding the universe. (Mormons and perhaps others would cite John 10:16. However, the “other sheep” whom Jesus refers to in this verse are Gentiles, not extraterrestrials.)

**The Problem of Doubt**

Thomas Paine’s and Roland Puccetti’s arguments provide an amazing example of how science sometimes gets used against a caricature of Christian theology. Paine and Puccetti failed to understand Christian teaching drawn from the Bible.

However, Christians themselves often fail to understand the Bible. Like scientists who misuse facts to promote the validity of a certain worldview, Christians often misuse the Bible. Instead of relying on the Bible as the basis for what we believe or do not believe, we draw conclusions from the Bible to fill in blanks where it remains silent or to affirm our preconceived worldview.

The Scriptures tell the story of human beings’ fall into sin and their redemption by the Lord. The entire Bible points to one particular event—the death and resurrection of Jesus. Here lies the intent of the Bible and the proof of the Christian worldview. The chief intent is to disclose the message of salvation. The historical events of Jesus’ life, death, and resurrection prove that God has redeemed His children.
In our attempts to answer the unanswerable, we may draw unverifiable conclusions from the Scriptures. Sometimes we even use the Bible to justify our errors. For example, we may quote the Bible to support our condemnation of others. Or we may quote the Bible out of context to prove an irrelevant point. The more we fail to see the thrust of the Bible, the more we use it apart from its intent.

If we take Scripture at face value, as we must, there are a number of “unanswerables” in the Bible. For example, we do not know exactly what is meant by “The sun stopped in the midst of heaven and did not hurry to set for about a whole day” (Joshua 10:13), how Jesus’ body and blood are present in bread and wine, how Samson’s strength was connected to the length of his hair, or who the Nephilim were (Genesis 6:4).

We can attempt to offer answers, but alternative explanations always remain. The Bible is not a book of philosophy or science. It is chiefly a record of God’s dealings with His people in the course of human history, culminating in God the Son’s taking to Himself human flesh and dwelling among His people. This is the one thing that must be maintained and remembered in our reading of the Scriptures.

After Jesus’ death and resurrection, He appeared on a road outside Jerusalem. Two of His followers did not recognize Him but accepted His company as they walked to Emmaus. Jesus showed them how all the Scriptures testified to His appearance on earth and His death and resurrection (Luke 24:25–27, 44–46). This organizing principle should guide our reading and interpretation of the Bible.

When Christians misuse or misapply the Bible, they expose the Christian faith to ridicule. For example, some well-meaning Christians argue that the Bible’s silence on the issue of extraterrestrial life means that extraterrestrial life does not exist. So they disregard the possible relevance of the search for extraterrestrial life. In misguided zeal, they argue for a geocentric view of the universe. Misinterpreting the Scriptures gives the impression to the public that the Bible is a book with a particular scientific worldview—when, in fact, the Bible’s worldview is centered on a person: Jesus Christ.

So really, the scriptural worldview is not one of a closed universe where all the answers to questions about the natural world can be found in the verses of the Bible. Rather, the biblical worldview is open to investigation of God’s creation, on Earth and throughout the universe. The question of whether extraterrestrials exist lies in the realm of empirical science. Their discovery would not invalidate the Bible.

Such openness has other implications. Scientific findings should not cause doubt about God in the Christian’s mind. Doubt about God, as well as its consequent unbelief, is sinful.
On the other hand, asking questions and probing for greater understanding does not offend the Creator of the universe. A great God can put up with a great many questions. But this great God also calls us to great faith. Here is the heart of the matter! Honest inquiry honors the Maker of the human mind. Self-righteous pride and mistrust dishonor Him.

Consider the questions raised by Ethan the Ezrahite in Psalm 89:46–52. How does Ethan, a believer in the Lord, receive resolution of these issues, and what does this teach you about questioning God? Ethan prays that the Lord would remember his suffering. If it’s all right for the psalmist to question God, it’s all right for you to question Him. However, ask your questions in humility and trust.

Read Job 31:24–37. This is the end of a long speech by Job, beginning in chapter 26. Job indirectly accused God of injustice and then defended himself as righteous. And God apparently listened patiently, just as He is willing to listen to us patiently. Now read 38:1–11 to see how the Lord responded to Job’s assertions. Notice that God never tells Job not to ask questions. He does, though, remind Job of his place in creation. The Almighty answers Job’s self-righteous assertions with a series of questions for Job that he cannot possibly answer. Our self-righteous assertions can anticipate sharp rebuke from the Lord.

Form a personal answer for the Lord’s question in Job 40:1–2 with help from 42:1–6. Job responded to God’s challenge by repenting. In contrast, the sin of Adam and Eve was not that they raised questions about their Maker and His plan for their lives, but that they sinned when they knowingly, self-righteously “sank their teeth” into something He had explicitly forbidden.

As a consequence of the fall into sin, we find ourselves doubting God’s faithfulness. God proves that He cares for us in spite of our constant rebellion. He has shown us His kindness through daily sustenance and continual provision (Acts 14:17). As the climactic act of His faithfulness, God fulfilled His promise to humankind by sending His only Son. However, we may still doubt His care and control over everything. When left to our own merits, we find ourselves naked before God and His impending judgment.

Doubting the sufficiency of God’s Word puts us in danger of His judgment. This comes from replacing God’s truth with something else. Our lack of trust in God could be followed by a trust in ourselves.

Read Mark 9:17–27 and consider how Jesus responded to the father’s desperate request. When the father admitted the state of his faith, Jesus did not rebuke him but responded in mercy. We, too, need to confess our doubts to the Lord! And He will answer us in mercy.

Think about the questions or doubts you struggle with. Pause to take these issues before the Maker of the universe. He will hear your concerns!
Off the Edge

Lord of the Cosmos

We have briefly reviewed Thomas Paine’s and Roland Puccetti’s arguments against the sufficiency of Christianity, which centered in the possibility of extraterrestrial life. Though no evidence testifies to the existence of life beyond Earth, the possibility exists for the discovery of extraterrestrial life. This should not raise any doubts concerning the truthfulness of the Christian faith.

The apostle Paul encountered attacks on the Christian faith similar to those leveled by Paine and Puccetti. Members of a young congregation in Colossae were expressing doubts about the sufficiency of Christ for the redemption of humanity. Paul responded by defending the full deity of Christ and His sufficiency to reconcile people to God.

Paul repeatedly argues for the universal effects of the reconciliation wrought by Christ (Colossians 1:15–20). In the space of six verses, Paul mentions the universal consequences of the person and work of Christ eight times. “All” is used two times, “all things” five times, and “everything” once. This supremacy or universality of Christ’s person and work is asserted in all six verses. In verses 15–16, Christ’s authority over creation is declared. Christ created “all things” for Himself. Verse 17 affirms Christ’s authority in divine providence. In Christ “all things hold together.”

In the incarnation, the man Jesus is also fully God (v. 19). (Theologians refer to this as the two natures of Christ.) The universal sufficiency of Christ’s reconciling work for “all things . . . on earth or in heaven” is declared in verse 20. Verse 18 affirms both the sufficiency of Christ for eternal life for all believers through His resurrection and Christ’s superiority and headship in the Church.

Thus, this brief passage pictures Christ not as the Reconciler of humanity alone but as the Reconciler of all creation—things visible and invisible, earthly and extraterrestrial.

This portion of Paul’s letter defends Christ’s sufficiency for the reconciliation of all creation as universal or, we might say, cosmic. Paul stresses the authority and superiority of Christ throughout space, time, and human existence.

The climax of the work of Christ took place at His crucifixion on Calvary. This unjust act against the Son of God brought about God’s reconciliation of “all things, whether on earth or in heaven, making peace by the blood of His cross” (v. 20). Paul here presents Christ as the One who not only brought the cosmos into being and continually sustains it but also brings it into harmony with God. Jesus is truly the Lord of the cosmos.

Recall the arguments against Christianity offered by Thomas Paine and Roland Puccetti. Since it is obvious on the basis of Colossians that the work
of Christ has cosmic implications, Paine's and Puccetti's arguments are faulty. They fail to take into consideration what Paul asserts here in Colossians 1—that the central Christian teaching (the reconciling work of Christ) includes the entire universe. Should extraterrestrial life be discovered, Christian theology would stand firm.

Even in the scope of His cosmic work, the death of Christ has personal benefits for each of us. Christ's reconciliation of the cosmos becomes personal when we trust in this act. Faith grasps the peace with God brought about by Jesus' work. Hence, it is faith that connects us to the oneness with God won for us by Christ.

This faith that connects us to Christ's merits on our behalf is a gift to us from God as well. In 2 Thessalonians 2:13, Paul states, “God chose you as the firstfruits to be saved, through sanctification by the Spirit and belief in the truth.” On account of God's grace revealed in Christ, we are considered righteous (and are therefore saved) through faith in the person and work of Christ.

Colossians 1:15–20 reveals a crucial part of the classical Christian worldview: Christ is the center of the cosmos, over which He is also Lord. Not only is He Creator and Sustainer of the universe and the life within it; He is also Reconciler of an alienated creation. Christ’s death on the cross and subsequent resurrection mark the center of human history. It is also the center of the cosmos beyond the scope of human existence.

Thus, Christianity presents a Christocentric worldview. Christ existed before the creation of the cosmos. He has always existed with God the Father and God the Holy Spirit. Also, He came into time to carry out God's redemptive work in the midst of human history. Christ is the center of all Christian theology.

**Points to Ponder**

People work very hard to justify the possibility of extraterrestrial life; they often work just as hard to argue against the existence of God, who took steps to redeem His creation. What kind of spiritual hunger drives this view, and how does the work of Christ more than meet our need?

**Words to Remember**

And you, who once were alienated and hostile in mind, doing evil deeds, He has now reconciled in His body of flesh by His death, in order to present you holy and blameless and above reproach before Him. (Colossians 1:21–22)