Deacon*: For favorable weather, an abundance of the fruits of the earth, and temperate seasons, let us pray to the Lord.

This is the humblest of all our petitions to God. Even our most common and material needs find their correct solution in God and by God. "We do not ask only for the things of the spirit, but also for those material benefits which we require, for healthful air and an abundance of the fruits of the earth, in order that we may recognize God as Creator and Provider of all things." God is the giver of every good thing (see James 1:17), spiritual and material. And although the spiritual gifts are higher and more important, Christ, and the Church He founded, do not despise the body and its needs.

Psalm 103 (102) is a hymn to God the Creator and Sustainer of the universe. The Church reads it at every Vespers Service. Yes, there are natural calamities: droughts, hurricanes, floods, tornadoes, tsunamis and all kinds of disasters. We understand that creation is not perfect, as it was at the beginning, when it was created. Still, God is in control. We signify our total dependence on God when we recognize Him as supreme Lord over nature and our lives. True and living worship is to live in God's presence and to attribute our very existence and everything happening in our lives to His care and providence.



MINI STUDY

FAITH & SCIENCE

aith and science are not in opposition. A scientist of our time says: "One of the greatest tragedies of our time is this impression that science and religion have to be at war." Another scientist advanced a principle he calls "NOMA" or "non overlapping magisteria of science and religion," according to which "the magisterium of science covers the empirical: the composition of the universe ('fact') and the way it works ('theory'). Religion, on the other hand, examines questions of 'ultimate

meaning and moral value.' These two magisteria do not overlap, nor do they encompass all inquiry. Science gets the age of rocks, and religion the rock of ages; science studies how the heavens go, religion how we go to heaven."²³¹ Darwin himself wrote: "There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved."²³²

The Orthodox Church is not far from these

229. St. Nicholas Cavasilas, *Commentary*, p. 47. "Καιρῶν εἰρηνικῶν" (*kairōn eirēnikōn*) is often rendered as "peaceful times." The entire petition is about good weather, so that the crops may grow well. Therefore the meaning is that of "mild" or "temperate seasons."

230. Francis S. Collins, *The Language of God: A Scientist Presents Evidence for Belief*, Free Press – Simon and Schuster, New York 2006.

231. Stephen Jay Gould, Rocks of Ages: Science and Religion

in the Fullness of Life, Library of Contemporary Thought, Ballantine Publishing Group, New York, 1999.

We do not subscribe to this controversial "principle," which would deny our belief in the Resurrection of Christ and in miracles (see our Mini Study, "Miracles and Miraculous Healings", p. 315).

232. Charles Darwin, *The Origin of Species* (1859), http://www.wsu.edu:8080/~wldciv/world_civ_reader/world_civ_reader_2/darwin.html.Cf. also, http://www.ualberta.ca/~dlamoure/3Darwin.htm. →

views. St. Gregory Palamas (A.D. 1296-1359), basing himself on the Holy Scripture (1 Cor. 1:2. 2:4-8, James 3:15), "distinguishes between two kinds of wisdom and two kinds of knowledge. There cannot be any confusion between the two."233 The antinomy is created when we make God another object of our natural knowledge, when we try to rationalize the truths of our faith, when we use the intellect "as the instrument or tool of knowing both the natural as well as the supernatural."²³⁴ Father George Metallinos also stresses this point: "The antithesis and consequent collision of faith and science is a problem for Western (Franco-Latin) thought and a pseudo-problem for the Orthodox patristic tradition."235 Why? Very simply, he answers, because "faith is the knowledge of the Uncreated, and science is the knowledge of the created," 236 two very different, but complementary, forms of truth.

The perceived antinomy between religion and science was furthermore exacerbated because of two erroneous assumptions made by western Christianity: that the Holy Scriptures are interpreted literally (scriptural literalism), and that religious truths, like all truths, must be discovered and explained exclusively by reason (rationalism). There are certain truths that cannot be arrived at by logic alone. Reason is not the only source of knowledge. Accepting a truth by faith does not make it unreasonable. Accepting a truth by blind faith is as bad as not accepting any truth that cannot be arrived at rationally. That God created the universe is more rational than accepting that the universe created itself. The perceived problem with certain Christian truths is due to the erroneous principle of scriptural literalism, which is based on the equally erroneous principle of biblical inerrancy. We believe that the Holy Scripture is infallible in matters of Christian faith and life.

According to our understanding the Bible is not a scientific textbook, therefore we are not to take every geographic, historical, and scientific detail as error free, and we should not read it that way. The Holy Scriptures seem to follow the view that God created a stationary, flat earth, with the heaven being a dome over it, and the sun and the moon circling around it (Ps. 104); that He created the universe in six 24-hour days, some 10,000 years ago; and that He took mud to form man out of it, and woman out of his rib. Scientific discoveries, from Galileo to Darwin, supported views at odds with a literal understanding of the biblical accounts. As more scientific discoveries were made explaining the laws of nature and the workings of the universe and of life, belief in God was pushed back farther and farther, but only for those who follow a literalistic reading of the Bible.

In the Orthodox Church's understanding, the biblical account of the creation of the world is an anthropomorphic account, relating, in a way expressed by and understandable to the people of the time, sublime truths and facts. The Fathers of the Church were open to the learning and experience of their contemporary world. They embraced the knowledge available to them and applied it in their exegesis of the Holy Scripture and in their views of the mysteries of the cosmos. "If they had had access to the technology and information which is at hand today, there is every reason to believe that they would utilise such knowledge to explain the scripture to contemporary man."²³⁷

St. Basil the Great (*Hexaemeron* Hom. 9) and St. Gregory of Nyssa (*Apologetic Treatise on the Hexaemeron*) would agree with Darwin.

233. Metropolitan Hierotheos of Nafpaktos, *Time to Act*, p. 169.

234. Ibid., pp. 29-30.

235. Fr. George Metallinos, "Authority is Experience: Faith and Science in Orthodox Gnosiology and

Methodology" in *Divine Ascent*, 1997, V. 1, No. 2, p. 26.

236. Ibid., p. 28.

237. Archbishop Lazar Puhalo, "Our Changing Paradigms: Science and Theology: *Models of Reality* as Sources of Conflict," http://www.orthodoxcanada.org/ChangingParadigms.htm.

Thanks to their legacy Orthodoxy is science-friendly. It has understood science not as a competitor, but as a blessing of God, placed in man's service.

A specific problem existing between faith and science concerns the origin of life and particularly the existence of man. The theory of evolution holds that all living things are descended from a common ancestor as a result of changes accumulated over geological time. This troubles many Christians who view this theory as "an essentially atheistic doctrine, holding that Man is only another animal, a naked ape, and the product of 'chance' in a purposeless and hostile world. By implication, whatever behavior patterns are seen in animals, particularly in apes, must therefore be natural and hence acceptable as alternative lifestyles in Man."238 Two things have to be mentioned in this regard. First, the theory of evolution is by no means the explanation for the origin of life. This theory explains some things to some degree but it does not provide all the answers. Like any scientific theory, the theory of evolution, despite the mass of evidence behind it, is not a proven fact. Science itself, and the theory of evolution along with it, is constantly evolving and revised based on new scientific evidence. One only needs to look at a science textbook from thirty years ago, whether in the fields of biology, astronomy, archeology or paleontology, and will see that scientists have changed/updated their views on many a subject.

But can the theory of evolution be compatible with the Christian view, which holds that the human being is "special" in creation, endowed with a rational soul by the Creator? The answer is yes, because the only "god" that is squeezed out is a god-of-the-Gaps, an idol, a meaningless reduction of God to the status of a scientific explanation. "Yet, some view evolution as a threat to religious

belief since it renders impossible literal belief in the creation stories of Genesis."²³⁹ Although some of the Fathers held that animals and plants were created fully formed, in accordance with a literal reading of Genesis, this is by no means the only Orthodox understanding of what creation is. Thus, according to St. Gregory of Nyssa († A.D. 394), "In the beginning" means, "All things were virtually in the first Divine impulse for creation, existing as it were in a kind of spermatic potency, sent forth for the genesis of all things. For individual things did not then exist actually."²⁴⁰ In our understanding evolution through natural selection does not stand in opposition to the existence of a personal God (and to free will, to a universal moral law, etc.).

Furthermore, we do not believe in a deistic God, who is merely a Creator of an inanimate, amorphous mass, which spontaneously gave origin to every living form, or in a God Who created certain living forms, from which again all other living forms "evolved"—without His involvement! Far from being remote from His creation, according to our faith, it is God who brings about the existence of all living things and gives direction to the course of their development.²⁴¹ Our God is not a God removed from His creation, which continues to exist and evolve mechanically, blindly and by chance, without any plan or purpose. To the contrary, our God is a providential God who, far from having created everything to then abandon it to its blind forces, guides it intelligently and lovingly to its intended destiny: "Everything in creation has its purpose... and the whole creation obeys His commands" (Sir. 39:21, 42:15). Our God is not a helpless bystander. He is the "God of Abraham, Isaac and Jacob" (Mt. 22:32), "the God of our Fathers" (Acts 22:14), a God involved in the history of the world, loving His creation and caring for it and especially

- 238. Dr. George Theokritoff, *Creation and Evolution*, published in *Jacob's Well*, the official publication of the Orthodox Church in America's Diocese of New York and New Jersey. The article can be found online, http://yya.oca.org/youth/yomail/back-issues/1999-02-15. html.
- 239. Kevin Basil, "On the Dogma of Creation," http://blog.kevinbasil.com/on-the-dogma-of-creation/.
- **240.** St. Gregory of Nyssa: *Apologetic Treatise on the Hexaemeron*, quoted by Theokritoff, o.c.
- 241. The subject of evolution, as treated in the West by non-Orthodox, is not representative of the Orthodox view. We do not subscribe to the understanding of "creationism," as it is cast in opposition to the scientific evidence, by fundamentalist Christians, based, erroneously, on a literal interpretation of the Bible.

for the human beings, the mirror of His image and likeness.²⁴²

We believe that everything happening in nature is guided by God's Divine Providence. Nothing happens by chance (see Mt. 6:25-34). Everything has a predetermined form of existence from the Being WHO IS, and Who shares His attributes in a creative and sustaining act with everything that exists. "God is directly present in creation," not in His essence, but through His divine energies, which "permeate the whole creation."243 Perhaps we can render this concept in today's terms as "the DNA of salvation." "When God created the world through His Son, He embedded within the 'DNA' of everything the sign of His wisdom." Everything is subject to God's wisdom; everything proceeds according to His plan—even when it appears to be contrary to our perception and limited understanding. When we Christians look at the world around us we see an intelligent design and much more: we see the work of a loving Being—even a Father.

When we say "intelligent design" we do not want to identify the Orthodox position with the theory of "Intelligent Design" invented by fundamentalist Protestant Christians. Evolution and

creation are not seen by us as two opposite theories of how the world came about, but one and the same, described from two different perspectives. One does not have to choose between acceptance of evolution and belief in God, any more than believing that God blesses a couple with a child, and understanding the part the couple plays in procreation. Here is another example: In the prophet Isaiah we read: "The Lord ... formed me from the womb" (Is. 49:5. Cf. also 44:24). What are we to make of this? That the inspired author did not know how we are conceived? Do we have to choose between God being the author of life, and our parents? Certainly not! The two move at two different levels: the one spiritual, the other material. Accepting the one does not preclude acceptance of the other.

For us the only possible explanation of the existence, number, complexity, relationship, balance and harmony of everything that exists is a Great and Intelligent Creative Mind. "For it is not by chance, the nature of such and so great a world, wherewith nothing comparable can be thought—do not credit so much to chancy reasons." For us everything that exists is planned; it has a "logicity" in it, from the Creative Divine *Logos*. It is remarkable

A succinct and balanced treatment of the subject of evolution is found in an article by Kenneth L. Woodward, titled "Evolution as Zero-Sum Game," published in the Oct. 1, 2005 edition of the New York Times, http://www.nytimes.com/2005/10/01/opinion/01woodward.html?th&emc=th.

For an Orthodox understanding of creation see Fr. (now Metropolitan) Hierotheos Vlahos, Orthodox and Western Manner of Life: The Creation of the World, pp. 101-137; I.M. Andreyev, Orthodox Apologetic Theology; Archbishop Lazar, The Creation and Fall (see also his articles, "Science and Faith: A Dialogue," http://orthodoxcanada.org/sciandorth/scienceNfaith.htm, "Models of Reality-as Sources of Conflict," http:// orthodoxcanada.org/sciandorth/modelsOFreality. htm, and see also his web site, http://constans_wright. tripod.com/abplazar.html); Nikos Matsoukas, "Cause and Mode of Creation of Beings" (Dogmatic and Symbolic Theology, vol. 2, pp. 166-174); Kevin Basil, "On the Dogma of Creation" (http://blog.kevinbasil. com/on-the-dogma-of-creation/); Fr. Gregory Hallam, "Orthodoxy and Creationism" (orthodox@clara.net); John Mark Reynolds, "Séances & Science" (http:// touchstonemag.com/archives/article.php?id=18-07-032-f); the two essays by Dr. George Theokritoff and Fr. Dr. George Metallinos quoted above; and "Orthodoxy

and Creationism," by Deacon Andrey Kuraev (http://www.fatheralexander.org/booklets/english/evolution_kuraev.htm).

242. The Fathers distinguish between "image of God" and "according to the image of God." Already Origen had pointed out to Celsus that image of God is His Only Begotten Son, whereas man is a creature created according to God's image ("Against Celsus" 6, 63. See Prof. Georgios Mantzaridis, *Palamitic Studies* (Παλαμικά) (in Greek), Editions P. Pournara, Thessalonike 1983, p. 157).

243. A Pastoral Letter on the Occasion of the Third Christian Millennium by SCOBA, *The Feast of the Nativity of our Lord and God and Savior Jesus Christ in the Year of our Salvation 2000*, § 95.

244. Ibid. § 97.

245. St. Gregory the Theologian [† A.D. 389], "On Providence," Poem 1.1.5, De Providentia (*PG* 37:424), *On God and Man, The Theological Poetry of St. Gregory of Nazianzus*, translated and introduced by Peter Gilbert, St. Vladimir's Seminary Press, Crestwood, New York 2001, p. 53.

that Francis Collins called the process of evolution "Biologos," or life through the Logos (the divine Word of God), thus expressing the belief "that God is the source of all life and that life expresses the will of God." The Creative Divine Logos also gives a logos, or reason, or purpose for the world to exist: "The faith expresses the incontestable fact that the world has been made for a purpose and, therefore, that it is the product of a Creator who gives meaning and is guided by the Creator towards the fulfillment of its purpose in Himself."

Orthodox Christians do not have preconceived negative notions about evolution or any other scientifically based theory. We believe that even as science advances and gives more answers to questions concerning nature and life, the perennial questions that have occupied the minds of philosophers and became the object of religions

will remain: Is there a God? What can we know about God? Why does the world exist? What is the value, meaning and purpose of life and of human existence? Can anything exist outside time and space? Is there a soul and an invisible realm? What happens after we die? Man will continue to wonder and search for satisfactory answers to such questions. In this search one thing is clear: it is not up to science to answer these questions. Science is by definition limited to the study of the material world and can neither ascertain nor examine ("scientifically") the things that pertain to the immaterial world. The latter is the area of faith. Christians should not be science-phobic! We know for certain that nothing in our faith can possibly run contrary to science—if both are true! We therefore firmly believe that as science advances there will always be room left for God.

Deacon*: For travelers by land, sea, and air, ²⁴⁸ for the sick, the suffering, the captives, and for their safety, ²⁴⁹ let us pray to the Lord.

In this petition the Church prays for those who are not present, either because they are traveling or because they are sick or captured in war. The Church cares for all the faithful and embraces all Her children, whether present or absent "for good reason." Notice the Church does not pray indiscriminately for those who are absent, who cut themselves off the Holy Mysteries to pursue worldly pleasures.²⁵⁰

The prayer is about those who are endangered either because of traveling (whether by boat or by foot, traveling in the olden days was a perilous venture), or because they are sick and weary or because they have been captured and are held as prisoners of war. Therefore, in this instance, the meaning of the Greek *sōtēria* is that they may be rescued and delivered from danger and adverse circumstances.²⁵¹

246. Collins, o.c., p. 203. For a thorough discussion of his book and the issues addressed from a Roman Catholic perspective see "Francis S. Collins and the Language of God" reviewed by John F. McCarthy in *Living Tradition*, http://www.rtforum.org/lt/lt124.html and http://www.rtforum.org/lt/lt125.html.

247. Fr. Dumitru Staniloae, *The Experience of God*, Holy Cross Orthodox Press, Brookline, Mass. 1994, p. 12. See also our Mini Study, "Pain and Suffering", p. 94.

248. "And air" is a modern addition. Those well-inten-

tioned priests who render it in Greek as ἀεροπορούντων (aeroporountōn, "air-voyagers") show inadequate knowledge of Greek, since there is no verb ἀεροπορέω (- $\tilde{\omega}$) (aeroporō). Ἱπταμένων (iptamenōn, "fliers") is as bad.

249. We render the Greek word $\sigma\omega\tau\eta\varrho^{i}\alpha$ ($s\bar{o}t\bar{e}ria$) as "safety," where others render it as salvation. The meaning here is similar to the use in Lk. 1:71 and Acts 27:34.

250. Metropolitan Dionysios of Kozane says the petition is for those "who are absent for good cause" (*o.c.*, p. 77).