



FiRST Principles

Journal of the Institute for Theological Encounter with Science and Technology

Faith
Reason
Science
Technology

ITEST

Volume 57 #3

Summer 2026

Opening Message

Amid the heat of Summer, we offer in this issue of *FiRST Principles* an exciting mix of three intellectually provocative articles. We're looking forward to hearing your further thoughts and arguments – please express them!

The first article is “The Digital Paradigm and Formal Cause” by Mark Stahlman of the Center for the Study of Digital Life. It is both an introduction to Marshall McLuhan’s famous approach to the analysis of technology and a bold argument regarding the nature of digital technology. The style of the writing emulates McLuhan’s refusal to follow many grammatical rules in favor of an infusion of a “nonlinear” mosaic of short, fragmented observations, puns, and juxtaposed concepts or examples. The core theme is that “Digital forces us to ‘imitate’ Memory. As humans, not monkeys.” You’ll want to read the essay to see why.

Long-time ITEST contributor and leader Dr. Thomas Sheahen is the author of “A Higher-Level View of the Real Presence,” a dimensional perspective on the sacrament of the Eucharist. While some have achieved spiritual and intellectual clarity on this article of faith, “for many of us, however, the initial necessary step of becoming totally humble before God, continues to be cluttered with distractions and obstacles.” The conceptual tool of dimensions, explained with the deft hand of an astute physicist who has also tackled time in his book *Everywhen: God, Symmetry, and Time*, may be just what many readers are looking for.

In the third article, researcher Richard Bonomo asks: “Unidentified Flying Objects, Unidentified Anomalous Phenomena: What Are We to Make of These?” This is a topic in the news recently, and the article describes a uniquely personal experience with the “experiencers,” “quasi-mystics,” and academics exploring such questions. Bonomo shares an urgent plea for spiritual guidance for those exploring this field of inquiry and a call for ITEST members to get involved.

Christopher Reilly, Th.D.
Editor, *FiRST Principles*

New Editor of *FiRST Principles* Needed

I have had to resign from the role of editor, and the Fall issue of *FiRST Principles* will be my last (unless we have a replacement before then). I have very much enjoyed interacting with authors and the ITEST leadership and staff. The “effort” is just a matter of recruiting writers, editing, and helping ITEST staff (who handle most of the production of the journal) four times per year. Unfortunately, I am prevented by my increasing responsibilities elsewhere, health concerns, and a felt call to focus on my intellectual activities. If you enjoy communicating with diverse authors and adding some of your own writing, all while serving an important organization’s membership, this is a great opportunity to take this journal to the next level. Please contact ITEST Director, Dr. Sebastian Mahfood, OP at ITEST@archstl.org if you have an interest or questions.

— Christopher Reilly, Th.D.

In This Issue...

Announcements	2
<i>The Digital Paradigm and Formal Cause</i> by Mark Stahlman	3
<i>A Higher-Level View of the Real Presence</i> by Thomas P. Sheahen	7
<i>Unidentified Flying Objects, Unidentified Anomalous Phenomena: What Are We to Make of These?</i> by Richard Bonomo	11

Announcements

ITEST Webinars

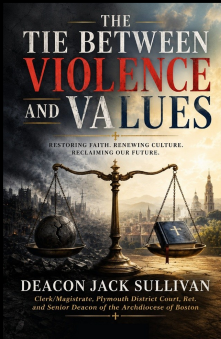
Watch our most recent ITEST webinars on demand.

Date	Title	Presenters	Watch/Register link
Apr 18 2026	The New Genetic Medicine: Miraculous Cures, Ethically Challenging Advances, or Both?	Fr. Kevin FitzGerald, S.J., Ph.D., Ph.D. Fr. Dennis Billy, C.Ss.R.	https://faithscience.org/the-new-genetic-medicine/
Jun 20 2026	Fides et Ratio: When Ideology Distorts Science and Medicine	Kevin Powell, M.D., Ph.D. Francis Etheredge	https://faithscience.org/fides-et-ratio/

Register now for these webinars.

Aug 22 2026	Scientific, Clinical, and Theological Problems with the Affirmation Model for Gender Dysphoria	Stephen Rouhana, Ph.D. Paul Hruz, M.D., Ph.D.	https://faithscience.org/affirmation-model/
Oct 10 2026	Revisiting “Computers, Artificial Intelligence, and Virtual Reality” in Light of Pope Leo XIV’s <i>Magnifica Humanitas</i>	Sr. Carla Mae Streeter, OP, Th.D. Ronald P. Loui, Ph.D. Gregory Beabout, Ph.D.	https://faithscience.org/revisiting-computers-ai-magnifica-humanitas/

Watch all past webinars on demand at www.faithscience.org/news-and-events/.

New Book 	The Tie between Violence and Values by Deacon Jack Sullivan In <i>The Tie Between Violence and Values</i>, Deacon Jack Sullivan examines the growing crisis of violence, moral decline, and spiritual emptiness in modern society. Drawing on decades of experience as a trial lawyer, court magistrate, and Catholic deacon, Sullivan argues that the erosion of faith, family, and virtue has contributed to social fragmentation and unrest. Blending cultural analysis, personal reflection, and spiritual insight, this provocative work calls readers toward moral renewal, evangelization, and a return to enduring Judeo-Christian values. Find this book at https://enroutebooksandmedia.com/violenceandvalues/.
--	---

In Memoriam

We ask your prayers for these ITEST members who recently died and entered Eternal Life.

Susan D. Mills **08/21/2022**
Romuald Simeone **10/21/2024**

We ask your prayers for ITEST members who are ill. May they feel the restoring hand of the Lord.

Follow ITEST on Social Media



faith.meets.science



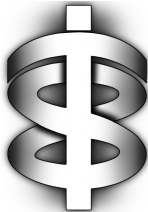
@faithscience



itestfaithscience



www.faithscience.org



Institute for Theological Encounter with Science and Technology
Cardinal Rigali Center • 20 Archbishop May Drive • St. Louis, Missouri 63119 • USA
314.792.7220 • www.faithscience.org • E-mail: ITEST@archstl.org

FiRST Principles - Christopher M. Reilly, Th.D., Editor
Sister Marianne Postiglione, RSM, Senior Editor • Sheila Roth, Managing Editor
ISSN 1073-5976 • Copyright © 2026

The Digital Paradigm and Formal Cause

by Mark Stahlman

Monkey see, monkey do . . . (old saying)

Digital technology will change us. Digital forces us to “imitate” Memory, retrieving what is forgotten. In Aristotelian terms, the turn to Digital brings the Formal cause back into science and the study of Man.

The Digital Paradigm

Technology Shapes Our Psyche

We humans are born imitators. We “mimic.” Rene Girard built a whole career on that observation. He called it “Memetic desire” – in other words, we don’t “desire” independently but rather learn what we want by imitating others. But did he really understand what that means?

Like many in the 20th century under the influence of Television, Girard reverted to an archaic “anthropological” explanation. He thought “Scapegoating” – or, in order to prevent a “war of all against all,” we instinctively unite to blame a single “scapegoat” to preserve the peace – could be traced to early cultures, so it must have endured. He also believed that Christ had allowed us to overcome this behavior. No, that’s not “orthodox” theology, but attractive to many in his days at Stanford. Girard’s student Peter Thiel has expanded on his insights; thus, his lectures on the “Anti-Christ.” Also, not Catholic theology.

Today, the question has become “What does Digital technology do to us?” No, it’s not the same as Television. Not the same as Radio. Or the Printing Press. When we “imitate” Digital technology, what are we doing? “Imitate” here means adopting the “structural” qualities of the technology subconsciously. What happens to our Soul under Digital conditions?

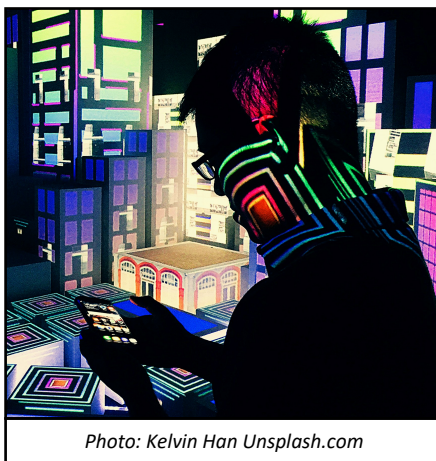
Television is mass-produced Fantasy. Technically, it isn’t even a fixed “picture,” but instead designed to fool our vision. Make-believe. Propaganda aimed at our personal tastes/biases. Bottom-up, so to speak. Choice – as long as it’s Ford or Chevy. It was a useful tool for the “human engineering” that became so important post-World War II. It is now obsolete.

Digital is different. Digital is Memory. Or, as McLu-

han suggested in his Tetrad heuristic for the Computer: “Perfect Memory, Total and Exact” (*Laws of Media: The New Science*, 1988). We are “imitating” Memory (not Fantasy) when we habitually use Digital technology. That means a retrieval of actual history. It means a shift towards revelation/unveiling. And today, we are experiencing a through-going “Disclosure Day” (i.e., way beyond UFOs).

Marshall McLuhan and Television

“Marshall McLuhan, whatcha doin’?” Famous in his day, McLuhan was made into a running gag by the television show *Rowan & Martin’s Laugh-In!* He even appeared in Woody Allen’s *Annie Hall* (reportedly unsettling Allen for upstaging him). There was a *Playboy* interview. Then the word got out that he was a Catholic. Quickly, he wasn’t so famous anymore.



McLuhan (1911-1980) was raised a Protestant “mongrel” but converted at age 25 in 1937. By then he was at Cambridge, UK (he studied literature, granted his *Classic Trivium* PhD in 1943), where the only two choices were reportedly Catholicism or Marxism. He mostly hid the fact that he chose the Church from his general audience, reserving it for other Catholics, publishing essays and reviews in the Marquette journal *Renaissance*. His

essays there, including the 1954 “Eliot and the Manichean Myth as Poetry,” are among his finest work.

McLuhan was initially promoted by television admen, like San Francisco’s Howard Gossage, who introduced him to Tom Wolfe and others. They were trying to get advertisers to switch from radio, and McLuhan gave them a leg-up. His “The Medium is the Message” (title of the first chapter of his 1964 *Understanding Media: The Extensions of Man*) was used to motivate moving to the new medium. Meanwhile, Gossage’s partner, Jerry Mander, published his *Four Arguments for the Elimination of Television* in 1978.

McLuhan knew that Television had different effects

Continues on page 4

on its audience than other technologies. He struggled to explain it with terms like “hot” and “cool.” He called Television “tactile” and lost his seminar audience in the process. He knew that all technological environments shaped us but, lacking Thomas Aquinas’ precision, he didn’t have the language/context to explain why.

To understand Digital in the current age, we need that language.

What if we combine Marshall McLuhan’s insights into technology with Aquinas’ understanding of psychology?

Aquinas and Faculty Psychology

What if we combine Marshall McLuhan’s insights into technology with Aquinas’ understanding of psychology?

Despite Pope Leo XIII’s best efforts (*Aeterni Patris*, 1879), many in the Church have forgotten much about the “Common Doctor.” Perhaps Leo XIV can do something about that, even though he’s an Augustinian?

Aquinas retrieved Aristotle (whereas Augustine could be said to retrieve Plato). Crucially, he retrieved Aristotle’s “Faculty Psychology” with a clear emphasis on the “Interior Senses” (*Summa Theologica* I, Q78, A4). But when Leo XIII attempted to launch a Psychology department at Leuven, all this was discarded. As a result, to this day, the Church has no “official” approach to psychology. In effect, it has dodged the whole question. Some who promote “Catholic Psychology” haven’t even read Aquinas – including at Divine Mercy University, which instead promotes a version of “Positive Psychology,” not Faculty Psychology.

Freud was trained in Aquinas by his (largely unrecognized) mentor, Franz Brentano. Brentano had been a Dominican priest (as was Aquinas), a role he abandoned as he attempted to “update” psychology to the new “scientific” standards. Freud was a personal witness to this transition. Arguably, Freud didn’t discover the “unconscious” – Aquinas did (with Aristotle’s help).

For Aquinas, there are four “Interior Senses” (or the subconscious): Common Sense, Imagination, Cognitive Power (also called the “Practical Intellect”) and

Memory. They operate to produce the “Phantasms” which are then “converted to” by the Intellect (“conversion to the Phantasm” is the Thomistic technical term to describe how the material senses are reflected in the immaterial Intellect). If all these faculties are working properly, we can begin to understand the world. If they aren’t – such as under Television/Fantasy conditions – then we will be deceived. Seriously mistaken.

The Center for the Study of Digital Life

In 2015, a group of us launched the not-for-profit Center for the Study of Digital Life (CSDL, 501(c)(3)). At its foundation, CSDL was born to apply Aquinas to our new Digital Paradigm. (We have done much more – we have an online graduate School, Trivium University, a Substack called *Exogenous* and a journal called *Dianoetikon*.) There are others with a similar goal, particularly the Lyceum Institute, with whom we collaborate. But CSDL has the unique character of combining Thomism with a deep engagement with Geo-politics. Not simply “philosophy” but taking all this beyond “potential” into “action.”

In the beginning, CSDL incorporated aspects of consultation to the Pentagon regarding Digital impacts (combined with this author’s personal engagement with the work of Norbert Wiener -- the man who coined the term “Cybernetics”). We also have a professional background with both Computers/Networks and Finance. We are not so much “academic” as focused on implementation and pragmatics. Our Fellows have built things and have had executive/command responsibilities.

This produces our conviction that today’s A.I. efforts – expressed as Large Language Models (LLMs) and the hunt for General Intelligence (AGI) – are very far from accomplishing their goals. Indeed, in our judgement, those involved don’t really understand Humanity and, as a result, cannot “replace” it. In this we agree with *Magnifica Humanitas* and its emphasis on Catholic Social Teaching (CST), rather than A.I. technology itself. We also agree that Leo XIV has effectively “re-started” CST – for which we would suggest the phrase Digital Catholic Social Teaching (DCST) might apply.

Formal Causality

Eric McLuhan and Forms

Marshall’s son, Thomas Eric McLuhan (1942-2018, a Fellow at CSDL who dropped his first name for the

Continues on page 5

public), struggled to get his “media ecology” colleagues to understand his father’s work. Marshall was “grounded” in Aquinas (which he only later discovered) and those studying media were largely “secular” (and lacked a broader education). So, Thomas Eric McLuhan decided to put it in terms of Aristotle’s Four Causes. No, that didn’t help much.

Thomas Eric first published his essay “On Formal Cause” in 2005, with little impact. He expanded this by adding essays by Marshall, et al. in the 2011 volume *Media and Formal*. Again, very little response – although essays on the topic (generally ill-informed) have appeared subsequently.

He begins by saying (tongue-in-cheek):

“Of course, you realize that McLuhan’s work was all in the area of Formal Cause. I mean Farm’l Cows, as a murder of corpse.

“There are Four Cowses, as you know.

“There are Efficient Cows. Material Cows and Final Cows, in addition to Farm’l Cows. Of the four, Farm’l Cows is the fundamental one and it contains all of the udders. It is the one that really concerns effects, namely side-effects.”

Marshall McLuhan was keenly aware of our senses. He asserted that our sensibility is a result of the changing “balance” of these senses. Eye. Ear. Tactile (touch). Or, as Aristotle put it, there is “nothing in the Intellect that was not previously in the senses” (*nihil in intellectu nisi prius sensu*).

For the McLuhans, these Forms – Aristotelian, not Platonic forms – are detected by the Interior Senses (*Summa Theologica* I, Q78, A4) and *cause* us to be who we are. They shape our souls. We “imitate” them. History can be divided based on these Forms, often summarized in terms of communication technologies as Oral, Scribal, Print, Electric, and – now – Digital. Digital is the specialty of CSDL in our “extension” of McLuhan.

End of Causality and Electricity

Causality hasn’t fared well in the Modern period. Under Print conditions, the philosopher David Hume famously doubted the Aristotelian distinctions, positing that we habitually “assume” causes as we observe the world, but without justification. Formal Cause (the structure/grammar of the environment) was among the first to be dropped, followed by Final Cause (the ultimate end/purpose) – in part due to their

Catholic origins. Efficient Cause (kinetic cause-and-effect) and Material Cause (the matter of which something is composed) persisted but were also on thin ice. They were judged to be “experimental,” thus subject to empirical testing. Up to a point.

Under Electric conditions, even Efficient Cause came under attack. As it turns out – B.F. Skinner and his “boxes” notwithstanding – experimenting on humans is generally frowned upon. Enter statistics. Replacing causality. Required for the study of “social science” today, statistics have a checkered history. “Figures lie, and liars figure” is often cited to explain the rampant “reproducibility” failures in social science. Along the way, most notions of “Unified Science” have also disappeared. (Although, for some, “Physics envy” still hasn’t.)

“Stories” are judged by their emotional (or affective) effects, quite independently of their veracity or even plausibility. When science turns into “story-telling” – absent causality – the research motivation shifts towards “selling” something. Selling a narrative.

For us, this seems appropriate in terms of the *effects* of Electric media environments – particularly Television. “Stories” are judged by their emotional (or affective) effects, quite independently of their veracity or even plausibility. When science turns into “story-telling” – absent causality – the research motivation shifts towards “selling” something. Selling a narrative. Funding tracks the “popularity” of these stories, often leading to plate-spinning dead-ends, as noted in Sabine Hossenfelder’s critiques of particle physics.

Can Causality be retrieved? Will that rescue Science? Not unless we shift to a new Paradigm. Such as the Digital Paradigm.

Neo-paganism and Modern History

McLuhan posited that new media environments can soften the upsetting psychological discontinuity involved in these shifts by retrieving aspects of our cultural past. Making the utterly new somehow “familiar” while we rummage in the “foul rag and bone shop of the heart,” as T.S. Eliot put it. He was particularly interested in how the Modern Electric

Continues on page 6

environment retrieved the earlier Oral sensibility. His SLU Master's student Walter Ong, S.J., named this "Secondary Orality" in his 1982 *Orality and Literacy: The Technologizing of the Word*.

Sometimes called "communitarian," this Oral sensibility retrieved by the moderns had much to do with the fascination with anthropology in the 20th-century. Electric people were mesmerized by Oral tribal behaviors. As noted above, Rene Girard wasn't immune to this bias in his audience. Neither were Margaret Mead and her one-time husband Gregory Bateson. Skipping Scribal and Print sensibilities. Digging for the origins. Like Stanley Kubrick's apes in the opening sequence of his *2001: A Space Odyssey*.

Polyamorous relations. Sex in the village square (aka "pornography"). Tattoos (all over the place). Piercings (ears, noses and everywhere else). How *pagan* of us.

Electricity retrieved paganism. No, not "secularity" (arguably from Print), but witchcraft.

Electricity retrieved paganism. No, not "secularity" (arguably from Print), but witchcraft. Some have suggested that "Wicca" is more popular in England today than the Church of England. The current King is known as a "naturalist." His presumed replacement, William, Prince of Wales, simply doesn't bother with attending church. His faith is "quiet." The Archbishop of Canterbury is a woman. How Electric of them all.

Modernity – in the West – was never "comfortable" with Christianity. Particularly the Trinity. Newton was an Arian (aka Unitarian) and an Alchemist. There are many Christian scientists (well beyond Mary Baker Eddy), but does that make Modern Science Christian? Or Hindu? Or Daoist? Perhaps this is a serious issue for the Vatican. Its acceptance of "scientific experts" is certainly filtered by its theology, but are their premises examined for fidelity?

So, are we simply Monkeys 2.0? Or, as Cognitive Psychology would have it "Information Processors"? What has happened to Humanity?

Re-enchantment and Max Weber

Pope Leo XIV has given us his answer. And, not surprisingly, the world has replied – often totally missing his point but still not allowed to ignore him. Hu-

manity is indeed magnificent. No machine will ever be its equal. We aren't monkeys either. We all have a unique Human Psyche, and we need to protect it. Nourish it. Elevate it.

Imago Dei. We are made in the "image and likeness of God." Not as the modern "pagans" would suggest with their pan-psychism (i.e. everything is "conscious"). Not "divine" as the Gnostics would suggest (speaking of themselves). Humans.

Imago Dei. We are made in the "image and likeness of God." Not as the modern "pagans" would suggest with their pan-psychism (i.e. everything is "conscious"). Not "divine" as the Gnostics would suggest (speaking of themselves). Humans.

This is where the Form of Digital (i.e., its structure/grammar) becomes particularly relevant. Digital retrieves the Medieval. The last time that humanity had a grasp on what it means to be human – culturally, psychologically – was in the "Middle Ages." The medieval First Estate were "those who prayed." Angels and demons were very real. Sin was asking for trouble. Freedom was positive – pointing us towards sainthood.

Recently, the *New York Times* published a Sunday Guest-Essay on its Op-Ed page titled "We Are Sliding Back Into the Middle Ages." (<https://www.nytimes.com/2026/05/17/opinion/supernatural-religion-reality.html>) It concludes by asking, "Everyone will believe in something. The question is in what?"

Indeed. Not the modern Libertarian freedom-from-interference – don't tread on me. Not the modern willingness to simply believe what we are told by the God-box – the Academy awards season is upon us. Not the endless chasing of "entertainment" that never satisfies – same story over-and-over. How boring.

In 1917, sociologist (and student of "comparative" religions) Max Weber gave one of his final lectures. It was titled "Science as a Vocation" ("Wissenschaft als Beruf"). In his concluding comments, Weber says:

"The fate of our times is characterized by rationalization and intellectualization and, above all, by the 'disenchantment of the world' ..."

Continues on page 7

Concluding with:

“We shall set to work and meet the ‘demands of the day,’ in human relations as well as in our vocation. This, however, is plain and simple, if each finds and obeys the demon who holds the fibers of his very life.”

Today, the “demands of the day” have changed. Drastically. A.I. compels us to discover what we have forgotten.

Today, the “demands of the day” have changed. Drastically. A.I. compels us to discover what we have forgotten. Digital forces us to “imitate” Memory. As humans, not monkeys. We are becoming re-enchanted in the process. ■

Mark Stahlman is a biologist, entrepreneur, Wall Street veteran and the President of the Center for the Study of Digital Life (CSDL, 501 (c) (3)). He teaches at the online graduate school, Trivium University (trivium.university) and writes essays for the substack Exogenous (exogenous.substack.com).



A Higher-Level View of the Real Presence

by Thomas P. Sheahen

The idea that Jesus Christ is truly present in the Eucharist has been a stumbling block for many people for the entire history of Christianity. In the “Bread of Life Discourse,” we read: “This saying is hard; who can accept it?” (John 6:61). Jesus didn’t ease up by saying He was talking figuratively; rather, He doubled down extravagantly by repeating Himself five times. Although many followers left at that point, Peter replied, “Master, to whom shall we go? You have the words of eternal life” (John 6:68). With the passage of two millennia, many Christians still assent in the same way, trusting in Christ but bewildered by what seems totally impossible on any natural level.

As recorded in the Gospels, at the Last Supper Jesus really did say “This is my body” and “This is my blood.” He didn’t say he was speaking figuratively or symbolically. Still, to this day, various denominations of Christians say it must have been just a metaphor. The objection “This saying is hard. Who can accept it?” never goes away.

Is there any way to make this saying less difficult to accept? I think there is, if we make use of some concepts drawn from science. Science has always been a partner of faith as they strive together to develop insights that lead toward truth; that partnership may help reduce the fog of preconceived notions that impairs our ability to believe what Jesus said.

As a first step, recall the first sentence of the Nicene Creed, which says that Almighty God created everything, both visible and invisible. By “visible” we mean anything accessible to scientific instruments, whether large or small. But the domain of “invisible” entities that God created is vastly greater than what is “visible.” Very basic realities such as space and time were actually created by God; St. Augustine was the first to realize that (*The City of God*, Book XI, Section 6). Likewise, mathematical abstractions (dimensions, numbers, symmetry principles, etc.) were created by God as He made our universe intelligible.

The mistake of the enlightenment philosophers was to take these entities for granted. The Deists imagined God creating a universe where the coordinate system (space and time) had always existed – and it didn’t occur to them that such a God must exist within (be *subordinate* to) the passage of time. But as Christians who assert that God created “*all* things visible and invisible,” we insist that the creator God is *not* subordinate to *anything*.

In particular, God is the creator of *time*, and is simply *present* to all time, even though we limited human beings speak of past, present, and future times. That distinction is actually a huge gulf between God and mankind.

Continues on page 8

When asked about God's property of *omnipresence*, we readily say "God is everywhere," but our human limitations prevent us from grasping that God is *present at every time*. In fact, at God's transcendent level of perception, there is unity between every moment of time and every point in space. It's all part of holding "the whole world in His hands." That completely boggles the mind of people; it's incomprehensible. Our human struggle to appreciate this reality is the subject of my book *Everywhen: God, Symmetry, and Time* (En Route, 2021). One very essential point made there: we must be humble, deferring to God's vastly superior knowledge.

A typical human misunderstanding of God's presence to all time would be to say time is compressed to "all at once." Rather, God is simply *there* at whatever specific time you can imagine. The original Passover meal by Moses' community and the Last Supper Jesus shared with his apostles are far apart by our reckoning but unified in God's far more comprehensive framework.

It is a further consequence of God's presence to all time, that every time a disciple of Jesus follows the instruction "Do this in remembrance of me," God is present at that event. And the words of consecration "This is my body" and "This is my blood" are identical with what Jesus said. An interval of time is a human concern, but nothing at all to God.

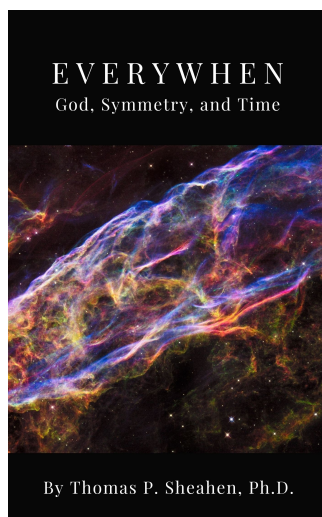
Again, what is called "elsewhere" or "long ago" in our human perception is not what matters. It is the entire package of Jesus' instruction to the apostles, his brutal treatment and horrible crucifixion, and his resurrection from the dead that are all unified at God's level. With great humility, we of the present day are privileged to share in it by repetition.

What do we mean by saying the Eucharist is Christ's "body and blood, soul and divinity"? To investigate this phrase, we first humbly admit that "divinity" is beyond our comprehension. However, we can try to imagine what is meant by the "soul" of Jesus. Countless authors have addressed this topic over millennia, with widely variable outcomes. Readers often remain vaguely dissatisfied, curious, and wishing for more.

Can anything be added to improve the clarity of our picture? In trying to lift the fog, to make it more

plausible, I find it helpful to make use of the mathematical concept of dimensions, which have helped organize our thinking in many fields. Humans have no difficulty with the three dimensions of space: up and- down, back and forth, sideways. That's as far as most people go. However, the additional notion of time as the *fourth dimension* is an entirely valid mathematical result of the theory of Relativity; but that's a very hard sell for most people who are unfamiliar with Relativity.

Here is what's important: We acknowledge that God created the very concept of dimensions. He is free to create in as many dimensions as He wishes, not constrained by the limits of human imagination, mathematics, language, or thought. Deferring to God's wisdom, we can concede that He has given humans access to some dimensions beyond the familiar ones. How this comes about is the subject of the paragraphs that follow.



Many people dislike the term "dimension," which carries memories of geometry class. An equivalent term is "degree of freedom," and they mean the same thing.

The visible part of creation begins with the minimum level of space and time, the domain of atoms and molecules. The equations of physics, thoroughly reliable at this level, describe the behavior of such elementary realities very well. But when a huge number of molecules interact, statistical fluctuations and probability lead into the science of *thermodynamics*, which deals with the behavior of large collections (*ensembles*), such as gases and fluids.

At this level, an additional degree of freedom comes into play: it is *information* that makes one system differ from another, even though the basic components of both are identical. Thus, multiple-body physics blends gradually into the science of chemistry, a step upward into greater complexity. A new dimension is present, not one recognized previously.

Within that greater domain, elements combine into various crystal structures, often due to remarkably small changes in energy levels. For example, the difference between an ordinary droplet of water and a beautiful snowflake is not in the component molecules, but in the highly organized way they're assembled. Another example: nutritionists know that the

Continues on page 9

differences between saturated fat, trans fat, and polyunsaturated fat are very slight changes in the position of chemical bonds. As complexity increases further, the difference between a useful chemical and a deadly poison can be attributed to only a few chemical bonds.

Very advanced (and useful) achievements come from the domain of chemistry. Contemplate the concrete that holds up a bridge, or the gasoline derived from crude oil that moves a vehicle along a road. It's a mistake to regard chemistry as just reducible to physics. Try to reverse the direction of complexity: step downward into fewer dimensions, and it's not the same reality anymore.

If we speak in terms of "dimensions," then in chemistry it is possible to measure quantities such as entropy, free energy, enthalpy, etc.; but beyond chemistry, any numerical scale vanishes into the fog of too many variables. "Degrees of freedom" is the more useful term. But keep in mind this central fact: for entities of increasing complexity, something is lost whenever a downward step toward simplicity is taken.

Biology is a further upward step in science. For living things to appear, yet more complexity (more degrees of freedom) is needed to form something qualitatively different from the world of chemistry. Even the simplest single-cell living entities are far more complicated than anything found in the realm of chemistry. For example, viruses are not even considered "living," but when they invade a living organism, dramatic changes occur.

And so the upward progression proceeds. For a plant, "movement" means turning toward the sun (phototropism). The mobility of even very simple animals in the deep ocean is much greater. At still higher levels, sensors develop, and eventually characteristics like sight and hearing emerge. Each of these upward steps adds a qualitatively new level of existence. A small mammal is incredibly far ahead of a sponge, tapeworm, snail, or dust mite, and yet they are each types of animals.

More advanced animals have memory and the ability to cooperate in getting something done. Beaver dams, birds flying in V-formations, wolves hunting in packs, all show a measure of intelligence. Some animals communicate. Domestic pets somehow seem to be able to gauge the feelings of their human masters.

The pattern continues indefinitely. There is continuous upward progression toward greater degrees of freedom, encompassing higher dimensions that lower creatures cannot access. But there are barriers: Chimpanzees can memorize lists of words, but syntax escapes them. Early hominids and Neanderthals were intellectually very inferior to modern *Homo sapiens*.

Progress into still higher levels eventually achieved abstract thought, mathematics, reasoning, choosing, decision-making – obviously very human characteristics. A wide gap exists between humans and lesser beings. At some point mankind began to grasp that spiritual realities exist. The *transcendentals* (truth, love, beauty, goodness, etc.) are within the grasp of a human being.

Meanwhile, as modern man advanced, agriculture supplanted hunting, and civilization emerged. Humans graduated from the level of manual labor alone. Intelligence became the driver of advancement. Technology and engineering developed in China, Egypt, and elsewhere. Among Greek mathematicians and philosophers, Aristotle introduced the concepts of "substance" and "accidents" to describe something real. In a human being, "soul" and "body" describe that combination.

The foremost characteristics of the soul are intellect and free will. This is the level on which human beings strive to interact with God.

The foremost characteristics of the soul are intellect and free will. This is the level on which human beings strive to interact with God. Early mankind's attempts were very clumsy indeed – worshipping the sun, etc. – but eventually a spiritual understanding of God appeared, quite possibly because God introduced it. The progression across many millennia brought organized religion to the level that Jesus entered. He didn't have to start at an extremely low level but drew disciples from a reasonably sophisticated community.

Notice that once God was understood to be a spiritual being, not Zeus hurling thunderbolts, the interaction with God stepped up to a still higher plane. Burnt offerings dropped away. Jesus was severely critical of the authorities' overemphasis on rules and

Continues on page 10

procedures; and he introduced entirely new criteria for meritorious behavior. He made it clear that “My kingdom is not of this world.”

Pause momentarily and recognize what a remarkable advance has been achieved here – all within the “invisible” aspects of creation. At this higher level, it no longer makes any difference what is happening back at the level of atoms and molecules in the domain of space and time. Jesus emphasized the spiritual aspects of life and directed his message to our souls. At the Last Supper, Jesus’ charge to “Do this in remembrance of me” is likewise directed, and the part drawn from the realm of visible creation is secondary.

To emphasize that lesser significance, we speak of the bread and wine as the *accidents* of the Eucharist. They don’t matter. We use our higher faculties – the intellect and will – to comprehend and accept the totality of the Eucharist. When receiving the Eucharist, our intent is to interact with the Risen Christ, an encounter at a far higher level than merely consuming earthly food. It is our assent to Jesus’ teaching that enables us to reach across huge gaps of time and space (in human perception) to be present in His company at the Last Supper, to hear Jesus speak directly to us.

From that initial gathering with a dozen apostles, the number of disciples grew without limit, and the community acquired the name “Christians.” The term “body of Christ” applied to the contemporary Church underlines the communal aspect of the Eucharist, which sustains the unity and coherence of the followers of Christ. Ideally, each reception of the Eucharist should be very uplifting spiritually, and it’s a serious lapse to let it become routine.

The *visible* aspects of the Eucharist don’t vanish, but they remain distinctly secondary. Bread is present; wine is present; just as they were at the Last Supper. But upon the words of consecration, prescribed for us by Jesus, the spiritual side completely dominates.

Those who regard the Eucharist as only symbolic are captives of an overemphasis on the “visible” side of creation and have missed the dominant importance of the “invisible,” spiritual side. They’re not lacking for company: Most of the people in Jesus’ time expected him to make Israel a great power, and got angry when He didn’t. There will always be a strong pull toward the tangible – even when the evidence of a different, higher, “invisible” reality of the spiritual

domain is well-known. Mankind’s limited perception of time, which seems to dominate everything in life, is a major component of that retrogressive tendency.

For many of us, however, the initial necessary step of becoming totally humble before God, continues to be cluttered with distractions and obstacles. The standard pre-Communion prayer “Lord, I am not worthy that You should enter under my roof; but only say the word and my soul shall be healed” is a step in the right direction.

There are Christians who have achieved a fuller understanding of the Eucharist, and it guides every aspect of their lives. A body of excellent literature testifies to that. They are to be emulated. For many of us, however, the initial necessary step of becoming totally humble before God, continues to be cluttered with distractions and obstacles. The standard pre-Communion prayer “Lord, I am not worthy that You should enter under my roof; but only say the word and my soul shall be healed” is a step in the right direction.

Have some people completely overcome the obstacles? I suppose so, but I don’t know any of them. Accepting that some truth is *transintelligible* – a mystery – will have to do for most of us. After all, we’re dealing with the transcendent, not the ordinary, so ordinary language and concepts fail. Perhaps this essay will help to “move the needle” a little, toward easier acceptance of Jesus’ “hard saying.”

Extra material:

To know something is true, and to know *that* you know it, is a high-level process described in Michael Polanyi’s book *Personal Knowledge* (Harper and Row, 1958). That’s the level the Eucharist is on.

Bishop Robert Barron: “‘Heavenly bread’ catches much of the paradox of the orthodox teaching concerning the Eucharist: Though it remains, as far as the eye can see, ordinary bread, the Eucharist in fact participates in a properly transcendent mode of existence and possesses, consequently, the power to produce eternal life.” (Gospel Reflection, April 21, 2026, <https://www.worndonfire.org/reflections/easter2026-wk3-tuesday/>) ■

Unidentified Flying Objects, Unidentified Anomalous Phenomena: What Are We to Make of These?

by Richard Bonomo

Personal Introduction

Before getting into the topic, permit me to introduce myself. I am trained in Electrical Engineering and Plasma Physics, with a minor in Mechanical Engineering. My primary area is Nuclear Fusion, though I have a broad experience, working primarily in academia in areas ranging from automotive laboratories to space-based astronomy laboratories, as well as conducting plasma physics experiments and managing a laboratory specializing in Inertial Electrostatic Confinement Nuclear Fusion. I have had a science bent pretty much from the womb.



I was born into a devout Catholic family, and my parents, in addition to raising me in the Faith, sacrificed to send, when possible, myself and my siblings to Catholic grade schools and high schools. As we are a U.S. Marine Corps Family, this meant changing schools every few years. As a consequence, I've been to four grade schools (in California, Hawaii, New York), and four high schools (California, Kuwait, Austria, and North Carolina). I am active in my parish church community and am a daily communicant.

I was born into a devout Catholic family, and my parents, in addition to raising me in the Faith, sacrificed to send, when possible, myself and my siblings to Catholic grade schools and high schools. As we are a U.S. Marine Corps Family, this meant changing schools every few years. As a consequence, I've been to four grade schools (in California, Hawaii, New York), and four high schools (California, Kuwait, Austria, and North Carolina). I am active in my parish church community and am a daily communicant.

In my adopted home of Madison, Wisconsin, where I have been since 1978, I also got to act on a long-standing interest in aviation for a time and commanded a local Civil Air Patrol Squadron. My interest in aviation continues, as does my long-standing interest in, *inter alia*, spacecraft propulsion and power systems.

UFOs and UAPs

I will note at the outset that I have not personally encountered any unusual experiences related to UFO phenomena.

Unidentified Flying Objects (UFOs), and the more broadly encompassing term Unidentified Anomalous Phenomena (UAP)—the term favored by many U.S. federal agencies—have been moving in and out of public consciousness in the USA and elsewhere for decades. At various times, there have been numbers

of sightings concentrated in a given time and place that have made the local, and sometimes national, news. These groupings of sightings have been given, for reasons unbeknownst to me, the name “flaps.”

The sightings or contact experiences fall into a number of categories:

- “Moving lights in the sky,” occasionally moving to ground level
- Physical craft or objects in flight, sometimes landing, crashing, or abandoned
- Claimed encounters with apparent passengers or crew, generally humanoid, of the craft
- Claimed abductions
- “Summoning” experiences
- Encounters with beings that appear in people’s homes, usually after a prior experience

For the most part, these experiences have been relegated to the fringes of public awareness and ostensive public policy. Those making claims about these matters are typically ignored, often written off as fraudulent or delusional.

For the most part, these experiences have been relegated to the fringes of public awareness and ostensive public policy. Those making claims about these matters are typically ignored, often written off as fraudulent or delusional.

Recently, this has changed. There have been Congressional hearings concerning UFO encounters.¹ The Navy has released footage of various flying objects—perhaps most famously the “flying tic tacs”—that perform maneuvers that are **well** beyond the capability of any known man-made aircraft, and not even explainable by our current understanding of physics, much less reproducible with current engineering knowledge.

Congressional hearing witnesses who had connections to government agencies, or contractors who had security clearances who were giving testimony in

Continues on page 12

public hearings, had to decline answering many questions regarding UAP events, indicating that they needed to get permission from superiors to answer, and that any such answers would have to be given in Secure Compartmentalized Information Facilities (SCIFs). While this may be attributed, in part, to a need to keep secret classified technology, sources, and methods, developed by US organizations, it seems that various government agencies and contractors are concealing more than that, for whatever reason.

In November 2025, a movie titled “The Age of Disclosure” (produced and directed by Dan Farah) was released on Amazon. It features a series of interviews by “insiders,” including, remarkably, the U.S. Secretary of State, Marco Rubio. It is admitted, plainly, that certain U.S. government agencies and contractors and some foreign government entities are in possession of advanced technology that appears to be of non-human origin. Furthermore, it is made known there is an ongoing race to understand the technology, as a government that possesses sufficiently advanced technology will potentially have great advantages over potentially antagonistic governments that do not.

One of the aspects of this matter that caused me to take a greater interest in the field is the matter of aviation safety. Incidents involving UFOs and, especially, military aircraft have apparently been increasing in frequency. Details in regular media are thin, but incidents related outside the media, such as in the aforementioned Congressional hearings indicate that this is a concern.

There have been many cases of UFO/UAP incidents reported over the years that defy prosaic explanation. Some of these notable cases include:

1. An object crash in 1933 in Italy. Allegedly, the Vatican and the US were involved in post-war retrieval of this object.
2. A flying object crash in Brazil. There was a recent press conference in or near Washington, D.C. connected with it.
3. Temporary shutdown of nuclear-warhead-equipped intercontinental ballistic missiles (ICBMs) by means and parties unknown.
4. An extremely bright light witnessed among trees by a physician and his family driving on a nearby highway in southern Arkansas; the light and accompanying radiation were bright enough to scorch tree-trunks.

In addition to sightings and encounters, there appear to have been people injured as a consequence of being in close proximity to UFOs while on or near the ground, or people evoking a violent reaction from an object by doing things such as turning a bright spotlight on the object.

Typical Speculations

So, what are these phenomena, these flying objects, and what appear to be living creatures associated with at least some of these various UAP?

Proffered explanations run the gamut. Of course, there is no reason to assume that one explanation covers all. I will note that it seems quite clear that a substantial fraction of UFO sightings are of advanced US aircraft. However, this does not account for anywhere near all of them. The discussion that follows concerns those cases that do not fall into this category and otherwise defy prosaic explanation.

As we have been conditioned by many decades of exposure to science fiction books, television series, and movies with “alien” themes, one of the first conclusions to which people jump is that these objects are spacecraft piloted by extraterrestrial aliens. This is, in fact, the most “ordinary” explanation. While this raises questions such as how alien spacefarers would get to Earth in a reasonable time or why they would bother to visit us, and would, no doubt, present many challenges, this scenario does not present any fundamental mystery or require a fundamental change in our understanding of the cosmos.

Others posit that the visitors are not traveling through space to get to Earth but are entering our space from a parallel reality that may exist in the same physical space. Those who hold to this speculation believe that these species have developed the technology to transit between these parallel “dimensions” of reality without having to travel any substantial physical distance. In this case, the objects that are seen are not spacecraft, but vehicles or probes that are **not** intended to traverse space.

Another set of speculations would have the UFOs be of human, or at least terrestrial origin, but be the product of an isolated group of humans (or a hitherto unknown non-human terrestrial rational species) that had achieved a high degree of technical prowess while not having substantial contact with the rest of human society.

Another speculation that is proffered is that the craft

Continues on page 13

are of human origin, but are from the future, and have, by some unknown mechanism, come to our day for a purpose yet to be determined.

One aspect of the phenomena of great concern is when encounters that do not seem to involve technology reportedly occur between humans and non-human beings. Some of these may involve demonic impersonation of “aliens.” I will go into this further later.

My Experience at a Sol Foundation Conference

As, until recently, formal acknowledgment of UFO/UAP phenomena by U.S. Government agencies has been lacking, and as it is yet apparent that a great deal of information is being withheld, a number of private organizations have sprung up to collect data about encounters and to investigate cases as much as possible. One of these organizations is the Sol Foundation, which was founded in 2022 and held its first symposium at Stanford University in 2023. The foundation was started by Dr. Peter Skafish, a sociocultural anthropologist, and Dr. Garry Nolan, a physician on the faculty of Stanford University Medical School. It currently has a board of directors and advisory board made of well-credentialed people in a broad range of specialties in the physical and social sciences. Another organization that has arisen is the Disclosure Foundation, which concentrates primarily on encouraging government transparency.

I attended the Sol Foundation Symposium² that was conducted in Baveno, Italy in October 2025, despite no prior professional experience in this area and no connection to my current professional engagement—which has to do with using nuclear fusion technology to detect landmines.

The conference was attended by about 400 people, mostly Americans, as far as I could tell. It was a noticeably friendly group of people that seemed trustworthy—the sort of group where one could drop one’s wallet or personal valuable and have no fear of it being stolen.

The conference was attended by about 400 people, mostly Americans, as far as I could tell. It was a noticeably friendly group of people that seemed trustworthy—the sort of group where one could drop one’s wallet or personal valuable and have no fear of

it being stolen. My observation is that there were three distinct, if somewhat overlapping, groups of people in attendance:

1. Science/Technology types, such as myself, interested in the flying/undersea objects, the technology behind them, aviation safety, and government policy, both public and hidden.
2. “Experiencers” (their term), who are people with direct personal experience of one sort or another, ranging from people who have seen moving lights in the sky; to people who have seen or been inside of apparently non-man-made craft; to physicians who have tried to treat non-human, apparently non-terrestrial, individuals who were injured in crashes; to people who have been abducted for a time or have memories of being abducted.
3. “Quasi Mystics” (my term), who are people who lump UAP together with all manner of paranormal phenomena. I have great concern for the welfare of this group, for reasons I will go into later in this article.

Particular Presentations

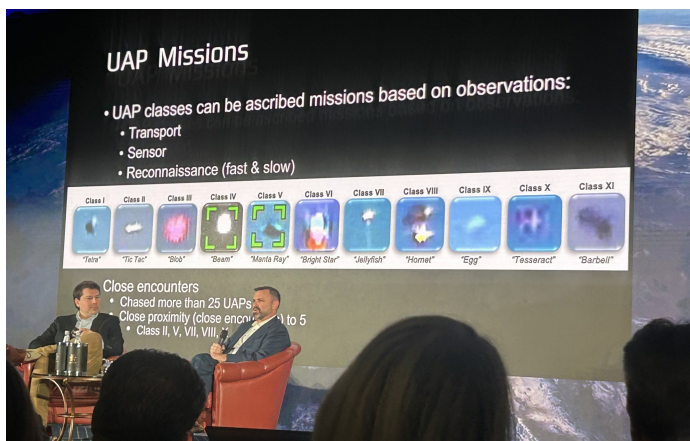
The approximately 18 presentations at the symposium, which was held over a weekend, spanned a variety of fields including astronomy, medicine, sociology, metallurgy, and law.

The first presentation was by an Astronomer, Dr. Beatriz Villarroel of the Nordic Institute for Theoretical Physics. She had been conducting a project to identify any transient stars in the astronomical data record. To this end, she began analyzing digital images of photographic plates exposed in the Palomar (200 inch) reflector telescope in California prior to 1957. Annus Domini 1957 is the year when Man started putting satellites into Earth orbit, the first being the Soviet Sputnik I. She made a deliberate choice to avoid telescopic images being contaminated by reflections and shadows caused by man-made artificial satellites. She found no evidence of vanishing stars, but she found something for which she had *not* been looking - reflective objects in near-Earth space. After screening out plate defects, digitization errors, cosmic ray effects, and considering only those objects which stopped reflecting light when passing through Earth’s shadow, the data showed that these reflective objects in near-Earth space tended to show up during nuclear weapons tests and UFO “flaps.” What these

Continues on page 14

reflective objects that appear in near-Earth space at those particular times and then are not seen so much at other times, before we launched any satellites, *are*, is a matter of speculation.

Another presentation on the “tech” side was by James Fowler, then of the Skywatcher organization. He described a private program with which he had been involved which managed to attract the apparent “attention” of anomalous flying objects by various means, track them on RADAR, and take photos of them. The project team collected enough data on these objects to categorize them by appearance and even attribute functions to them. The team recorded 11 classes of such objects. They also had access to a helicopter to attempt to approach the proximity of some of these objects. Strangely, as the helicopter got to altitude, the crew was not able to see the objects even while they were visible from the ground. Alarmingly, as the helicopter approached a given object, its forward progress was stopped, and internal instrumentation malfunctioned.



The other presentations covered a wide variety of topics including philosophy, law, and the social sciences. The most disturbing things presented were the accounts of witnesses and “whistleblowers” who suffered varying degrees of intimidation after revealing their particular experiences. These people, in the US and elsewhere, appear to be victims of shadowy groups that seem to operate with impunity. Recently, there has been much talk in Congress of trying to provide formal protection to “whistleblowers” who bring their concerns to Congress. It is not clear how this would work, however, as much of the intimidation is not lawful to begin with, and the rest (such as loss of security clearance, position, or contract) can be claimed to have been done for other reasons.

Appraisal

I have already noted my concern for the group I have labeled “quasi-mystics” and the possibility of demonic impersonation. On the way to the symposium in Baveno, I flew into Milan and spent the night there before taking a train to Baveno the next morning. A few of us who were going to the symposium “found” each other and met for dinner at a restaurant in Milan. During the dinner one of the symposium-bound individuals related that he had been born into a Catholic family, left the Church in high school, and did not give much thought to it afterwards as the years rolled by. Relatively recently, when he was in his home (if I recall his account correctly), some entity, which he took to be an alien, appeared. For reasons he does not understand, he found himself in a panic, calling out the name of Mary, the mother of Jesus. The entity immediately disappeared. Others at the table indicated to me that this is not that uncommon. Beings that are initially perceived as “aliens” appear in one fashion or another, the human object of the beings’ interest calls on the name of Jesus or Mary, and the beings flee or disappear. I noted that there is no particular reason that a simple extraterrestrial alien would flee at a human being mentioning the name of Jesus or Mary, and it seems to me that entities who do so are likely demons!

As I listened to the conversations going on around me during the symposium, it was apparent that many of those in attendance, especially of the third group I described, were heavily into New Age quasi-mysticism, or neo-Gnosticism, or both.

It was certainly not a church-going crowd at the conference. I organized an early morning Mass at a nearby church. I did not expect more than a few out of 400 to attend, in large part because there was no good way to communicate with the attendees at large, and the organizers were obviously squeamish about being helpful at all, not even being willing to make a courtesy announcement about Mass being available via the formal Signal-application group for conference announcements. As it worked out, there were only two of us, both American, for the Mass on Sunday morning. By comparison, an apparently new-agey “meditation” session held on the hotel lawn one afternoon easily drew about 30 people.

My Goals and Comments

I write and submit this article in hopes of accomplishing a number of things:

Continues on page 15

... I am genuinely concerned about the welfare of the people who are working in this field. Those who are witnesses and whistleblowers need to have spiritual support, as they frequently take a great deal of abuse and experience much grief.

First, I am genuinely concerned about the welfare of the people who are working in this field. Those who are witnesses and whistleblowers need to have spiritual support, as they frequently take a great deal of abuse and experience much grief. Apparently, the recently deceased Dr. Paul Thigpen, a devout Catholic who was a professor of Theology at Southern Catholic College in Dawsonville, Georgia, apparently was deeply involved in providing such support. I would like to see Catholic professionals and clergy provide this support.

... if it turns out that there are non-human, corporeal, rational intelligences involved with some of these phenomena, the Church will have to be involved in guiding mankind, including the faithful, in relating to them.

Second, if it turns out that there **are** non-human, corporeal, rational intelligences involved with some of these phenomena, the Church will have to be involved in guiding Mankind, including the faithful, in relating to them.

Third, to the extent that some of these phenomena may involve demonic impersonation, the people working in this field are not equipped to deal with it, and the Church must be ready to intervene.

Before closing, permit me to comment on the philosophical and religious implications of Man being in contact with non-human rational corporeal creatures, possibly more advanced than us, whether this is a consequence of our own explorations, telecommunication with non-human species, or their showing up here.

I do not jump to the conclusion that the UFO/UAP phenomena involve extraterrestrial aliens, but as this possibility looms large in many people's minds, the contingency must be addressed.

To me, it has always been plainly obvious that this unimaginably large physical universe is home to an

unimaginably large number of rational species. Of course, this is not *necessarily* the case—God can certainly create the entire universe just for Man, but I've never thought this to be the case. Just looking at life on Earth makes it clear that God loves variety. It seems unlikely that the Communion of Love which is the infinite Holy and Undivided Trinity, whose communion brings forth all of Creation—spiritual, material, and whatever categories that we cannot imagine—would be “satisfied” with having only one corporeal rational species with whom to be in communion. I have been routinely praying for the welfare of extra-terrestrial rational life forms since my childhood.

Revelation to Man—through Abraham, Moses, the prophets, and, finally, Jesus the Incarnate Word—has been directed to Man for the purpose of salvaging what can be salvaged of fallen Mankind. As there were very few men around who gave much thought to there being other habitable worlds besides our own at the time of Abraham and going forward for many centuries, it seems to me that it would have only caused pointless confusion if God decided to give Men substantial revelations about intelligent life on other worlds. My working assumption is that the Word became flesh and dwelt with fallen Man for the purpose of salvaging as many of the *sons of Adam* as are willing to be salvaged. While it is certainly *possible* that we won a sad lottery of sorts, and God chose our little Earth to be Incarnate, murdered by its inhabitants, and then rise from the dead, to save *all* the rational species of the universe from final damnation, I doubt that this is the case.

What of life in other worlds, then? What if we actually come into contact with extra-terrestrial rational corporeal beings capable of having a deliberate relationship with God?

What of life in other worlds, then? What if we actually come into contact with extraterrestrial rational corporeal beings capable of having a deliberate relationship with God?

Assuming for the sake of simplicity that we can communicate with them, the first step would be to determine whether the species is fallen. If they are not fallen, there is nothing for us to do, aside from establishing some agreed upon protocol for inter-species relationship. If the species is truly not fallen,

Continues on page 16

they may be wise to minimize contact with us, unless they are on a literal mission from God in our regard. If the species is behind us, technologically speaking, then the most charitable thing we can probably do is avoid any substantial contact, lest we become a vector of evil for that species.

Concluding Thoughts

If the species is fallen, then we would have to determine where the species is in its salvation story. This is where exotheologians would have to earn their salaries or research grants. I imagine that our role in such a situation, if any, would be to assist the members of the species in understanding the status of their salvation story and the implications of that.

One might suspect that the Lord employed many modes of salvation throughout Creation, tailored to the nature and needs of each species. His Incarnation, death, and resurrection is presumably not a necessity in all cases. However, it seems plausible that the Word has and will become flesh, and dwell, dwells, and will dwell, among some fraction of fallen species throughout our universe in a process paralleling what He did on Earth over the course of the universe's lifetime.

Making *very* conservative assumptions, I once tried to do a back-of-the-envelope estimate of how many times the Word has done or will do this. The number with which I came up was 46 *quadrillion*. The mind boggles at the thought of God taking on the nature of a rational corporeal creature, suffering, dying, and rising, that many times. Of course, God can do that, but our minds have a hard time accepting such a horrifying thought.

While meeting extraterrestrial corporeal rational species should not be a shock for the Catholic Church as a Divine institution, nor require substantial retooling of doctrine, it would be a shock to individual Catholics and completely devastating to many Sola Scriptura ecclesial communities.

While meeting extraterrestrial corporeal rational species should not be a shock for the Catholic Church as a Divine institution, nor require substantial retooling of doctrine, it **would** be a shock to individual Catholics and completely devastating to many Sola Scrip-

tura ecclesial communities. It would be our task as scientists, engineers, technologists, philosophers, and theologians to assist our fellow Catholics and other Christians in dealing with the shock. Based on my conversations with Catholics over the years, many would have a hard time dealing with the idea of there being multiple—perhaps quadrillions—of alien versions of Jesus, the same Divine Being taking on multiple corporeal natures. The same consideration will apply when they would have to grasp the idea of there being multiple—perhaps quadrillions—of alien equivalents to the Blessed Virgin Mary. As we think of Mary as being **the** Queen of Heaven and **the** Queen of Angels, it would be a radical shift for many to think of Mary as being the Queen of Heaven only in regard to the saved Sons of Adam.

The effect on the Sola Scriptura ecclesial communities would likely be more profound. Holy Scripture deals explicitly with Men and angels, and only vaguely hints at other possible rational creatures. As a consequence, the Sola Scriptura ecclesial communities, largely have an anthropocentric view of Creation, and, in the event of unambiguous encounters with extra-terrestrial rational corporeal creatures, they will almost certainly fall back, at least initially, on the assertion that all such creatures can be nothing other than demons deceiving us—in *all* cases.

Since I am an engineer, after all, I should also note that, if we **do** come into substantial overt contact with an extraterrestrial rational species that is technologically well advanced beyond us, we will be profoundly shocked. However, we have witnessed this in our terrestrial history, so we have some idea how that would likely play out.

Finally, I entreat you who read this to consider getting involved in the field. I would like to form an informal study and discussion group to see how we, as Catholics, scientists, engineers, philosophers, theologians, etc., can best engage the topic and best serve God and Man in this matter.

If you are willing to consider this, please contact me at richard.bonomo@wisc.edu or 608-258-8613. ■

References:

- (1) for example: <https://www.congress.gov/event/118th-congress/house-event/116282/text>
- (2) <https://thesolfoundation.org/events/the-2025-sol-foundation-symposium/>