



Institute For Theological Encounter With Science and Technology

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Thankful for Education

Thanksgiving each year brings to mind the things we should be thankful for, and that’s usually “current” aspects of life, such as close family members, good health, economic security, etc. It seems weird to bring up something from the distant past – in 2015 you wouldn’t likely thank God for a high school track championship long ago.

But there is one thing from many years ago that we should all be grateful for every year: education. What we learned in our formative years stays with us, and often has determined a lifetime trajectory. Many fellow human beings without education couldn’t follow a comparable trajectory.

This was made particularly clear to me while recently watching a TV show on EWTN, “Father Spitzer’s Universe.” It was the first in a series of monthly interviews with our close colleague Fr. Robert J. Spitzer, SJ director of the Magis Center, where he discussed some of his themes familiar to ITEST members, and also answered questions from callers to the show. The first part of the interview was about the 4 levels of happiness, but then callers started to ask about the creation of the universe, the multiverse, the “bouncing” universe, etc. Fr. Spitzer gave fine explanations, because of his excellent knowledge of cosmology. While I was watching, it occurred to me that of all the viewers of that EWTN show, I was probably one of a dozen or so who understood everything Fr. Spitzer said. You could see that the interviewer’s head was spinning during Fr. Spitzer’s answers.

My ability to keep up came from my education, beginning two thirds of a century ago, but continuing to the present. In fact, having the desire for continuing education is an exceptional gift as well, and something to be grateful for. Furthermore, those who provide that continuing education for adults merit our gratitude; and the technology that makes it possible (on-line classes, etc.) contributes to life-long learning in ways never accessible to previous generations.

To be interested enough to read ITEST publications, one must be attentive enough to at least entertain the possibility that religion and science have something to say to each other. That degree of curiosity isn’t automatic or shared by everyone; it’s a gift from God, and therefore something for which to express thanks.

Another major benefit of education is the freedom from having to believe what some talking head says. It is very common to hear the opening clause “I’m not a scientist, but...” followed by a discourse derived from a TV celebrity. The actor Bill Nye the Science Guy grew to stardom by doing simple demos for children, and now he’s the oracle for countless adults. We who have studied science (even at the high-school level) can think for ourselves and aren’t subject to fashionable notions recited by entertainers. Sadly, far too many people have lost confidence in their own education, and cave in to popular nonsense draped in the mantle of science. The atheist’s claim that “science disproves God” can be traced to that blunder.

When we can think more clearly because of our studies of the great minds of yesteryear (St. Thomas Aquinas, etc.), it’s a mistake to take that ability for granted. Rather, thank God for that very special gift.

Thomas P. Sheahan
Director, ITEST

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Announcements

Economic Justice in the 21st Century: Myth or Reality

A set of CDs containing the edited proceedings of this timely conference held at the Rigali Center in St Louis, October 23rd and 24th, will be sent to all ITEST 2015 dues-paid members.

Although you may not have been able to attend our conference in person, never fear. You will be able to listen to the excellent and thought provoking presentations by leading thinkers in this area of economic justice. We plan to mail the CDs before Christmas or early in the new year, 2016. (See Tom Sheahen's executive Summary of the conference on page 14 of this issue of the Bulletin)

Good News! Grants Received

The Annual Catholic Appeal (ACA) of the St Louis Archdiocese awarded ITEST a \$10,000 grant following Sister Marianne's presentation on the contributions of ITEST to Catholic Education on the elementary and high school levels. These funds will be directed to strengthening ITEST's continuing ministry to students in Catholic schools in St Louis and around the country.

In his letter notifying ITEST of the award, Archbishop Carlson, Archbishop of St. Louis, wrote "Thank you for sharing with me and the Committee all of the excellent programs, presentations and workshops ITEST is providing to so many educators and school age children throughout the archdiocese."

The Dr. Scholl Foundation recently notified us that we would be receiving a small grant of \$5,000 for our work with high school students in the faith/science area.

While these grants certainly help ITEST financially, we really depend upon your membership dues and generous donations to support and sustain our faith/science ministry.

Speaking of Membership!

By now you have all received the first renewal letter for calendar year 2016. We hope that you will respond before the Christmas "spending season" settles in. In the renewal letter Tom Sheahen, Thad Niemira and I wrote not only of the accomplishments of the past but of future expectations. Not willing to rest on our laurels, the ITEST Board of Directors is planning to work more closely with archdiocesan agencies for a deeper collaboration among various ministries

connected to the ITEST faith/science ministry, for example, education, evangelization, social and economic justice and others.

Congratulations to Brother Guy Consolmagno, SJ

Pope Francis has chosen Jesuit Brother Guy Consolmagno, to be the new director of the Vatican Observatory. He succeeds Argentine Jesuit Father Jose Funes who has been its director since 2006.

Brother Guy, an astronomer, author, ITEST member and contributor to ITEST conferences/workshops and the bulletin, has been with the Vatican Observatory since 1993. Among his books are *God's Mechanics: How Scientists and Engineers Make Sense of Religion*, (2008), *Would you Baptize an Extraterrestrial?* (2014) with Paul Mueller, and others. Following the success of his books, Consolmagno has branched out into audio books. Produced by **Now You Know Media** (NYKM) audio productions, *Galileo: Science, Faith, and the Catholic Church* is an engaging set of CDs guaranteed to hold your interest during your commute to and from work or in the comfort of your living room. Another NYKM audio production featuring Consolmagno is, *Meaning: Exploring the Big Questions of the Cosmos with a Vatican Scientist*. ITEST strongly recommends both productions. Consolmagno, an astute teacher and scientist has a broad appeal not only to people in the scientific community but to those who have an interest in how the integration of faith and science can have meaning in today's world.

In Memoriam - ITEST Members

Stephen Veazey physicist and ardent stamp collector who died last year in England

Sister Mary Ellen Murphy, RSM scientist and educator who died July 27, 2015

Brother Lawrence, Bradford, OSB Microbiologist, and musician who died September 15, 2015

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



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Capitalism and the Culture of Consumerism

By Dawn Carpenter, September, 2015

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(From the author) This week we celebrate the feast day of Saint Matthew, patron saint of bankers. Reflecting upon my patron saint, I recall many times having been asked how capitalism can be compatible with Christian theology. As a banker and Catholic intellectual, I draw upon both faith and reason to explain this often misunderstood relationship.

What Capitalism is and What it is Not.

Many people use the term capitalism to mean an entire philosophy of life where money and material acquisition is seen as the ultimate goal of existence. This understanding is not capitalism.

In contrast, Scottish moral philosopher Adam Smith, recognized throughout the world as the Father of Capitalism and its chief apologist, writes in *The Theory of Moral Sentiments* that “the care of the universal happiness of all rational and sensible beings, is the business of God and not of man.”

A capitalist society, Smith writes in *Inquiry into the Nature and Causes of the Wealth of Nations*, is one in which consumers are free to demand products to serve their needs, and firms must compete for the right to supply products (and earn profits). This is a system of economic organization (not a philosophy of life) where markets are created to serve the needs of man.

Pope Saint John Paul II explained in *Sollicitudo Rei Socialis* that “the economy, in fact, is only one aspect and one dimension of the whole of human activity.

Dawn Carpenter Biography

Ms. Carpenter is currently working toward a doctorate in Liberal Studies at Georgetown University where her research interest is the intersection of philosophy, theology, business and work. She has previously earned a M.A. in systematic theology from the Notre Dame Graduate School of Theology at Christendom College, a M.P.M. in public finance from the University of Maryland, and a M.A./B.A. in political science from American University. Ms. Carpenter and her family reside in Washington, DC.

(From Catholic Stand)

If economic life is absolutized, if the production and consumption of goods become the center of social life and society’s only value—not subject to any other value—the reason is to be found not so much in the economic system itself as in the fact that the *entire socio-cultural system (emphasis added)*, by ignoring the ethical and religious dimension, has been weakened, and ends by limiting itself to the production of goods and services alone.”

“What the Church criticizes is the spirit that capitalism has encouraged, utilizing capital to subject and oppress the man,” Pope Francis wrote in his little known 1998 book, titled *Dialogues between John Paul II and Fidel Castro*.

*What we often come to think of as
“capitalism” is really something else —
the culture of consumerism.*

What we often come to think of as “capitalism” is really something else—the culture of consumerism.

The Scourge of Consumerism.

The culture of consumerism is understood as a purely materialist answer to the meaning of life. Why do we live: to consume. How do we find happiness: we acquire “things.” Economic theorists hold that there is a distinction between the economic sphere and the moral/cultural sphere.

In 1965, The Church Fathers in *Gaudium et Spes* made clear that “[I]t is what a man *is*, rather than what he *has* that counts.” The spiritual risk is that the human person is diminished by his own economic progress *by becoming less an acting person*, who reasons about his good and pursues it in the world, and more *a person who is acted upon*—ruled by passions and subject to outside manipulation of his desires. This dichotomy

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between “having” and “being” is the frame work for the Magisterial teaching on consumerism.

Pope Paul VI’s 1967 encyclical *Populorum Progressio* laid the foundation for future teachings on putting economic development into a moral context. He explained that “[e]very kind of progress is a two-edged sword. It is necessary if man is to grow as a human being; yet it can also enslave him, if he comes to regard it as a supreme good and cannot look beyond it.”

In following, Pope Saint John Paul II’s first encyclical, *Redemptor Hominis*, continues Paul VI’s teaching by addressing the scourge of consumerism—reminding us that the world economic situation is the embodiment of the parable of the rich man and Lazarus. He calls on us to recall the rich man in the scriptures (caught up in his feasting) who does not see the important human good outside his door—a man in need of basic material goods. He warns that (1) an abundance of goods makes people vulnerable to consumerism (or slavery to possessions), (2) consumerism is essentially an inability to see beyond material goods, and (3) consumerism generates a restlessness that manifests in a constant search for new products and the creation of a “throw-away” culture.

In celebration of the twentieth anniversary of *Populorum Progressio*, Pope Saint John Paul II, continued his teachings on the dangers of consumerism in *Sollicitudo Rei Socialis*, reminding us that the economic growth does not necessarily lead to moral improvement: “In fact there is a better understanding today that the mere accumulation of goods and services, even for the benefit of the majority, is not enough for the realization of human happiness.”

In his book *Following Christ in a Consumer Society*, John Kavanaugh argues that consumerism is a “Commodity Form” of life. As such, he means that consumerism is “a system of reality and a religion.” He argues that consumerism is “a total world view” that “affects the way we think and feel, the way we love and pray, the way we evaluate our enemies, the way we related to our spouses and children.” Kavanaugh sees that the “Commodity Form” of life is a complete way of perceiving, valuing and behaving.

Why is Consumerism So Dangerous?

Consumerism is deficient as a moral and cultural attitude because it treats every person and relation as a commodity...

Consumerism is deficient as a moral and cultural attitude because it treats every person and relation as a commodity that can be had rather than recognizing the existence of goods that cannot be reduced to commodities.

Kavanaugh concludes that the “Commodity Form reveals our very being and purpose as calculable solely in terms of what we possess. We are only insofar as we possess. We are what we possess. We are, consequently, possessed by our possession, produced by our products.” In the end, we are “remade in the image and likeness of our own handiwork, we are revealed as commodities... We are robbed of our very humanity.”

Pope Francis in *Evangelii Gaudium* explains the danger: “Human beings are themselves considered consumer goods to be used and then discarded. We have created a ‘disposable’ culture which is now spreading. It is no longer simply about exploitation and oppression, but something new. Exclusion ultimately has to do with what it means to be a part of the society in which we live; those excluded are no longer society’s underside or its fringes or its disenfranchised – they are no longer even a part of it. The excluded are not the ‘exploited’ but the outcast, the ‘leftovers.’”

Consumerism as a Cultural Distortion of Human Freedom—Not the Result of a Free Market.

Consumerism is not a necessary by-product of the market but a very common distortion of freedom.

The free market is an expression of the human capacity for free choices. Consumerism is not a necessary by-product of the market but a very common distortion of freedom. It is the result from poor choices made by free individuals.

Pope Saint John Paul II warns in *Sollicitudo Rei Socialis*:

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1. An abundance of goods makes people vulnerable to consumerism and a susceptible to becoming a slave to possessions.
2. Consumerism is essentially an inability to see beyond material goods.
3. There is a restlessness inherent in consumerism that creates a perpetual need to new products which facilitates a type of “throw-away” culture.

Pope Saint John Paul II reminds us that the dominion given to Adam and Eve was not absolute and that the original sin of Adam has distorted the relationship between man and the material world. *Sollicitudo Rei Socialis* underscores that consumerism is yet another chapter in the ongoing story of original sin and the promise of redemption.

Capitalism is merely an instrument for effectively utilizing resources and responding to needs.

Capitalism is merely an instrument for effectively utilizing resources and responding to needs. At its heart is work, initiative and entrepreneurial drive—operating in the economic sphere in such a way as to appeal to man’s inherent dignity.

In his book *Doing Well and Doing Good: The Chal-*

lenge to the Christian Capitalist, Father Richard John Neuhaus reminds us that [The pope] is not so much criticizing an economic system as he is warning against the excesses that the efficient working of that system makes possible.”

Is Capitalism Sufficient for Man?

In the end, capitalism is a mode of economic endeavor layered upon a fallen world.

In the end, capitalism is a mode of economic endeavor layered upon a fallen world. Some of the most disheartening abuses of our fellow man have been done in the pursuit of profit. However, does capitalism afford man the opportunity to exercise his freedoms? Yes. Is there evil in the world? Yes. But Adam Smith would posit that the chaotic interaction of self-interested consumers and of self-interested firms produces outcomes that benefit society. Our job as individuals is to call on our conscience as we participate in the market and call out those who disregard the dignity of our fellow man. Arguably this is a cultural endeavor and not a metaphysical one. Saint Matthew, pray for us all.

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The Problem of Riches

“I tell you solemnly, it will be hard for a rich person to enter the kingdom of heaven. Yes, I tell you again, it is easier for a camel to pass through the eye of a needle than for a rich person to enter the kingdom of heaven”. (Mt. 19:21-24)

These are strong words. And it is good to remember that it is indeed Christ, and not our own virtue, which will save us. And it is also good to remember that Jesus loved Bethany, enjoyed the celebrations of life, was delighted at the ointment that eased his tired feet. He was not against the good things of the earth because he knew they were for the glory of God and the help of souls.

Zacchaeus was a rich man whom Jesus met. What did Jesus say to him? Not “I reject you,” or “Woe to you,” but “I want to go to your home today.” And Zacchaeus, so struck by the open heart of the One who called him, said that half of his holdings would go to the poor. And Jesus Christ did not say: “Only half?”

Yet—and it would do well for us to consider this—he was betrayed for thirty pieces of silver by a person who pretended to have a concern for the poor.

Judas’s concern, we know, was not for the poor. It was for himself.”

**- Faces of Poverty, Faces of Christ
by John F. Kavanaugh, SJ
Orbis Books, New York, 1991. pp. 73-74.**

Artificial Intelligence, Humans and Spirituality

By Father Joseph Lee, SDB

Computers and Artificial Intelligence (AI) can operate driverless vehicles, devise reasonable solutions to real world military problems, and manage perpetual trusts.¹ Numerous films have portrayed the concept of AI and robots. But all not rosy. There are genuine concerns for human bodies and AI's threats of disembodiment, highlighted by Sr.M. Timothy Prokes, FSE.² Indeed, the term "Apocalyptic AI" has been used to describe the apocalyptic theology in artificial intelligence and robotics, as found in popular science writing by Ray Kurzweil and Marvin Minsky.³

There are also concepts such as paradise, "faith in technological salvation", "dreams of robotic salvation."⁴ However, others highlight how computers cannot love because they are machines. A "telling proof" noted by the late Fr. Stanley L. Jaki, OSB is that robotics researcher and futurist Hans Moravec dedicated his book to his wife as the one who made him whole.⁵

Looking deeper, spiritless AI surprisingly reveals the human spirit, and can help us appreciate how God lovingly relates with persons. These comparisons are worth exploring because of the faith placed in computers and their indispensability.⁶ This article consid-

ers *interactive voice recognition, a technology which is deployed widely to talk with human beings, using sounds akin to a human voice and speech patterns. Yet, communicating with machines can be an "inhuman" experience.*

Talking to a machine

Business and government customer service mostly occurs through call centers.⁷ A customer dials a toll free telephone number, where an *interactive voice recognition (IVR)* system delivers a series of announcements and interactive menus. Another term is *interactive voice response (also IVR)*.⁸ Typically, the voice prompts for information, such as, 'Welcome to...for Sales, please press 1.' While familiar, this intelligent machine technology often leaves people longing to speak with a human being.

There are other uses. Intelligent tutoring systems can offer instruction which adapts to each student's learning.⁹ Another example is patients with diabetes who received weekly IVR calls.¹⁰ The patients answered questions about past week using the telephone keypad.

But IVR has its difficulties. One study of 185 older adults found that adults aged 65 and older experience significant difficulties in interacting with IVR systems.¹¹ Although customers use IVR systems daily, they are not yet content with them.¹² In pondering the limitations, we see some spiritual themes emerging in human-computer interactions.

Forgetting and Transience

As soon as someone hears, "Press 1 for English services", the instruction has ended.¹³ Frequently, users must listen again to the instructions because they quickly forget what they heard. This is reminiscent of the words of Jesus to his disciples before his passion and death, foretelling the coming of the Spirit, "I still have many things to say to you, but you cannot bear them now" (John 16:12). Forgetting is a reality of human existence, although to be forgetful of God is an error (Jeremiah 3:21). As Jesus asks, "Were not ten made clean? But the other nine, where are they?" (Luke 17:17).

Joseph Lee SDB Biography

Father Lee is a member of the Salesians of Don Bosco. His doctorate is from Flinders University, Adelaide (Australia), exploring the Catholic Church's teaching on the human soul within the contexts of the neurosciences, modern philosophy, and various spiritual themes. He is also interested in the philosophical and ethical implications of artificial intelligence, and technologies such as cochlear implantation and brain-computer interfaces.

Father Lee is rector of the Gawler/Brooklyn Park Salesian Community in South Australia (SA), and is parish priest of the Parish of St John Bosco and St. Aloysius at Brooklyn Park and Richmond, SA. Currently he is scholar in residence in the Department of Theology within the School of Humanities and Creative Arts at Flinders University.

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Sometimes the ability to forget is spiritually helpful. St. Paul forgets what lies behind and strains forward to what lies ahead, (Phil 3:13). St. Francis de Sales writes, “we must not fret over our own imperfections.”¹⁴ He says that reason requires we ought to be sorry in committing fault, nonetheless, we ought not be emotionally displeased. For example when overcome by anger, St. Francis observes people becoming angry at being angry, vexed at being vexed. Human nature is imperfect, which is something God already knows (Psalm 103:1-14; John 2:24-25).

Linearity

IVRs play messages such as: “Press 1 for English services. Press 2 for Chinese services. Press 3 for Spanish services”, and is called a linear method.¹⁵ Users can only receive information in a certain order. A related difficulty is information navigation, where callers had to return to the root or the previous menu.¹⁶ This is equated to listening to music by cassette tapes. The listener cannot navigate from the first track to the last in the tape.

There is a need for linearity and orderly exposition—schooling involves methodical teaching. Also, with systematic texts, e.g. St. Thomas Aquinas’ *Summa Theologiae*. However, interacting with IVR systems contrasts God who is not law-like nor linear. Pope Francis reminds us that God is a “God of Surprises.”¹⁷ The Holy Father was commenting on Luke 11:29-32, where Jesus criticizes the crowd as “an evil generation” because demanded a sign. “They had forgotten that God is the God of the law”, but also “the God of surprises.”

Ambiguity

Speech can be ambiguous.¹⁸ IVR systems do not have the characteristics of good conversation. As St. Francis de Sales suggests, “your language should be restrained, frank, sincere, candid, unaffected, and honest.”¹⁹ The technology is incomparable to the infinitely loving yet sometimes subtle ways God communicates with humanity.

Nevertheless, sometimes ambiguity features in the spiritual life. In the gospels the disciples did not always understand Jesus’ words, for example, the passion predictions (Mark 9:32), his teaching about greatness as service (Mark 9:33-37); even about the resurrection (Luke 24:13-17). The disciples asked Je-

sus why he spoke to the crowds in parables (Matthew 13:10-17). Jesus’ disciples appreciated when he was “speaking plainly, not in any figure of speech!” (John 16:29). God’s ways are sometimes mysterious.

Achieving perfection for progress

A pertinent IVR difficulty is where keying errors occurred and concentration was lost when following the machine voice commands.²⁰ Moving forward in the interaction is only possible by correct responses recognized by the system. Yet such narrow performance-based progress is far from how one lives the spiritual life.

Indeed, the *Catholic Catechism* teaches that when Jesus gave the words to pray (Matthew 6:9-13), he does not give a formula to repeat automatically. Instead, in every vocal prayer, “it is through the Word of God that the Holy Spirit teaches the children of God to pray to their Father. Jesus not only gives us the words of our filial prayer; at the same time he gives us the Spirit by whom these words become in us ‘spirit and life’.”²¹

Conversely, the perfect performance demanded by IVR differs to Christian notions. It is generally accepted that perfection is not very appealing to modern thinking, as it suggests attitudes not favored such as elitism, perfectionism, and individualism: qualities seemingly incompatible with the humble gospel of Jesus Christ.²² Benedictines note that even when the spiritual classic the *Rule* of St. Benedict mentions perfection, it is really perfection closer to love than to flawlessness; it is dynamic, and full of the language of progress. Similarly, journeying towards God is an archetypal motif in spiritual masters such as St. Teresa of Avila and St. Bonaventure. Human spiritual growth is a work of grace and patience.

Conclusions

AI systems as encountered in IVR cannot successfully imitate a human being. Yet they highlight the profound human dimensions of communicating, and being in loving relationship with God who knows humanity and always is surprising. The IVR difficulties: forgetting and transience, linearity, ambiguity, and achieving perfection for progress, remind us of important human and spiritual themes.

When applied to communicating with God, the divine

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qualities are valued: enduring memory from the one who creates, imaginative complexity, who speaks in diverse ways, and does not have Pelagian expectations.

Pope St. John Paul II taught that machines are instruments at our service. "Their 'intelligence' is limited for they do not possess reason in the full sense of the term, the reason that enables man to think like a creature, to comprehend the good, the true and the beautiful, to direct his life and to proceed towards his end by voluntary action."²³ After time spent navigating IVR technologies there may be moments to be thankful for normal speech with another human, while also giving praise to God for becoming a human being like us.

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"The dialogue between science and faith is a vital field in the New Evangelization. On the one hand, this dialogue requires the openness of reason to the mystery which transcends it and an awareness of the fundamental limits of scientific knowledge. On the other hand, it also requires a faith that is open to reason and to the results of scientific research."

- From the Bishops at the 2012 Synod on The New Evangelization

Apollos, Cephas or Paul?

By Father Robert Brungs, SJ

September 1987

Father Brungs submitted this article to a national Catholic newspaper for possible publication as an OP-ED. In his letter he wrote: "The consideration of the issues of "conflict," and "dissent" in the Church and the frequent use of politically-charged labels within the faith community, led me to write some of my own reflections. Thus, I offer them to you with the hope that those who read the article (if it is published) and those who engage in dialogue will be able '...to stand together, rooted in Christ,...' all the while retaining their own perspective on issues."

Father Brungs received a short polite refusal from the editor, citing 'a serious space crunch.'

It is now 20 years since the end of Vatican II and I am growing old in its shade. As the Church matures in the Council's wisdom, inspired, as we know, by the Spirit's presence, one aspect of the post-Vatican Church in the United States has begun to disturb me more and more, the loss of unity within our family.

We seem more and more to fit the description which St. Paul uses about the Church in Corinth. *Mutatis mutandis*, how many of us are for Apollos? How many for Cephas? How many for Paul? Many seem to see the Pope and the Vatican as enemies! How can this be?

There are (and always have been) areas for legitimate disagreement in the life of the whole Church and of the regional or local churches. Such conflict existed even in the Apostolic Church. We need only recall the conflict between Peter and Paul which grew out of the evangelization of the pagans and the reaction of the "Judaizing" party. Differences of view can be inferred from Paul's treatment of eating meat offered to idols and in the divergent emphases put on good works by Saints Paul and James. None of these seem terribly important to us because they are not our problems. But they were critical issues to the Apostolic Church. Both sides quite vigorously promoted their views. It was hardly a tranquil time in the Church, but she prospered mightily.

And so it has been through the whole history of the Church. Periods of relative unanimity have been very rare. In that sense, the period, say, from 1920-1965 may have been an anomaly. But we always have to ask ourselves what "conflicts" are productive to the growth of the Church and which are destructive? Is there any approach that may help us consider our differences in a way that avoids "being for Apollos, or

Paul or Cephas."

St. Paul himself gave the answer to the church in Corinth – and it was an answer that rings down the ages to our own time and our own place. "Has Christ been parceled out? Was it Paul that was crucified for you? Were you baptized in the name of Paul?...After all, what is Apollos and what is Paul? They are servants who brought the faith to you. Even the different ways in which they brought it were assigned to them by the Lord...Neither the planter nor the waterer matters: only God, who makes things grow." Paul goes on to say that no one can lay any foundation other than the one which has already been laid, that is Jesus Christ.

Before all else, we must be rooted in Jesus Christ. We can serve and love the Father only in union with Christ.

Before all else, we must be rooted in Jesus Christ. We can serve and love the Father only in union with Christ. We can live our Catholic lives only within "the holy society in which we cling to God"—that beautiful description of the Church given by St. Augustine. Within that holy society we must be in unity with the faithful of the past and with each other, so that we can pass on a united love and service of the Lord to our successors in the Faith.

We have been commanded to be "perfect as our Heavenly Father is perfect." This, I believe, is meant literally as a commandment, not as an ideal or as an exhortation. I believe it is an imperative, not a subjunctive nor an optative. How can we be perfect, fallen creatures prey to the many forms of egotism? In union with Christ, who is as perfect as the Father, we can

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grow into that perfection. It is not something that we can achieve apart from Him, either in this life or in the next.

But this union with Christ exists for us only in that holy society in which we cling to (i.e., worship) God. St. Paul tells us that this is an ordered society in which we have different gifts of the Spirit and differing calls to the service of each other, the creation and God. And here's where the struggles occur among us.

It is not a conflict between the "Right" and the "Left" nor between "Liberals" and "Conservatives." The use of such politically-coined and politically-charged labels demeans the importance (necessity?) of the divisions among us. We do not all have the same gifts nor do we have the same calls to service nor do we have the same experiences of the world and of God nor do we have the same perceptions of the one truth who is our God. Not only can't we all be the same, we are not meant to be the same. Always, in the Church, the conflicts seem to come down to which perception is correct—and it is always that from both sides. Yet, each one of us is unique and, united with Christ, more deeply individual than ever. There is simply no way we can be the same, nor even having the same vision of God's will for the growth of the Church. The advance of the Church, under the ministration of the Spirit, depends upon the unifying of those varying perspectives in the love of and for Christ.

Yet, despite the need for differences in the life and strength of the Church, I find it difficult to imagine Christ being pleased with labels like 'Left' and 'Right'. The Essential difference, which is degraded by such labels, is our view of love and authority. In our society these two poles are almost always dichotomized—and we have drunk deeply from that tainted water. In the holy society, love must be expressed under authority and authority can be wielded only in love. Or put it another way: the arena of the struggle we face in a holy society peopled by us who are wounded by sin is again the secular dichotomy between truth and freedom. And yet, in God's Kingdom we cannot be free apart from the Truth, nor can Truth be pursued or advanced except within the "freedom of the sons of God." So whether we are more concerned with truth and authority or freedom and love, we must somehow embrace all at once if we wish to remain in Christ. The polarity—like that of divinity and humanity—must

remain and be fruitful.

How can we collectively reach for unity within the holy society. St. Paul in addressing a church (Philippi) that needed unity of conviction (as we do) states: "If our life in Christ means anything to you, if love can persuade at all, or the Spirit that we have in common, or any tenderness and sympathy. Then be united in your convictions and united in your love, with a common purpose and a common mind....there must be no competition among you, no conceit; but everybody is to be self-effacing. Always consider the other person to be better than yourself, so that nobody thinks of his own interests first but everybody thinks of other people's interests instead. In your minds you must be the same as Christ Jesus:..."

Here is the issue!

We must be the same as Christ Jesus, who came not to be served but to serve.

Here is the issue! We must be the same as Christ Jesus, who came not to be served but to serve. What would happen to the stridency of our disagreements if we followed St. Paul's directions? But once again, we cannot do so unless we are united in our love and service of the Lord Christ. If we are so united to him that his mind is ours, then we can be united to each other—but only then. If we pursue some private crusade (or vendetta) or some public effort inspired by an unspiritual society or by a reaction to it, then we cannot be unified and the holy society will inevitably be fragmented.

If, however, we can live out the mind of Christ, we can stand hand in hand, even if some look more toward the pole of love and freedom and others look more toward that of authority and truth. But if we stand for love and freedom only—from one end of the polarity—or only for authority and truth, we cannot reach each other and the body of Christ is no longer one body. Whether we are labeled as "liberal" or "conservative," "evangelical" or "fundamentalist", we must be able to stand together, rooted in Christ, with our own perspective on issues. If we dichotomize the holy society into "us" and "them" or "the good guys" and "the bad guys" then we simply talk (and live) past each other and end up "excommunicating" each other. We end up being "not in the mind of Christ." Christ will have been par-

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celed out. In his name, we would deny His name!

Please above all, let us never designate each other as “enemy.” How can we be brothers and sisters in the family of Christ as enemies? If each of us were to spend more time trying to assimilate the goodness in the other’s position and less time denouncing its inadequacy, we would I believe, have taken a significant step in putting on the mind of Christ.

Please, let us try “to love one another as He has loved us.” There will be growth for the Church in that embrace.

The editors are often surprised when reading through some of Father Brungs’ articles, written as far back as 30 years or more, that his words still strike a chord – or a nerve, if you will –relating to issues of today’s faith community: the practice of labeling, for one, is still alive and kicking in the faith community. In this article Father Brungs pleads quite effectively for dialogue that is “...rooted in Christ.” Can we honestly say today that our dialogue with those of our faith community who do not agree with us is truly “...rooted in Christ?”

DVD: In The Beginning : Evidence for God from Physics

Four lectures on two DVDs by Fr. Robert J. Spitzer, SJ

Produced by the *Magis Center of Reason and Faith*,
13280 Chapman Avenue, Garden Grove, Ca. 92840-4400

Reviewed by Ralph Olliges and Thomas P. Sheahen

There are several different ways of presenting the comprehensive picture of God’s creation that has been synthesized by Fr. Robert J. Spitzer, SJ *In the Beginning: Evidence for God from Physics Series* is a set of two DVDs that are intended for use in parishes over four weeks to promote discussion about faith and science. These videos show Fr Spitzer on stage discussing topics on faith and science. The presentation style features people on the street interviews with graphics interspersed within a Fr. Spitzer lecture. Each video is about one hour long, and it covers one major theme. That makes a convenient way to initiate a parish or classroom discussion which focuses on that particular theme.

The content of this series is what Fr. Spitzer has presented live to many dioceses and universities across America: his explanation of why modern physics points to God as the creator of the universe. It is a very comprehensive exposition, which is usually presented all at once to an audience. Spitzer presents the most *reasonable* and *responsible* interpretation of all the available evidence.

All this is made easier if you’ve read Spitzer’s book *New Proofs for the Existence of God* (Eerdmans: 2010). For the many who have not, the pause and backspace buttons enable the viewer to ask “Did I really understand that point?”

The topics of the sequential videos are:

Episode 1 – The Big Bang and Our Universe

Today, more evidence than ever before exists for the creation of the universe by God. The new atheism in the popular media attempts to use science to convey their atheistic beliefs. One question to ask the new media is “Where is the evidence for your stand?” Their motives are not scientific and do not necessarily provide us with all of the facts.

Sir Isaac Newton held three assumptions about the universe: (a) it was infinite in time, (b) it was infinite in space and (c) it was infinite in mass points. Fr. Georges LeMaitre, a Belgian priest, said that we should consider the universe as a deflated balloon and that it keeps stretching and expanding. Thus, there had to be a beginning. The observations of Edwin Hubble showed that the universe is expanding where galaxies are moving apart.

Science is inductive; it argues from the particular to the general. There are four known forces in the universe: (1) electro-magnetic force (electrons and protons); (2) strong, nuclear force; (3) weak force; and (4) gravitational force. The Big Bang Theory is well established. The universe is composed of 4.6% visible matter; 23% dark matter; and 72.4% dark energy. Science is always open to new theories.

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Episode 2 – Did the Universe Have a Beginning?

For about ¾ of a century, most scientists have agreed that our universe started with an explosive beginning, the *Big Bang*. Some have argued for a “multi-verse” or a “bouncing” universe. The beginning of physical time is when the universe came into existence. Nothing existed “prior” to that. Nothing can come from nothing, so there had to be a causal power outside of physical time and space. The requirement of a beginning indicates that the universe had to have a creator, *transcendent* to the universe; which we identify with God.

Did the universe *have to* have a beginning? Yes. Fr. Spitzer examines this question from two approaches: (a) Space-Time Geometry proofs and (b) the second law of thermodynamics. The space-time geometry proof notes that just over a decade ago, physicists proved that *any* universe is “past-time limited,” which means that it doesn’t go back forever. Hence it must have had a beginning. This proof is *very* general; the only condition is that the average rate of expansion (the *Hubble constant*) must be greater than zero – that is, the universe is expanding.

Entropy is a measure of disorder; low entropy (organized state) is contrasted to high entropy (disorganized state). Think of a pool table with balls scattered around; that conveys the image of change from order to disorder well. Our universe began in a state of low entropy, for a very good reason, and as it expands it evolves continuously toward a state of higher entropy, toward increasing disorder.

Episode 3 – Is Their Evidence of Fine-tuning, Design and Intelligence in the Universe?

Fine-tuning expresses the incredible precision of the universe we live in. There are 17 numerical conditions (ratios of numbers fixed from the very beginning) that govern our universe. If any of them were different by a tiny amount, then we would not exist. These are known collectively as the *anthropic coincidences*. The probability of them all happening by chance is 1



part in $10^{(10^{123})}$, a number so big that it is impossible for all the zeroes to ever be written out.

The incredible precision that makes intelligent life possible is far more finely tuned than a number obtained by multiplying the number of galaxies (100 billion, 10^{11}) times the number of stars in a galaxy (1011). The most *reasonable* and *responsible* conclusion is that it was accomplished by a super-intelligence, which is God.

The multiverse theory has three inherent weaknesses: (a)

One cannot observe the other universes; (b) it violates Ockham’s razor; and (c) it requires meta-level fine-tuning. The fine-tuning is attributable to a super-human, super-intellect, which we call God.

Episode 4 – Physics, Evolution and the Bible

In the fourth lecture, Spitzer brings in the Bible, explaining how the Genesis narrative serves to convey theological insights, not a scientific account. Here the discussion moves away from the heavy physics into more familiar territory. The bible is not about science, but rather about theology. Making reference to several Papal Encyclicals, he examines evolution and makes the distinction between the materialist’s limited perception [of *only* the atoms of our bodies] and the Christian belief in an additional (immaterial) component of humanity [a reality that extends beyond bodily death]. According to Pope Pius XII, the bible is for theological truths that help us get to salvation. Science explains *how* the universe was created. Theology and the Bible explain *why* it was created. Pope Pius XII said that we can believe what science determines about evolution with one exception. That exception is that we need to believe in a soul.

Again referencing his book, Spitzer reminds the audience of Plato’s five transcendental desires. Conditional love can be painful. We are reminded of words going back to Plato, “Evil is the absence of love.” Evil comes from rejecting love. Plato spoke of five transcendental desires: truth, love, fairness or

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goodness, beauty, and being.

Next he describes the authentic medical studies of *near-death experiences*, in which people who were clinically dead exhibit a remarkable similarity in what they experience before being revived. The topic of *near-death experiences* provides some food for thought about the soul. The scientific evidence for life beyond death is piling up. 18% have near death experiences; 82% do not. Of those people that go through a near death experience, they have verifiable perceptions; blind people see, including those born blind, they have an absence of the fear of death, and they see a white light.

In a brief final postscript, Spitzer allows that alien life-forms are possible, but should not be worrisome to humans.

Discussion

Thus, the lectures proceed from the (relatively familiar) *Big Bang* into deeper topics. The physics-proof that the universe doesn't go back forever, but must have had a beginning, really is a terribly important point, because over the centuries many learned writers have *assumed* the universe has always been there, and have built philosophical edifices on that mistaken assumption. The conclusion is that the universe was created by an intelligent being whose existence *transcends* the universe.

Moreover, the universe is exquisitely designed and constructed, with a set of numerical constants in the equations of physics that are fine-tuned to an astonishing degree. The usual excuse by atheists to avoid recognizing God's hand in creation is to postulate that there is a Multiverse, an infinite number of universes, and we just happen to live in the one that turned out just right. All the other alleged universes are

impossible for us to know anything about. Rather than ridicule that escape route, Spitzer patiently explains why it demands yet more fine-tuning of the Multiverse; the attempt to evade the need to recognize the fine-tuning of our *one* universe backfires. Spitzer quotes several famous physicists about the overwhelming improbability of our universe being the result of chance.

Fr. Spitzer's total picture makes it possible for a religious believer to stand up against the flamboyant but unsubstantiated assertions of atheists that "science disproves God." When all the atheists' escape routes turn out to be dead ends, the most *reasonable* and *responsible* stance favors the transcendent God. The case is very convincing. With these lectures, Fr. Spitzer has made a major contribution to the field of *Apologetics* in the 21st century.

As an alternative to individual viewing, these DVDs can form the basis for a church group to consider and discuss these topics. A four-week series was the structure of these presentations, and that pace probably works well for adult-study groups. There is a workbook available to accompany the DVD set, which defines unfamiliar terms, summarizes key points, and extends the opportunity for reflection.

While the DVD set could be shown as a four part series in a parish, it may be more suitable to a high school classroom setting. It does provide answers showing that science and theology are not in conflict. The series does contain a workbook chapter for each episode. The one downside of the series is that is primarily in lecture format with a few graphics interspersed.

We recommend the series *In the Beginning: Evidence for God from Physics* to high school teachers of science and religion or to a parish for informal discussion.

"All the beauty that wells up into our lives from science and technology and from the theology that it prompts, points more and more to the beauty that is Christ. From the delicate tracery of living systems and elemental particles to the grand dance of galaxies, the patterning of nature is being revealed to us in all its beauty, in all its splendor. How does this fit the beauty of Christ? It is all there waiting for us to explain it to each other."

- Fr. Robert Brungs, SJ, *Written in our Flesh: Eyes toward Jerusalem*. 2008.

Economic Justice in the 21st Century - Conference Summary

by Dr. Thomas P. Sheahan

This ITEST-sponsored conference took place at the Cardinal Rigali Center in St. Louis on October 23 and 24, 2015. The speakers were Prof. Don Boland, Prof. Hermann Frieboes, Dr. Ed O'Boyle and Rev. Martin Rafanan. All registered attendees were sent copies of the papers in advance, so that participants could prepare thoughtful questions.

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As in every other ITEST conference, the intent is to gain *understanding* of different points of view, as contrasted to *convincing* the audience of one point of view. The very diverse selection of presenters for this conference reflected that basic purpose.

On Friday evening, each speaker gave an overview of his topic. Since Don Boland was transmitting from Australia (9 time zones away), he gave his entire presentation on Friday evening, and wasn't involved in the discussion sessions on Saturday.

Then on Saturday morning, the presenters developed their topics more fully. Later Saturday (mid-day), they formed a panel who asked questions of each other, engaged in dialog, and then took questions from the audience.

First was Hermann Frieboes, who reviewed the history of Papal Encyclicals about economic justice, dating from 1891 (*Rerum Novarum*) to the present. Don Boland gave the philosophical background needed for a discussion of economic justice concepts. Ed O'Boyle contrasted the relevant teachings of Pope John Paul II and Pope Francis. Martin Rafanan, who serves as the Coordinator of Champions Programs for Missouri Jobs with Justice and is working to raise the minimum wage of fast-food workers,

presented a very realistic example of how these principles bear upon human situations. This did not create polarization and conflict, but strengthened our focus on how to bridge from theory to practice.

Going beyond their prepared papers, the dialog and exchange among the presenters on Saturday brought out many additional important points. For example, Ed O'Boyle directed attention to the February 2001 issue of *First Things*, where the topic of a just wage was treated. Martin Rafanan described some of the impact of slavery on the economy in the early USA. Hermann Frieboes told how collective bargaining had brought about the 40-hour work week and eliminated child labor.

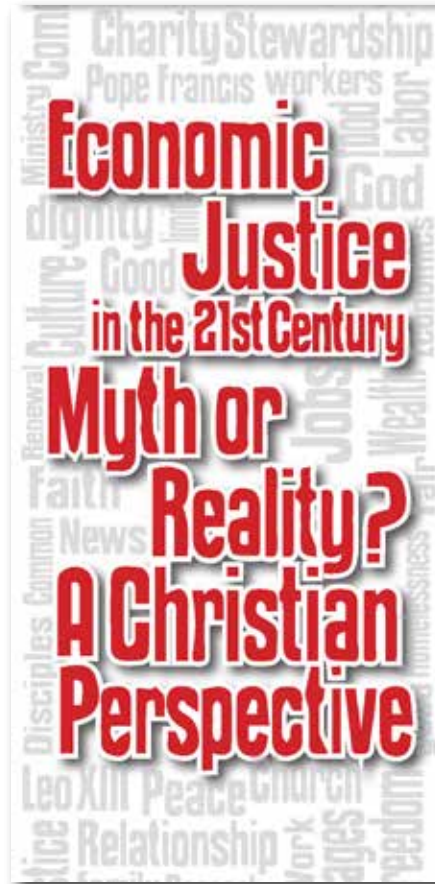
The concept of *profit sharing* with employees was discussed; Ed O'Boyle described the example of *Lincoln Electric Corp.* In Cleveland Ohio, which had an excellent profit sharing plan that incentivized both management and employees to work together.

The question arose "When there is a loss, who shares that?" Hermann Frieboes recalled an example of an 18% pay cut in one instance. Clearly, there will be a need for an arbitrator to reconcile differences.

This blended into the topic of reconciliation, the striving to bring people together. (A contract is a type of reconciliation.) Detroit provided an example: for many years the *United Auto Workers* union would drive hard bargains but produce poor cars. Workers considered management their enemy. *The Big Three* went downhill as a result of the constant fighting. If profits are destroyed, the company is destroyed, and the jobs are gone.

The role of ever-changing technology was discussed. Nobody makes buggy whips or typewriters anymore. Many assembly lines are increasingly robotized. Martin Rafanan observed that with the drop in union membership,

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prosperity is declining. Unions *created* the middle class, and made it possible for a family's next generation to do

Unions created the middle class, and made it possible for a family's next generation to do better.

better. Lately, that's becoming a dream. Countering this, Ed O'Boyle argued that the unions' problems were self-inflicted; it was the unions that caused the big automakers to fail.

Questions from the audience brought about further development of some topics. It was noted that Pope John Paul II wrote *Centissimus Annus* 25 years ago, and a great deal has changed since then. One speaker noted that there once was a field called "Catholic Social Economics," but that's dead now.

There was discussion of the morality of economists as they practice their science. Ed O'Boyle said that an economist has to take moral positions. The economic conditions in Argentina were noted, because that forms the background for Pope Francis, and influences his view on economics.

After a lunch break, interaction between audience and the panel resumed, and attention turned to *Laudato Si*. After a brief diversion into climate-change issues (conclusion: adapt, don't try to mitigate), the topic re-focused on just wages. Martin Rafanan said that an increase of \$1/hour turns into \$2,800 spent in our community. We want to keep money circulating in our community, and we'd like people to be more engaged in the community.

Marie Kenyon said that \$15/hour would allow other life improvements, like getting a car. The question "buy medicine or food?" would disappear. The quality of life would rise. Ralph Olliges noted that fast food work is supposed to be a "starter" job, but now there are people who are stuck in such jobs lifelong. Such workers are becoming unionized.

Martin Rafanan described the plight of fast-food workers who are holding multiple jobs. They seek mobility to better jobs, but need education to get that mobility; and yet they have no time (or dollars) to get that education. St. Louis has a rapidly-aging population, and most of us will need some level of care someday. So we have to create 2.5 million home-care jobs. This involves keeping old people in their homes, making it necessary for home-care person to come to the elders' home. This arrangement is

much cheaper than a nursing home. In addition, it provides quality work for a care-giver. This is a job some fast-food workers could move up to.

Martin Rafanan stated there is a critical set of actions to take in our community, to emphasize *accountability* of various agents. He spoke about the way work is sliced up into part-time jobs; for example, *Uber* is taking away taxi-cab business. There are many major challenges here. He said that independent consultants have formed a union,

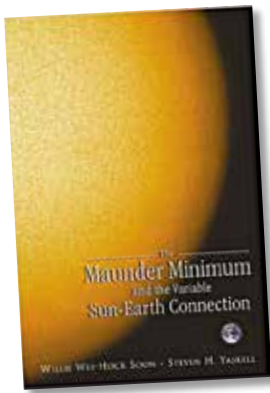
Many people work at jobs with no benefits, no pension, no health care.

just in order to get lower-cost health care. Many people work at jobs with no benefits, no pension, no health care. Ed O'Boyle added that there are severe unfunded liabilities of pension funds, for example of state employees.

At 3 pm the conference went into a "summary" session, in which the individual panelists stated the conclusions they've drawn from the conference. Ed O'Boyle said that we've got a *lot* of work to do; first, we need to identify a *process* by which we tackle the issues. We must discard "flat-earth" economics. The writings of John Paul II were great, but not complete. There is a serious problem of *not knowing what to teach*. Also, a lot of people are not listening – all they catch is sound bites. O'Boyle reminded us that it *will* make a difference when you "light one little candle."

Hermann Frieboes underlined the importance of self-reform, trying to follow Christ. Martin Rafanan said that this conference has been enlightening about how the science of economics relates to the person. Martin said that Hermann provided the *vision* of how a person should relate to work. Rafanan talks to low-wage workers, who are in it for their families. We're trying to figure out what is the next good step. Concluding on a hopeful note, Martin said that God wants us to be partners in the work that needs to be done.

In the weeks following this conference, Ed O'Boyle and Don Boland have further enunciated their views via email. We hope that in a future issue of the ITEST Bulletin, we can bring you some of that dialog.



The Maunder Minimum and the Variable Sun-Earth Connection by Willie Wei-Hock Soon and Steven H. Yaskell and published by World Scientific Publishing Co., Inc., 1060 Main Street, River Edge, NJ 07661, (2003), \$71.00, pp. xviii + 278, paperback, ISBN: 981-238-275-5.

Anyone and everyone with an interest in “global cooling”, “global warming”, or “climate change” should read this book. To skip the main period of interest in this book (roughly, mid-17th Century plus about 70 years) and pretend to know something about “climate change” cheats your students and yourself about what is important when it comes to preparing for the future. One cannot get at the root causes of the phenomenon that is currently being blamed for every idiosyncratic event that one does not understand, as a result of “climate change”. Perhaps the most significant point being made in the book is that the Sun and the Earth-Sun distance is an important source of data that has been left out of the picture. The husband and wife team of E. Walter and Annie S.D. Maunder studied the Sun’s chemical, electromagnetic, and plasma properties. They knew about sunspot cycles and the patterns that they followed across the Sun’s surface. They were sure that Sun cycles affected Earth’s cycles.

The authors introduce quite a bit of history to show that crops favored at times and places, failed at others. I learned in Elementary School that Squanto greeted the Mayflower’s Pilgrims in English which he had learned from previous settlers that had been wiped out due to harsh winters and well-documented epidemics some five years earlier. Squanto was from a tribe farther south. This book goes into much more detail regarding those important years, especially in Massachusetts...

The Maunders’ story outlines how our cyclical sun can alter climate. The book goes on to view the Sun-Earth connection in terms of geomagnetic variation and climatic change, contemporary views on the sun’s operating mechanisms, and the effects these have on the earth over long and short time periods.

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LETTER TO THE EDITOR

In response to our latest fundraising letter, long-time ITEST member and scientist, Robert Jefferson, expressed his thoughts which carry a strong message about the place of Science in the life of Faith (Eds.).

Your letter about the future of the ITEST Ministry contained a statement of personal interest, i.e. “standard thinking believes that science has nothing to do with our faith.” I feel that I am being moved to use my knowledge of chemistry to present the fact that Science is the last and the most direct of all of 2000 years of apologetics in affirming our faith.

This I know: God’s plan for all of Creation is basically the many formulations He drafted to bring about the universe and all that it contains—even the smallest and largest proteins that make life possible on planet Earth.

One scientific fact alone is ample proof that God is real. Oxygen, nitrogen and carbon are Earth’s “tools” God used to fashion a large protein called hemoglobin in the womb of every woman about to give birth to a child. The child’s very first breath takes oxygen into his/her lungs. Hemoglobin in the child’s blood attracts these molecules of oxygen from the lungs and distributes them where needed. The hemoglobin protein (on its way back to the lungs) attracts carbon dioxide waste to be dispelled to the benefit of plant life.

Science teaches us that hemoglobin are globular proteins whose reason for existence is to ferry oxygen molecules and carbon dioxide molecules throughout the body. Hemoglobin’s presence in the womb of every pregnant woman is obviously the work of One far superior to mankind who anticipated our every need before the planet Earth existed.

I agree, “the atheists’ pitch of science” is not going to go away. You may pray for them but my frame of mind as a chemist prefers to call them “Miserable Failures.” Should they die in their disbelief, they will learn their need is Hell, a miserable choice.