

THREE VIEWS ON CREATION AND EVOLUTION

A dialogue

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Fr. Austriaco represents the position he calls *evolutionary creation*, however, a more popular (and correct) name for this position is *theistic evolution*. Mr Hugh Owen represents *special creation*, however a more common and fitting name is *young earth creationism*. Fr. Chaberek represents the third position called *progressive creation* (which is a form of special creation or old-earth creationism). Each of the participants agreed to answer to six questions within the limit of 5000 words.

Here we present the answers to the first question:

***How do you think God created all the kinds of living organisms today? When did He create them?**

1. YOUNG EARTH CREATIONISM by Hugh Owen

Special Creation

The Inerrant Word of God, as understood by all of the Fathers, Doctors, Popes and Council Fathers in their authoritative teaching, tells us that God created all of the different kinds of living organisms, by fiat, at the beginning of time. It also tells us that when God had finished creating our first parents, Adam and Eve, He stopped creating new kinds of creatures, because He had created a perfectly beautiful, complete and harmonious universe for us, in a condition which St. Thomas Aquinas calls “the first perfection of the universe.”^[1] Thus, when and how God created the various kinds of living organisms, from which all of the living organisms on Earth today are descended, is not something that can be determined by extrapolation from the present order of nature, since that order of nature did not begin to operate with relative autonomy until the whole work of creation was finished. We can only know when and how God created the world from His revelation of what He did when there were no other witnesses.

Many present-day Catholics think it “naïve,” “anti-science,” or even a form of “fundamentalism” to answer questions about origins by appealing to Genesis and traditional Catholic teachings. Given this common view, it is important—however briefly—to reflect on the reason for this “modern” position and to ask if it is justified. Historically speaking, the cause of the departure from traditional Catholic teachings on origins is clear. By the start of the twentieth century, many Catholic theologians had departed from the traditional interpretation of Genesis based on the belief that the Earth is millions of years old and that Darwin had somehow proved the evolution of living organisms over eons of time as demonstrated, for example, by the “fossil record.” These same theologians had little choice but to demote Genesis to the category of legend, allegory, or myth.

In reality—as will be documented in this and subsequent articles in this series—Darwinism is in a state of collapse from a scientific perspective, as is big bang cosmology and the geological gradualism of Charles Lyell and his disciples. Catholics willing to study the collapse of Darwinian claims will soon realize that—to reference the great principle of St. Augustine, quoted by Pope Leo XIII in *Providentissimus Deus*—neither “reason” nor “necessity” ever required the Church to depart from the straightforward and obvious sense of Sacred Scripture regarding origins. In the face of the catastrophic consequences of abandoning this teaching, especially the mass exodus of young Catholics out of the Church, and the spread of a global evolution-based anti-culture of death, all Catholics of goodwill should recognize the urgent need to return to the traditional doctrine of creation.

Sources of Authoritative Teaching

God’s Revelation is contained in the 73 books of the inspired, inerrant Word of God and in Sacred Tradition. It is infallibly interpreted through the authoritative teaching of St. Peter and the Apostles and their successors, in the unanimous teaching of the Church Fathers and approved Theologians, and in the liturgical prayers and other official expressions of the Faith in the approved rites of the Catholic Church, according to the principle “*Lex Orandi, Lex Credendi.*” According to all of these sources of truth, the entire universe and all of the different kinds of spiritual and corporeal creatures were created from nothing by God less than ten thousand years ago. After the entire universe was created, the natural order of Providence began, in which all of the different kinds of living organisms operated according to their particular natures within the framework of the natural laws that God established in the beginning.

What is Creation?

Dogmatic theologian Fr. Peter Fehlner beautifully sums up the Church’s teaching on creation as it has been elaborated by Sacred Scripture, Sacred Tradition and Magisterial teaching:

All that exists other than God, the invisible world of angels as well as the visible world of matter, came to be originally, neither by an emanation from the divine substance, nor by development or evolution entailing natural processes of pre-existing agents not divine, but came to be out of nothing by an act of the divine will.[2]

The supernatural creative work of God in the beginning of time brought all of the different kinds of spiritual and corporeal creatures into existence:

Not only did this creative act give existence to the world; it provided the world order and intelligibility, and this in two ways:

by constituting the essences or species of the natural agents acting within the world, and

by establishing certain patterns, rhythms, and laws according to which these natures act on or are acted on by each other.[3]

God the Creator and Principal Cause

In the traditional creation theology of the Fathers, Doctors, Popes and Council Fathers, God as Creator is the sole principal cause bringing into existence the different kinds of spiritual and corporeal creatures, and man:

The principal cause is the agent directly responsible for the specific effect produced, and is contrasted with instrumental cause, the agent responsible only in a subordinate way . . . When a creature acts as principal cause of some effect, God is also involved as the primary Cause conserving and concurring with that action. When, however, God is said to be Creator, He and He alone is the principal Cause. When He is said to work a miracle, He may or may not utilize an instrumental cause, He may or may not act on pre-existing creatures. Although in some cases a miracle may appear to be like a natural process, it is in fact not a natural process at all, because the principal Agent is not a natural agent, and therefore, the process is not uniform or measurable in those terms . . . In the work of creation, the six days of Genesis, the Church has always understood God to be the principal Agent . . .[4]

In the teaching of the Fathers and Doctors, the overwhelming majority interpreted the days of Genesis 1 as six 24-hour days, the Hexameron, while St. Augustine proposed an instantaneous creation of all things at the beginning of time. All agreed that the creation of all of the different kinds of living organisms took place through the direct supernatural action of God in the beginning:

On the particular point of the literal or merely figurative interpretation of the six days, St. Bonaventure acknowledges that the Church has never condemned St. Augustine's view, creation of all as it were in a day. But what St. Bonaventure notes in opting for the literal interpretation of day in the first chapter of Genesis has been commonly overlooked in modern times. The ratio seminalis of St. Augustine is the equivalent of essence, not embryo. It is the same when the world began to operate on its own as it is now. Only God can make it, change it, annihilate it. And thus how long it actually took God to make these species, only God can answer, because no one else was there to observe. It might have taken a day, or 200 days, etc., says Bonaventure, but the only evidence we have is what God has told us. For Bonaventure, the philosophical and epistemological points Augustine wishes to defend can be made just as well or better by holding for six days of twenty-four hours; and for Bonaventure there is no other convincing evidence pointing to a merely figurative meaning. Finally the choice of six days by God to complete His work of creation provides a solid objective basis for the subsequent rhythms of history. The structure of the seven-day week, of the lunar and solar year, all provide a very exact, regular, intelligible backdrop for the unfolding of the divine plan of salvation.[5]

Thus, according to all of the Fathers, the Hexameron is in a class by itself, as the period when God created the different kinds of creatures and established the laws of nature.

Sacred Scripture on the Six Days of Creation

The Scriptural evidence for the fiat creation of all things at the beginning of time could easily take up thousands of words. We will confine ourselves to a few of the most powerful Scriptural testimonies, beginning with the ones committed to writing by God Himself in the Ten Commandments. Moses tells us in the Book of Exodus that God Himself wrote the Ten Commandments on tablets of stone and explained why the Hebrews were to work for six days but to "rest" on the seventh day of the week:

For in six days the Lord made heaven and earth, and in the seventh he ceased from work. Exodus 31:17

This commandment established a one to one correspondence between the days of Genesis 1 in which God created the heavens and the earth in six days and rested on the seventh and the days of the week in which the Hebrews were to labor for six days and rest on the seventh day. God's "rest" after creating Adam and Eve on the sixth day of creation signified that the work of creation was complete and that He stopped creating new kinds of creatures. From that point forward creatures reproduced "after their kind" but no new kind of creature came into existence through divine creation.[6] All of the different kinds of living organisms existed together on the seventh day of creation, each one perfect according to its nature, and all subordinated to Adam and Eve, who were created in a state of exalted holiness, in union with the Will of God.

"Scoffers Will Arise"

One of the most remarkable prophecies in the entire Bible can be found in the second letter of St. Peter, the first Pope. St. Peter predicted that "in the latter days"—a future time—"scoffers" would arise who would deny God's supernatural creative action "in the beginning of creation" and at the time of the Noahic Flood, thus casting doubt on His sovereign intervention in the future at the Second Coming of Christ:

Scoffers will come in the last days with scoffing, following their own passions and saying, "Where is the promise of his coming? For ever since the fathers fell asleep, all things have continued as they were from the beginning of creation." They deliberately ignore this fact, that by the word of God heavens existed long ago, and an earth formed out of water and by means of water, through which the world that then existed was deluged with water and perished. (2 Peter 3:3-7) (emphasis added).

St. Peter foresaw that the scoffers would predicate their denials on the stability of the natural order "from the beginning of creation," thus denying the creation of all things by the Word of God and the destruction of the first created world by Noah's Flood. Indeed, just as St. Peter had foretold, "uniformitarianism" became the guiding principle of Charles Lyell, Charles Darwin, and other naturalistic evolutionists who argued that natural scientists could extrapolate from present-day material processes in the order of providence all the way back to the beginning of creation.

These thinkers implicitly contradicted the unanimous teaching of the Church Fathers who held, with St. Paul, that "all God's works were finished from the foundation of the world" (Hebrews 4:3)—after the creation of Adam and Eve—and that God created all of the different kinds of creatures, including man, by a supernatural divine action, in six natural days (the majority view) or in an instant (the Augustinian minority view). Indeed, St. Peter's primary point in the third chapter of his second epistle is that creation—like the Second Coming—is a supernatural divine action which "scoffers" will try to reduce to a natural process:

St. Peter simply denies the truth of the assumption made by the skeptic . . . The uniformity we presently observe in the world is not absolute and provides no basis for extrapolating into the past or into the future without limit and without taking account of God's power to modify the form of the world and the order prevailing among the actions of creatures. In fact, the Creator has modified that order at least once since completing His original creative work. He did this at the time of the universal flood, and will do so again by fire at the time of Christ's coming in glory. The basis for this relative uniformity of the laws of nature is to be located in the difference between a creative-miraculous act and one merely natural. Neither the original existence of the world, nor the constitution of its original order can be

explained in terms of merely natural activity by extrapolating from the nature of that activity presently observed.[7]

Original Sin and the “Bondage to Decay”

According to the traditional Catholic doctrine of creation, God created all of the different kinds of creatures, including man, by fiat, at the beginning of time, each one perfect according to its nature, but the Original Sin of our first father Adam subjected man and the universe to a “bondage to decay” that will continue until the “new heavens and the new earth” at the end of time (cf. Romans 8). Thus, the traditional Catholic doctrine of creation provided an ideal framework for scientific research—one that recognized the existence of a lawful universe of well-designed creatures, marred (but not ruined) by the effects of Original Sin, whose function (but not their origin) can be discovered through rational investigation. Natural scientists operating within this framework presumed stable form and function throughout the biosphere and were free to focus on the natures of living things and on their relationships with other living things without wasting time, energy and other resources on unwarranted extrapolation and fruitless speculation about how they came to be.[8]

This framework of Creation, Providence and Fall also perfectly harmonizes with the universe we observe. On the one hand, we see living organisms of astounding beauty and complexity, far surpassing the ingenuity of any human artist or engineer. On the other hand, we see matter moving from order to disorder throughout the cosmos, according to the Second Law of Thermodynamics; and we see living organisms breaking down, dying and passing on genetic mutations to their offspring, thus steadily eroding the original genomic architecture of each kind of organism. To explain the origin of the different kinds of living organisms in terms of the material processes we observe in the order of providence would be like trying to explain the origin of a computer by studying its operating system—when the manufacture of the computer with its operating system involves a totally different process from the design and operation of the operating system.

The traditional Creation-Providence Framework also accords perfectly with the unity of all living organisms within Earth’s biosphere. The creation of all things at the beginning of time explains why there have always been insects to pollinate flowers and food crops to sustain animals and human beings, but also to serve as food for birds. If these different kinds of living organisms had not existed together from the beginning, it would have been impossible for human beings to survive, much less thrive, on the Earth.

Conciliar Teaching on Creation

In 1215, Pope Innocent III convened the Fourth Lateran Council in 1215 and greeted the Council Fathers by reminding them that God had created all of the different kinds of corporeal and spiritual creatures in “six days” in contradiction to the Albigensian-Catharist heretics who held that God had not specially created the different kinds of corporeal creatures.[9] The Council then approved the most important dogmatic decree on creation in the history of the Catholic Church, the firmiter, which defined de fide that:

God...creator of all visible and invisible things of the spiritual and of the corporal who by his own omnipotent power at once from the beginning of time created each creature from nothing, spiritual and corporal namely angelic and mundane and finally the human, constituted as it were, alike of the spirit and the body.

For 600 years, according to the foremost Catholic Doctors and commentators on this dogmatic decree, the words “at once from the beginning” signified that God created all of the different kinds of corporeal creatures and angels “simul” (“at once”). Among the commentators who taught that Lateran IV had defined the relative simultaneity of the creation of all things, perhaps the most authoritative was St. Lawrence of Brindisi (1559-1619), the last Doctor of the Church to write a detailed commentary on Genesis. In his commentary, St. Lawrence explained why the opinion of some Fathers that the angels might have existed for some time in a kind of twilight zone between time and eternity prior to the creation of the material universe was no longer tenable for Catholics, because, he explained:

the Holy Roman Church determined in the Fourth Lateran Council that the angels along with the creatures of the world were at once created ex nihilo from the beginning of time.[10]

It was only at the end of the nineteenth century that Catholic theologians began to look for a way to depart from the traditional interpretation of the Firmiter espoused by St. Lawrence of Brindisi, Francisco Suarez, Cornelius a Lapide et al, on the grounds that natural science had produced irrefutable evidence that the earth was millions of years old and that the evolution of the various kinds of living organisms over long periods of time was irrefutably recorded in the “fossil record.” The acceptance of these false claims persuaded a growing number of Catholic intellectuals that the origins of man and the universe was a legitimate subject for natural scientists and that the natural scientists could therefore dictate to the theologians how best to interpret the first chapters of the book of Genesis.

In reality, natural science in the field of genetics, paleontology, sedimentology and other disciplines has confirmed that the Fathers and Doctors of the Church were correct in their unanimous view that the sequence and timing of the origins of the different kinds of living things is exclusively a subject for historical theology and not for natural science. In this reply we will mention only the monumental work of plant geneticist Dr. John Sanford whose masterpiece Genetic Entropy demonstrates from peer-reviewed journals in genetics that mutations destroy or degrade genomes, that there are no examples of “beneficial mutations” that produce new functional genetic information, and that the entire biosphere is characterized not by evolution but by devolution from a higher level of organization and functionality to a lower level of organization and functionality. Moreover, genetics confirms the testimony of the Word of God as understood in the Church from the beginning, that all human beings are descended from one man (“Y-chromosome Adam”) and one woman (“Mitochondrial Eve”) who were created in a state of genetic perfection less than ten thousand years ago.[11]

Pope St. Pius V and the Roman Catechism

Three hundred and fifty years after the Fourth Lateran Council, one of the great reformers of the Church, Pope St. Pius V, promulgated the Roman Catechism in 1566 to all the bishops with instructions to have it translated and made available to everyone responsible for religious instruction. The writing of the Roman Catechism was presided over by a canonized saint, St. Charles Borromeo, and the work has received the approval of more Popes and canonized saints than any catechism in the history of the Catholic Church. Pope Clement XIII said that it contains “that teaching which is the common doctrine of the Church, from which all danger of doctrinal error is absent”; Pope Leo XIII spoke of it as a “precious summary of all theology, both dogmatic and moral”; and Pope St. Pius X ordered that pastors should preach to the people out of the Roman Catechism during his pontificate.

What, then, did this “precious summary of all theology” teach about creation?

In the first place, the Catechism affirmed the creation of all things by divine fiat in the beginning:

the Divinity -- created all things in the beginning. He spoke and they were made: he commanded and they were created.

Thus, according to this "precious summary of all theology," God created all of the creatures of the earth by His word, instantly and immediately. During the six days, He made, specifically, trees, "every variety of plant and flower," the heavenly bodies, air creatures and water creatures and land animals. There was no evolution and no long interval of time. According to the Roman Catechism, the plain sense of the sacred history of Genesis is so sure a guide to the truth of the creation and early history of the world and of man that the pastor who reads "the sacred history of Genesis" can "easily" make himself familiar with the facts. The Catechism goes on to affirm that God finished the work of creation with the creation of Adam and Eve:

the seventh day was called the Sabbath, because God, having finished the creation of the world, rested on that day from all the work which He had done. Thus it is called by the Lord in Exodus.

Note that God had finished the creation of the world specifically on the sixth day. The Catechism goes on to explain that:

the Church of God has thought it well to transfer the celebration . . . of the Sabbath to Sunday.

For, as on that day light first shone on the world, so by the Resurrection of our Redeemer on the same day . . . we were called out of darkness into light; and hence the Apostles would have it called the Lord's day.

We also learn from the Sacred Scriptures that the first day of the week was held sacred because on that day the work of creation commenced, and on that day the Holy Ghost was given to the Apostles.

In summary, this Catechism "from which all danger of doctrinal error is absent," and which has been extolled by St. Pius V, St. Pius X and so many other Popes for four centuries, teaches that God made the heavens and the earth and all they contain in six days and rested from the work of creation on the seventh day.

Blessed Pope Pius IX and Vatican I

Charles Darwin published his *Origin of Species* in 1859 during the pontificate of Blessed Pope Pius IX. As noted by Darwin's most successful propagandist, the German anatomist Ernst Haeckel, Blessed Pius IX firmly rejected Darwin's microbe-to-man hypothesis as "a tissue of fables," and convened the First Vatican Council to defend the truths of the Faith that were being challenged by the errors of the sons of the so-called Enlightenment. The Council Fathers reaffirmed verbatim the Firmiter of Lateran IV and added an important decree on Revelation which specifically reaffirmed the creation of mankind at the beginning of time. Chapter 2, "On Revelation" states:

The same holy mother church holds and teaches that God, the source and end of all things can be known with certainty from the consideration of created things, by the natural power of human reason:

ever since the creation of the world, his invisible nature has been clearly perceived in the things that have been made (emphasis added).

With this decree, the Council upheld the constant teaching of the Fathers, Doctors and Popes that man had existed on Earth “since the creation of the world,” and had been able to know the Creator through His works from “the beginning of time.” In his dogmatic definition of the Immaculate Conception, Blessed Pope Pius IX had already reaffirmed this teaching, writing in *Ineffabilis deus*:

[A]t the beginning of the world, the Almighty, announcing the remedies of his mercy, prepared for regenerating mankind, crushed the audacity of the lying Serpent, and wonderfully raised up the hope of our race, saying, “I will place enmity between thee and the woman, thy seed and hers” . . . (emphasis added).[12]

Pope Leo XIII

Faced with the Darwinian revolution against the Church’s teaching on origins, Blessed Pope Pius IX’s successor Pope Leo XIII continued to defend the traditional teaching and published an encyclical on holy matrimony in which he specifically upheld the Church’s constant teaching on the special Creation of Adam on the sixth day of creation:

Though revilers of the Christian faith refuse to acknowledge the never-interrupted doctrine of the Church on this subject, and have long striven to destroy the testimony of all nations and of all times, they have nevertheless failed . . . We record what is to all known, and cannot be doubted by any, that God, on the sixth day of creation, having made man from the slime of the earth, and having breathed into his face the breath of life, gave him a companion, whom He miraculously took from the side of Adam when he was locked in sleep (*Arcanum*, paragraph 5).

Pope St. Pius X

While many leading Catholic intellectuals in theology, philosophy and the natural sciences embraced evolution, St. Pius X recognized the grave threat that the new evolutionary pseudoscience posed to the foundations of the Catholic Faith. In *I Moderni* in 1907, St. Pius X condemned with the full authority of his office the proposition that “the progress of the sciences demands that the concept of Catholic doctrine about . . . creation be recast.” Since it is impossible to reconcile evolution or long ages with the Catholic Faith without “recasting” the doctrine of creation, in effect, this anathema made it impossible for the Church ever to embrace these errors. In 1907, St. Pius X made the Pontifical Biblical Commission an arm of the Magisterium to counteract the modernist trend in Scriptural exegesis. In 1909, the PBC decrees upheld the historical truth of Genesis, the creation of “all things” by God in “the beginning of time,” the special creation of Adam and the creation of Eve from Adam’s side. St. Pius X also exhorted pastors to preach from the Roman Catechism of the Council of Trent which clearly taught the fiat creation of all things and the special creation of man.

Pope Pius XII

By 1950, the number of Catholic intellectuals who had accepted evolution had reached such proportions that Pope Pius XII had to address the topic of human origins in an encyclical. The encyclical *Humani generis* defended unlimited Scriptural inerrancy and the traditional literal historical understanding of Genesis. The only opening that Pope Pius XII gave to the evolutionary hypothesis was to exhort Catholic

scholars to examine the evidence for and against the hypothesis of human evolution. From that day until this, this “permission” to discuss evolution has been widely touted as “approval” of the evolutionary hypothesis. But it was nothing of the kind. “Permission” to discuss the evidence for evolution no more signaled papal “approval” of that hypothesis than Pope Paul VI’s “permission” to the Birth Control Commission to discuss contraception signaled “approval” of birth control.

The Unanimous Verdict of Sacred Tradition and Authoritative Magisterial Teaching

The entire liturgical tradition of the Church confirms the patristic, conciliar, and Magisterial teaching that God created all of the different kinds of living organisms by fiat at the beginning of time. According to the principle of “Lex Orandi, Lex Credendi,” the unanimous teaching of the liturgical traditions of the Church that God created all things by fiat in the beginning constitutes yet another infallible stamp of approval upon this teaching.[13] It should now be clear that the fiat creation of all of the different kinds of spiritual and corporeal creatures at the beginning of time is not what we “think” happened. It is what God Himself revealed about how He created the world, as that revelation was understood in His Church from the beginning.

[1] ST. THOMAS AQUINAS, ST, I, q. 73, a. 1.

[2] FR. PETER DAMIAN FEHLNER, *In the Beginning*.

[3] IBID.

[4] IBID.

[5] IBID.

[6] In the language of genetics, God programmed the genomes of the original organisms so that they could adapt to changing environments, but only within the limits imposed by the original genome. Hence, there is only one human race of mankind, comprised of the descendants of Adam and Eve.

[7] FEHLNER, *op. cit.*

[8] Cf. “The Negative Impact of the Evolutionary Hypothesis on Scientific Research” in *Evolution Theory and the Sciences: A Critical Examination* (Bierbronn, Germany: Gustav Siewerth Akademie, 2012), pp. 441-464. This paper shows how the abandonment of the Creation-Providence framework and its focus on studying the form, function and inter-relationships of organisms and their parts severely retarded scientific progress in regard to the understanding of the appendix, the tonsils, human embryonic development and so-called “junk DNA.”

[9] POPE INNOCENT III, *Between God and Man: Six Sermons on the Priestly Office* (Washington, D.C.: Catholic University of America Press, 2004), p. 61.

[10] ST. LAWRENCE OF BRINDISI, *Commentary on Genesis 1-3* (Mt. Jackson, VA: Kolbe Center for the Study of Creation, 2009), p. 18.

[11] Cf. JOHN SANFORD, “God, Family and Genetics” in “The Two Shall Become One”: The Creation of Adam and Eve as the Foundation of the Church’s Teaching on Holy Marriage (Rome: Human Life International, 2015), pp. 68-103.

[12] Blessed Pope IX, *Ineffabilis Deus*.

[13] For example, in his Commentary on Genesis, St. Lawrence of Brindisi cites the prayers of Vespers for Wednesday to clinch his argument that the sun was literally created on the fourth day of creation week, and not merely fashioned into its present form on Day Four from the light that God had created on Day One:

Some think that it is the Sun itself that ought to be understood here . . . However, Holy Writ indeed denies this assertion, [for the Bible] says that the Sun itself was created on the fourth day. The Church also confesses such, saying in the Vespers hymn for Wednesdays:

Thou, on the fourth day establishing

The fiery wheel of the Sun...

2. THEISTIC EVOLUTION by Nicanor Austriaco, O.P.

Evolutionary Creation

Since the beginning, when the earliest Christians proclaimed their belief in God, the Father Almighty, Creator of Heaven and earth, the Catholic faith has affirmed that God is Creator and that He freely created the universe.

What does it mean to say that God is creator?

The Catechism of the Council of Trent published in 1566 explains creation this way: “For God formed the world not from materials of any sort, but created it from nothing, and that not by constraint or necessity, but spontaneously, and of His own free will. Nor was He impelled to create by any other cause than a desire to communicate His goodness to creatures.”

The Catechism of the Catholic Church published in 1992 echoes this perennial teaching: “We believe that God needs no pre-existent thing or any help in order to create, nor is creation any sort of necessary emanation from the divine substance. God creates freely ‘out of nothing’” (§296).

Properly speaking, therefore, to create means to make from nothing, and only God can create in this way.

Importantly, this act of creation was not simply an act at the beginning of time. It continues today for God has to create at every moment lest the creatures He has created fall back into nothingness.

The Catechism of the Council of Trent: “We are not, however, to understand that God is in such wise the Creator and Maker of all things that His works, when once created and finished, could thereafter continue to exist unsupported by His omnipotence. For as all things derive existence from the Creator’s supreme power, wisdom, and goodness, so unless preserved continually by His Providence, and by the same power which produced them, they would instantly return into their nothingness.”

The Catechism of the Catholic Church reiterates the same truth this way: “With creation, God does not abandon his creatures to themselves. He not only gives them being and existence, but also, and at every moment, upholds and sustains them in being, enables them to act and brings them to their final end. Recognizing this utter dependence with respect to the Creator is a source of wisdom and freedom, of joy and confidence” (§301).

Creation occurred in the past, it continues in the present, and it will last until the end of time.

Why did God create? As we saw above, for the Catechism of the Council of Trent, God created to communicate His goodness to creatures. This communication of goodness is what happens when an artist paints a painting. The painting is good because the artist has shared some of his goodness with the ink on the canvas. He has given the painting something of himself. Creation is good because God shared some of His goodness with everything that He had made (cf. Gen. 1:31).

The Catechism of the Catholic Church explains this teaching by noting that God created because He wanted to invite His creatures to share in His being, wisdom, and goodness: “We believe that God created the world according to his wisdom. [...] We believe that it proceeds from God’s free will; he wanted to make his creatures share in his being, wisdom and goodness” (§295).

In sharing His goodness, God reveals His glory: “The glory of God consists in the realization of this manifestation and communication of his goodness, for which the world was created. God made us ‘to be his sons through Jesus Christ, according to the purpose of his will, to the praise of his glorious grace’.” (Catechism of the Catholic Church §294)

These are the foundational truths of the Catholic faith and every authentic Catholic account of creation has to include these truths. But how exactly did God create? This has not been defined by the Catholic Church. That God created is an article of faith. How He created is not.

In this essay, I would like to propose that the best explanation that we have today for how God created and continues to create is that God created through evolution. This is the view we are calling evolutionary creation. I will argue that He chose to do it this way because evolutionary creation better reveals His glory than other rival accounts including an account that focuses on special creation. To make this argument, I will rely heavily on the philosophical and theological wisdom of St. Thomas Aquinas, O.P., the great Doctor of the Church who lived in the thirteenth century, while also bringing it into conversation with modern science.

To grasp the explanatory power of evolutionary creation, we first need to understand how God acts because creation is an act of God. And to understand how God acts, we have to understand the difference between a primary cause and an instrumental cause.

Consider the example of an author writing a thank you note with a pen. Who wrote the note? Clearly the author wrote the note, but in a sense, the pen “wrote” the note too. Both of them wrote the note. Philosophically speaking we can distinguish the author and the pen because they play different roles in the writing of the note. We would say that the author is the primary cause of the thank you note, while the pen is an instrumental cause. Both worked together – both cooperated with each other – in order to realize the writing of the note.

Clearly, God could have created everything in the world Himself. In fact, He could have done everything Himself. And yet, when we look at both the history of creation and the history of salvation, we discover that God has preferred to act through His creatures. He enjoys using instrumental causes! He generates infants through their parents. He heals the sick through their doctors. He forgives sinners through His priests. Indeed the sacramental system established by the Lord Jesus is suffused with instrumental causes. Here God chooses to use water, bread, wine, oil, and ordinary, sinful men, to communicate His power and His grace.

Most profoundly of course, God chose to save His people through a human nature that He had created. The mystery of the incarnation – the mystery of Jesus – is a mystery that reveals God’s preference for instrumental causality over primary causality in the unfolding of salvation history. God could have saved His people directly, but He chose to save them through a human nature that allowed Him to die and to rise from the dead.

Why does God do this? Why does He prefer to work with and through His creatures rather than without them? St. Thomas explained that God's use of instrumental causes allows God to give His creatures a share of His causality. And in doing this, He reveals His power (cf. *Summa theologiae* I.103.6).

To understand this claim of St. Thomas, consider two teachers who are working with a student who is struggling with a calculus exam. One teacher simply completes the questions for the student. He acts directly on the exam. He writes down the answers. He is a primary cause. The other teacher teaches the student enough calculus so that the student can complete the exam himself. Instead of acting directly, this teacher makes his student an instrumental cause. He answers the exam with and through his student.

Who is the better teacher? Clearly, the second teacher. He is better because he was able to share his knowledge of calculus in a way that made the student a knower of calculus himself.

In the end, as this example of teachers illustrates, it is more difficult to act through an instrumental cause than it is to act directly as a primary cause. Someone who can do the first is more powerful than someone who can only do the second. In acting through His creatures, God gives them a share of His causality. And in doing this, He reveals His power.

Similarly, I want to propose that God chose to create through evolution because He wanted to reveal His power and His glory through the use of instrumental causes.

Thus, the history of creation is a tapestry of God's actions working both as a primary cause and through instrumental causes. Whenever the circumstances require it, He acts as a primary cause, but whenever it is possible and fitting, He acts through His creatures.

What does this tapestry of creation show?

Human reason aided by scientific inquiry has revealed that God created all the energy in the universe at a single moment 13.8 billion years ago (bya). At this moment, which we now call the Big Bang, all the energy of the universe was concentrated in an extremely hot and extremely dense point called a singularity.

Within a fraction of a second, however, God expanded this primitive universe by an incredibly large factor, usually estimated at 10^{78} . Cosmologists call this expansion the cosmic inflation of the universe. About a minute after the Big Bang, God formed the earliest atoms of the lightest chemical elements, which we call hydrogen, helium, and lithium, using a process that astrophysicists call primordial nucleosynthesis. The universe continued to expand and to cool.

Over a long period of time, God used the force of gravity to form gas clouds, stars, and galaxies. The first stars appeared about 100 million years after the Big Bang. Within the core of these early stars, God created the remainder of the chemical elements using a process involving nuclear fusion, neutron capture, and proton capture. These heavier chemical elements were distributed throughout the cosmos once these stars exploded as supernovae. This began the cosmic chemical enrichment that led to the formation of the stars that we see in the Milky Way today, with solar systems of rocky planets orbiting them.

God created our solar system, once again using the force of gravity as an instrumental cause, about 4.5 bya. At that time, the solar system was just a cloud of dust and gas known as a solar nebula. As this cloud began to spin, gravity collapsed the material in on itself forming the Sun at its center.

With the appearance of the Sun, the remaining dust and gas began to aggregate and to clump together. God used the solar wind from the new star to sweep away the lighter elements such as hydrogen and helium from the closer regions surrounding the Sun leaving only heavy, rocky materials to form the terrestrial worlds, including our own planet, Earth. Farther away, the solar wind had less impact on the lighter elements allowing them to form into the gas giants like Jupiter and Saturn.

Here on Earth, life began about 3.5 bya. It is still not clear if God created life as a primary cause or with the instrumental causality of His creatures. All our current theories for how life could have appeared from non-life remain highly speculative so it is not clear how God accomplished this critical act of creation.

I should point out that there are Catholic philosophers who believe that abiogenesis – the process of life coming from non-life – requires that God act as a primary cause. It mandates an act of special creation. However, St. Thomas Aquinas would not have agreed with them. Like the Aristotelians who went before him, he thought, not only that spontaneous generation occurred so that maggots could appear from decaying meat, but also that this transformation from non-living matter to living matter could occur naturally without divine intervention.

Regardless of how God created life on the Earth, whether directly as a primary cause or indirectly with instrumental causes, we know that the earliest forms of life have evolved over the many hundreds of millions of years to generate the diversity of living forms that have paraded across the stage of life on our planet.

Biologists estimate that there are around nine million species of living things on our planet today but they only represent a fraction of the total number of species that have ever existed. Clearly, God has created countless different life forms that have revealed His glory over many billions of years.

In the next essay of this series, I will present a summary of the evidence for evolution, especially in the fossil record, and explain how God guided this evolutionary process of creation over the eons to bring it to its fulfillment in Christ.

3. PROGRESSIVE CREATION by Michael Chaberek, O.P.

Progressive Creation

One thing to notice at the outset of our response is that whenever we speak about the “origin of species” in the context of evolution we do not mean the origin of biological species, varieties, races or other minor variations. We refer to the origin of entirely new forms of life such as we find at the level of taxonomical genus or family. Hence, the controversial notion of evolution that we are going to discuss is not a type of evolution that could be defined as “change over time”, but the idea that entirely new natures, new types of life can emerge by natural processes. This controversial idea may be called “biological macroevolution” (in contrast to “biological microevolution”, which does not incite any controversy among the main parties).

Virtually all responses to the creation vs. evolution debate may be classified as one of four options. The first is atheistic evolution, which holds that species emerged spontaneously, thanks to the workings of natural biological processes such as random variation and natural selection and this happened over millions of years.

The second is theistic evolution (TE), sometimes referred to as evolutionary creation (which is not quite a correct name). According to theistic evolution, all species formed naturally, thanks to the workings of natural processes (the same as those adopted in atheistic evolution), however, the entire process was started and is continually guided and supervised by God. The participation of God in the evolutionary process is explained differently by different authors, but they seem to agree on at least two major points:

(1) The emergence of different forms of life (different species) or even life itself did not require any special, supernatural or direct divine causation.

(2) Since evolution is a natural process driven by laws of nature it has never ended – it continues with other natural processes along with the existence and operation of the universe.

We see therefore that on the empirical level theistic and atheistic evolution do not differ. They both adopt the theories proposed in science to explain the origin of species, but theistic evolution adopts also some non-empirical Christian truths regarding divine causation and providence.

The third option is young earth creationism (YEC), which postulates that the universe was created within the six days of creation described in the Bible. The day is understood as a natural day i.e., a period of 12 (or 24) hours. According to YEC, species were produced directly by God, without any secondary causation. Obviously, in the YEC perspective there is no question about the historicity of Adam and Eve because all first 3 chapters (in fact, all 12 initial chapters) of Genesis are understood as actual history.

The fourth option is called progressive creation (PC). This one, like theistic evolution, adopts the scientific timeline of the universe currently estimated at 13.7 billion years. However, progressive creation rejects the ideas of universal common ancestry or natural emergence of all species by evolution and adopts special creation instead. Thus species were produced directly by God who did not use any active secondary causes. (He could have used the so-called passive secondary causes, such as dust or clay in the formation of man (Gen 2:7) and some animals (Gen 2:19)). In this, PC is congruent with YEC.

As a believer I will set aside the atheistic type of evolution which boils down to saying that something just emerged from nothing. In what follows, I will consider the remaining three options and explain why I believe that progressive creation is the way to go for believers of our times.

First, let's consider theistic evolution. This is the most common position in contemporary Christianity, both Catholic and Protestant. Theistic evolution appears as a neat and easy way of combining science and faith, the Bible and the scientific theory. On the one hand, we have the Darwinian theory to some extent supported by the facts and overwhelmingly favored by the scientific community.

On the other, we as Christians, by large, ceased to believe in veracity of the Bible in general and the reality of the Book of Genesis in particular. Theistic evolution fits this context perfectly. However, it is not always the case that an easy and neat solution is the true one.

It seems reasonable for a theologian to take a theory proposed by science and square it with Christian belief. But here is the problem: Christian dogma cannot be modified by scientific theories. If there is a tension between a theory and a dogma, the theory must be modified not the dogma. The dogma could be reinterpreted – in the sense that a truth of faith was mistakenly understood and now thanks to science we see it better – only if the dogma was incompatible with the facts and data, not a theory. In other words, the fact that some theory is supported by the scientific community is not a sufficient reason to reinterpret the faith to make it compatible with that theory. Were the faith incompatible with the thoroughly recognized facts, this would be a problem for the faith. But this is not the case with evolution.

In evolution we have only two “hard” facts or “verifiable data”: one is the fossil record another is the evidence of what the Darwinian mechanism can really accomplish as tested in laboratories. As shocking as it may sound, in both cases the “hard facts” are more compatible with special creation than biological macroevolution. Let’s briefly explain why.

The fossil record reveals two basic features – species emerge as fully developed and adapted to their environments (no evolutionary ancestry, no connecting links, no trace of nature tinkering with different un-adapted forms) and species last for millions of years without change in their form beyond minor adaptations (microevolution). This phenomenon known as stasis is a universal rule governing the history of life which undermines the idea of transformation of species from one to another. There are no common ancestors in the fossils. Species do not emerge little by little, one after another, as the evolutionary theories have it. Instead they pop up out of nowhere in big explosions of life, many simultaneously. The fossil record is therefore more compatible with the classic Christian idea of special creation than with the evolutionary idea of universal common ancestry.

When it comes to the experiments devised to establish the abilities of Darwinian mechanisms to produce new genetic information, new biological systems and organs, and ultimately completely new forms of life, we also see striking limits to what this mechanism can actually accomplish. In recent years tremendous work has been done by the scientists promoting the theory of intelligent design who effectively proved the inability of the neo-Darwinian mechanism to produce anything more than small adaptations. As Michael Behe explains, these adaptations happen mostly thanks to breaking existing genes rather than producing new ones. But breaking and jettisoning of what already exists can hardly explain the appearance of it. Evolutionary theories currently circulating in science do not explain the origin of any significant biological novelties such as new functional genes, proteins or irreducibly complex organs; they postulate that these structures evolved but they do not explain how or prove that it actually happened.

Since real science, stripped from the ideological materialistic bias, is not on the side of biological macroevolution, why would any theologian tinker with theology? Why would anyone try to modify faith to make it compatible with fishy science? It is true that in modern theology the Bible is not an argument, because it lost its authoritative meaning. Any fragment can be neutralized or dismissed by the so-called “modern exegesis”. Thus, according to modern scholars one cannot make an argument from the Genesis account of creation because it does not say what it says. We are invited to ask what the “inspired author” wanted to say. But how can we know it? The only way is by reference to what he actually says, therefore I believe that he meant what he says, and I see no reason why the Bible would be written in such a way to delude anyone by saying something different from what it means. In fact, the sharp division between “words” and “meaning” introduced by modern exegesis is nothing but a tool to fashion the meaning according to the exegetes’ whims regardless of the words.

“Modern exegesis” devised many techniques to dismiss the authority of the Bible. Some include reducing it to just religious poetry, a liturgical hymn, or calling it an echo of Babylonian and Eastern mythologies. Each of these reductionist interpretations may contain some truth but none of them can justify the abandonment of the literal and historical meaning of the first chapters of Genesis which was recognized by the Church since the very beginning and by the pre-Christian Jews. The literal and historical meaning is the foundational one, the one that settles the issue of origins.

The problem is that the literal historical reading of Genesis flatly contradicts the essential claims of theistic evolution: If God created plants and animals according to their kinds then they did not develop from one ancestor. If God formed man from the dust of the earth then man did not descend from ape. If God accomplished the work of creation and rested on the seventh day then new species cannot emerge anymore in an ongoing process of continual creation as theistic evolutionists believe. Theistic evolution denies at least three classic Christian beliefs:

The work of formation – according to Christian theology of creation, God not only created the universe out of nothing – the moment in which time, matter and energy started to exist- but also formed it over the time which the Bible describes as the “six days”. The formation of the universe is not reducible to the ordinary workings of nature. Otherwise there would be no sense in speaking about the work of formation as a separate stage. The formation of the universe was a time when God acted supernaturally (sometimes directly, sometimes indirectly) on the natural order. Thanks to these divine operations we observe the increase of complexity and forms over time. But this stage ends with the creation of man. This is why today we do not see the same increase in complexity. Instead, we see the extinction of species. The universe is not emergent (as theistic evolutionists imagine) but entropic.

The special creation of man according to his/her body and soul. All Christianity from Jesus to the 19th and mid 20th century believed that man was created directly by God both according to his body and soul. Theistic evolution acknowledges the special creation of the human soul, but not the body. This is where all problems (scientific, theological and philosophical) regarding the so-called hominization originate. But the truth about the special creation of the human body is so well-established and unanimously supported by the entire tradition that it should be considered a dogma rather than dismissed as a “mistaken biblical interpretation of the past” for allegedly scientific reasons.

Creation is finished. According to Christian faith, God accomplished the work of creation and rested, which means that after man was created God does not create anything new. God maintains the universe in existence and oversees it by his ordinary and extraordinary providence. But according to TE, God never ceased to create, which means that divine works are not perfect and we do not know what Genesis means when it says that God rested. In TE there is confusion between preservation of being (*conservatio in esse*) and continual creation (*continua creatio*). According to Christian faith, God indeed never ceased to work in the sense that He preserves the universe in existence all the time, but conservation of existence is something quite different from the continual creation of new things, such as entirely new forms of life. This latter idea resembles more of Pagan mythologies with their circular concept of time where the universe exhibits a single mode of ongoing process of evolution.

Theistic evolution encounters problems not only from the Bible and classic Christian theology but also from what is called Christian philosophy or classical metaphysics. I described these problems in my book “Aquinas and Evolution” and perhaps there will be an occasion to describe some of them in the later presentation. Here I will just make a note on why a theory acceptable to Catholics cannot contradict classical metaphysics.

Christian faith is generally speaking independent from any particular philosophy and as Pope John Paul II confirmed (in *Fides et Ratio*) the Church has never committed herself to any given philosophical system. One can have an integral faith without being a proponent of any particular type of philosophy. We need to notice, however, that the basic Christian dogmas have been formulated in the language of classical realistic metaphysics. All attempts to formulate them in other than classical terms failed. This obviously

may be taken as an argument for the trueness of the philosophy itself, but for our argument something else is also important: If a theory of nature is incompatible with classical metaphysics, especially if it deprives its basic concepts of their realistic meaning, then the theory is problematic for the Church. It ruins the explanations of the dogmas turning faith into fideism. One can still believe it but one cannot explain it or communicate it in objective realistic language.

Theistic evolution contradicts the basic metaphysical notions such as substance and nature. As such, in a long run, it leads to dissolution of Christianity in a mash of pantheism, deism and emanationism.

Much more should be said about the problems of theistic evolution from the Christian perspective. But the current question is about our own understanding of how God created species. In order to make my answer clearer I will now contrast it with the concept of young earth creationism.

According to YEC, the universe was created within six natural days no more than a few thousand years ago (some YEC proponents accept up to tens of thousands years). There are two basic types of YEC – one is the so-called “Biblical fundamentalism” (or Biblical creationism) another is called (not quite correctly) “scientific creationism”. The first type does not bother with the scientific evidence testifying to the long existence of the universe. It assumes that the Bible is the sole and entire source of truth therefore other sources, such as natural sciences, are irrelevant. In scientific creationism there is a great deal of effort to dismiss the scientific evidence for “deep time” (billions rather than thousands of years of natural history). Since I am not a scientist and also because YEC is a theological concept, there is no reason for me to answer to the scientific rebuttal of deep time as presented by scientific creationism. Usually these types of discussions lead to nowhere anyways. YEC requires a response on the theological level because this is the level at which its proponents formulate their arguments. They say that the Bible is the infallible word of God and since the Bible speaks about the six days they must be maintained by faith.

We agree with both of these premises. The Bible indeed is the true word of God that has to be listened to with obedience. Moreover, we agree that Genesis tells the true history, which means that it speaks about the events that actually happened in the past. However, we believe that the six days do not mean six natural days but some other periods of time.

Catholic proponents of YEC very often refer to the testimony of the holy Tradition in maintaining that the six days are natural days. But we know that there are actually two different traditions of interpreting Genesis long recognized by Christianity. One of them dates back to St. Ambrose. This is the one that maintains that creation happened over the six natural days. Another one dates back to St. Augustine, who believed that creation happened in one moment and the division into six days is literal but not historical, i.e., these are like six visions that the angels received from God when learning about creation. Augustine’s interpretation is more complex than this but I will skip the details. For our purpose it is important to notice that there was at least one holy author of the greatest stature who did not understand the day of creation as a natural day. Following the holy tradition the Church (and the Church is the proper authority competent to judge what belongs to tradition) established in 1909 that the word “yom” (the Hebrew word for “day” in Genesis) can be understood either as a natural day or any other period of time. This ecclesiastical resolution is very important because it undermines the foundational claim of Catholic YEC that the “entire tradition supports YEC”. Not quite correct. Indeed, the majority of the Fathers believed so, but why would they believe otherwise if they did not have any reason to believe in billions of years of natural history? The Church Fathers along with their contemporaries believed in many other things that were taught by the science of their time such as spontaneous generation, geocentrism, celestial spheres, etc. But new discoveries modify our worldview. This is what happened with the discovery of the great age of the universe. It does not modify any of the truths of faith, it just helps us better understand the Genesis account of creation. The question: “How old is the universe?” is a scientific one, therefore it should be answered by science, not the Bible.

Another theological reason for why “yom” is not a natural day stems from the fact that it would be hard to squeeze all of the events of the sixth day into 12 (or 24) hours. On the sixth day God created the animals. Creation of the animals in the Biblical narrative does not seem to be reducible to a single act but rather is a progressive event in which new creatures appear in waves one after another. On the same day God created Adam, dwelled in the garden with him, presented all of the animals to him, Adam did not find an adequate help, Adam was put to sleep by God and finally Eve was created from his side. It is not impossible for God to make all of this in one natural day, however, such interpretation is not in keeping with the natural reading of the text to which “young earthers” are committed. Thus by their very method of reading Genesis as a historical account one should rather assume that the day is longer than a natural day.

Surely, there are many other theological reasons to interpret the day of creation as a period of longer time. For example, Augustine has already noticed that the sun was created only on the fourth day which means that until the fourth day the idea of the solar day makes little sense. There was no sun to measure the natural day. Also the seventh day is longer than a natural day because it is the time when God rested which happened after the creation of man and lasts until now (and will last until the end of this universe). Thus we know for sure that the seventh day is not a natural day. Moreover the Bible very often refers to a day as to a moment (as in the expression “on the day of the Lord”) or a period of time. It also presents the length of time as relative from God’s perspective (2 P 3:8). Thus there are many reasons stemming from the Bible itself to not adopt the idea of YEC.

Here we come to the answer to the question of how God created all the kinds of animals. Since we believe that Genesis is literally and historically true, and we do not have any plausible theory of the origin of species in science, we need to say that they were created separately as distinct natures directly by God. The divine creative activity extended over millions and billions of years because this is what the evidence from natural history tells us. The first living beings (prokaryotic cells) date back as far as 4 bln years. Then there is little progress in life forms (except for the mysterious episode of the Ediacaran biota) until the great Cambrian explosion when most of the body plans appear all of the sudden fully formed. This pattern of sudden appearance of major groups of life forms is repeated throughout natural history until the most recent time. Finally, a few million years ago humans are created. They begin with one pair, Adam and Eve, who originally are placed by God in the specially prepared area called the Garden of Eden. In the concept of progressive creation (as in YEC) the historicity of Adam and Eve is taken for granted, therefore there is no sense of challenging the Catholic concept of original sin as it happens in theistic evolution. Also, in PC and YEC there is no question of hominization of an animal, because man does not share common ancestry with any other living being. It is a special and separate work of divine power designed from scratch in its bodily form to receive the rational soul.

We can imagine divine creative activity as painting an image or making a wedding cake. God adds layer after layer of creation. He does not diminish or ruin the previous parts by adding the new ones. In fact each additional layer adds to the beauty and taste of the whole. At the end God creates man which is like the proverbial cherry on top of the cake which makes it perfect and beautiful. At each stage creation is good, that is, complete, operational and coherent. If God did not create the following layers one would not notice any want in creation. Only because we have the experience of the total creation we would complain seeing the universe let’s say deprived of plants or animals. Each additional being was added by God not out of some necessity but to make the creation more perfect, beautiful and reflective of divine grandeur.

There is a very common mistake in understanding divine work of creation as a type of intervention. Theistic evolutionists believe that God “does not intervene” in the created order, therefore they reject the idea of special creation. But creation is not an intervention. In theistic evolution the universe is considered an essentially independent being and thus any supernatural work of God in the universe is seen by them as God’s intervention, disruption and some kind of rapture performed by the divinity on

the closed system of the universe. This is quite a distorted picture of divine formation of the universe over the millennia. Creation is not an intervention, because the universe is not a closed system. It's not a music box, not even a barrel organ. It is an instrument that makes music only when a player touches it appropriately. God is the master of this instrument. He never sets it aside, He does not make breaks, forgets about it. He constantly plays, although the modes of how He does it change like they change during an orchestra concert. An act of creating a new species does not disrupt any cause-effect chains already existing in the universe. Surely, a newly created species would enter some of these chains, sometimes disrupting them effectively (as it happens, for example, with the creation of a predator that would modify some food chains). But this is not the creation itself that causes the disruption but rather the operation of the already created being.

Theistic evolutionists also think that progressive creation (or any form of special creation) diminishes the importance of natural secondary causes in the works of nature. They believe that by the acts of creation the universe would be somehow deprived of its autonomy. This is another false imagery stemming from the misunderstanding of the act of creation itself. As Thomas Aquinas puts it "in the works of nature creation does not enter, but is presupposed to the work of nature" (S.Th. I,45,8, co). This means that whatever can be accomplished by nature itself (as established and formed by God) will not be produced supernaturally by God. The reason is that both orders – the natural and the supernatural – originate in one God. Therefore, since nature can move planets on their orbits thanks to the law of gravity God would not do this supernaturally. If a seed thrown to the ground can spring and turn into a tree then God does not need to create a fully grown tree. Since the combination of different geological factors can produce mountains God does not make them by supernaturally pulling them out from the crust. But nature has no power to produce the seed by itself, therefore God had to create the first seeds of different plant families in the ground. By the same token, since the so-called higher animals are viviparous they have to begin with an active principle which is an adult pair able to mate. This is most clearly seen in the case of the first humans who must have started with a pair of adults to make the propagation of the species possible. Similarly, the first horse or cat or mouse must have been produced as at least one pair of adults. We also see that new varieties, variants, races and even biological species emerge constantly thanks to the operations of nature. Therefore there was no need for God to create all of them directly. Rather, life started with the creation of one original type in each family or genus. For example, God did not create domestic dogs and wolves (and probably some others such as foxes, jackals, hyenas) separately since they have one common canine nature that differs among them only accidentally. How much nature can accomplish on its own is to be established by biology. Unfortunately, contemporary science driven by the Darwinian bias postulates that nature can accomplish everything and anything by itself. In fact, however, anywhere we look in nature we see insurmountable limits of biological change that can be produced by natural causes. We see therefore that the belief in the separate creation of species does not diminish the secondary causation in the universe. Rather it restores the proper place of the direct divine causation.

It is clear from what I have said that progressive creation is the solution that best meets the requirements of both modern science (or rather modern scientific facts and data) and classic theology. Theistic evolution allegedly follows modern science though in fact it follows just Darwinian theory not the scientific facts. Theistic evolution rejects the classic Christian concept of creation and the traditional Biblical interpretation. As such it is a form of modern materialistic reductionism. On the other hand young earth creationism is at odds with the overwhelming scientific evidence for the "deep time" stretching billions rather than thousands of years back. As we have shown, YEC is also not quite compatible with Catholic tradition and a thorough reading of the Bible. Still, it is a doctrinally accepted position, as is clear from the 1909 response of the Pontifical Biblical Commission. As such it should be considered a form of modern fideism which denies science for the sake of one particular Biblical interpretation.

I doubt that there is an easy solution to creation vs. evolution debate. Progressive creation is not an easy solution. But PC is the solution that creates the least amount of difficulties on the theological, philosophical and scientific levels. PC is a form of a synthesis between science and faith. Just like any synthesis it stands on the top between two hollows – theistic evolution which is a form of materialism and YEC which is a form of fideism. To keep the balance is most difficult. Perhaps this is the reason why PC has relatively few proponents. But if we look at the issue from a more general perspective PC seems the most obvious solution that accounts for the traditional faith and the best of modern science.