

Clocks, Pool Balls, Waves, Dice and the Hand of God

Clarifying the Task

From time to time, I have the pleasure of marking assignments and exam scripts. I like to think that I do so in a fair and honest manner. One thing that focuses my attention is the need to define the question clearly and require that the candidates address that question without aimlessly wandering off into all sorts of interesting other topics that do not address the question to hand.

I mention this because, before we start, I need to make sure that we all understand the scope of the topic of this lecture. Sometimes it can be helpful to clarify the matters that I am NOT going to address, then we can all then concentrate on the topic in hand. I am not going to present and discuss in detail any particular examples of God's intervention in human affairs or the world as related in the Scriptures or the Tradition of the Church, unless of course, they directly illustrate my theme. A full examination of miracle in the life of the Church would require a talk all by itself.

Aside these aspects that I am *not* going to explore, I shall examine those issues concerning divine action where religion and science meet. These questions will require an analysis not limited to Christianity, since all religions, for the most part, claim evidence of miracles and other divine interventions attributable, so these allege, to the sole causation of a deity or deities. David Hume (more later) made precisely this point in trying to demolish the reality of miracles. I make his same point here but rather to support the reality of miracles and other such divine actions. If *everyone* claims it, then it must be worth considering seriously, or so the argument goes. However, we should also accept that universal beliefs may be wrong. A terracentric solar system was overturned by Copernicus. Few once doubted in hunter gatherer groups that familiar spirits inhabited all things. In human affairs little remains unchanged for long and believers should not recoil from this.

In this talk I am indebted to an article by the Revd Dr. Keith Ward entitled: “Are the laws of nature absolute?”¹

Deformations in Orthodoxy - a Cautionary Tale

There are some in the Orthodox Church who, quite justifiably in one sense, regard the working of miracles as so normal and ordinary, that they do not stop to think about miracles at all. Sometimes this even extends into realms of incredulity for many when miracles are claimed in situations where the evidence of divine activity is either fragile or non-existent. For example, it is not legitimate to claim a miraculous cure from cancer when in fact the cancer has been cured by medical intervention. Of course, the skill of medical science is also a miracle from God in the expression of human intelligence and ingenuity, but that would be to stretch the definition of miracle beyond its usual sense of something which can only be attributed to God rather than to any human agency. The “want-to-believe” aspect of some Orthodox concerning divine intervention - not just miracles but also divine healing, the efficacy of intercessory prayer and the reliability of visions - is a problem today in Orthodoxy. Uncritical acceptance should not be claimed as the triumph of a superior simple faith. The Orthodox do not respect St Thomas any the less for asking Christ for tangible evidence that he sees no apparition but rather the Lord Himself.² Seeking confirmation of miracle by rational investigation is not a betrayal of faith.

In many ways the Roman Catholic Church is much better at this discernment than the Orthodox in the modern era. For example, before a miracle of healing at Lourdes may be declared as such, ecclesiastical authority requires the submission of doctors’ reports to exclude any possibility that the healing may be attributable to human agency alone. If this kind of checking and discernment is not performed, then “miracles” that turn out not to be miracles can only serve to bring the Church into disrepute among those sceptics whose

¹ Ward, Keith. 2017. Chapter 4: *The Big Questions in Science and Religion* (Templeton Press, West Conshohocken, PA 19428)

² John 20:25

judgements we are attempting to inform, and attitudes perhaps even to change. In other words, it simply will not do for us to think that we have no responsibility to exercise such discernment, either for our own sakes or for the world beyond the Church's canonical boundary. If we do not follow our own historic Orthodox principles in these matters, we are little better in terms of reliability than some Pentecostal traditions in the Protestant churches which unthinkingly claim miracles everywhere, including allegedly and in recent times: miraculously implanted golden tooth fillings ³ and stunted limbs that miraculously grow longer in the in the space of a few minutes ⁴. This is not to say that such miracles are impossible but rather that they cannot be claimed without being tested and they also cannot be claimed without having a clear account of how such extraordinary events MIGHT be possible because with God even mountains may (apparently) be moved by faith!

These inadequacies of discernment which arise from deformations in current Orthodox thinking, and paralleled in Pentecostalism, set the scene for the remit of this talk. We shall begin with an overview of the increasingly sceptical secular and scientific perspectives in the west since the 17th century when addressing alleged divine intervention. In the second part we shall consider how Orthodox Christianity characterises the workings of miracles, divine healings, theophanies, and above all the Incarnation of our Lord and God and Saviour Jesus Christ. This section will fully take on board all the changes in the scientific perspectives which have been increasingly evident since the time of Einstein and until the present day. When I explain the science, I shall attempt to do so without jargon and make amazing and difficult discoveries easily understood by those of our readers who may have little or no scientific background. Please remember that this science is not irrelevant to our question, it is crucial and fundamental to its exploration and resolution. If we have a heterodox rather than Orthodox take on the miraculous, then I suspect it will not be compatible with this exciting new science.

³ [Spiritual healer - cavities filled, gum diseases healed \(healingteethnaturally.com\)](http://healingteethnaturally.com)

⁴ [A Bunch of Leg Growing Miracles - instant growth caught on video - The Rising Light](#)

If you are an Orthodox Christian reader, then please be patient with the progress of the reasoning in this essay. We first need to have a clear and thorough understanding of the changing science *and* all the heterodox reactions in the west to that during the last 350 years or more before, in the final part, we explore how Orthodoxy resolves these questions.

Christianity, Science and Europe from the Renaissance to the Reformation

Although atheists will not thank me for reminding them of this, it is not only ancient Greece that we must thank for the scientific method, but also the Christianity in the West as it embraced this ancient wisdom from the Renaissance onwards. In England, for example, we can note the work of the Bishop of Lincoln, one-time Chancellor of Oxford University and admirer of the Christian East, Robert Grosseteste (1168-1253) who saw the importance of observation of the natural world, the analysis of data and the use of mathematics as the gift of God to humanity in exploring and accounting for his creation. He developed mathematical physics, put forward the first known wave theory of light, and advocated the use of controlled experiments (which led to the modern scientific method). This was undoubtedly made possible by the insistence of the three great Abrahamic monotheistic religions (Judaism, Christianity and Islam) that God is the Creator of all things and that nothing created can be confused with God. A historical reluctance to investigate creation rationally is always encountered in those religions and metaphysical systems where creation is confused with God, ruling out as blasphemous any attempt to investigate. The spur for modern science, therefore, is precisely to be found in monotheism, a truth recognised even by the 19th-century atheist commentator on religion, Auguste Comte (1798-1857) in his (rather contrived) “Law of Three Stages” ⁵.

In this period from the Renaissance to the Reformation in Catholic Europe scientific progress marched along quite happily with Christianity and nobody envisaged any real

⁵ [Law of Three Stages: The Corner Stone of Auguste Comte's \(yourarticlelibrary.com\)](http://yourarticlelibrary.com)

problem in combining an interventionist God with rational enquiry into the natural world. Occasionally there would be a Galileo (1564-1642) who fell afoul of the Church authorities, but this was because Christianity sometimes found it difficult to keep up with the science rather than any issue it might have had (but in fact did not have) with the value of science itself. The Galileo affair at the time of the Reformation was, however, a warning of what was to come, particularly after the Enlightenment and especially in the work of Charles Darwin. At some point the late Latin tradition lost its way in trying to harmonise religion and science and the estrangement only deepened. ⁶

In the 16th century however, and again in England, the great polymath Francis Bacon (1561-1626), strengthened the Aristotelian distinction between metaphysics, which included both philosophy and theology in its remit, and physics that could only be rooted in empirical observations and non-theological theories. ⁷ Again, this can be seen as the fruit of monotheism in its insistence that the natural world operates according to laws imbued by God the Creator himself. Unfortunately, Bacon also arguably reinforced an existing tendency to estrange God and the world, an estrangement that was later to deepen to the point of divorce in the thought of such men as David Hume in the Enlightenment.

Clocks and Pool Balls – A Mechanical Universe

It is only when we come to the work of Sir Isaac Newton (1642-1727) that we begin see significant departures from both Orthodox and Catholic conceptions of divine intervention in the created order. Newton was a Unitarian with highly idiosyncratic beliefs,

⁶ Protestant apologists sometimes claim that the Reformation drove science and technology forward since science found a ready patronage in Protestant countries where scientists did not have to look over their shoulders nervously at ecclesiastical authorities. This argument may be overplayed considering this list of famous Roman Catholic scientists and mathematicians who were pioneers in their own field: [Catholic Scientists and Mathematicians \(thomism.org\)](http://thomism.org)

⁷ Bacon was a devout Anglican. As these works attest, he clearly saw no conflict between his works as a scientist and his religious beliefs: [Works by Francis Bacon - Wikipedia](https://en.wikipedia.org/wiki/Works_of_Francis_Bacon)

including an interest in the occult. He strongly believed in divine intervention and Ward has written this concerning Newton's understanding of how miracles happened:

*"... [he] wrote a number of extremely boring books about the miracles, pointing out that God could break His own laws if He wanted to. But he did not realise that this made miracles much odder than they had previous been. Miracles had been extraordinary spiritual acts, but still acts of the same general (spirit-caused) sort that occur through the Universe anyway. Now, however, miracles have to be transgressions of universal laws of nature."*⁸

Newton of course was a genius of science and mathematics; next to Einstein, perhaps the greatest scientist of the modern era in Europe. His experiments confirmed to him what many had long thought; namely that the Universe was an incredibly complex machine working by an iron clad system of laws. Sometimes it appeared like a clock whose mechanisms could readily be prised apart and understood. As astronomy and military ballistics developed, it also appeared as a system of bodies in motion constrained by gravity. Forces, inertia and elasticity were observed and theorised from balls impacting on a modern pool table or a tennis ball bounced from the ground; all these just like Newtonian apples falling from a tree - forces and reactions, all very comfortable and predictable; when, that is, you had worked out the equations that accounted for what you observed. These discoveries of Newton presented the Universe as a completely predictable, deterministic closed system in which, if you could only thoroughly understand all the natural laws, you might eventually attain to a perfect explanatory description of everything you observed.

Newton was, of course, less capable as a theologian, even for a heterodox one. His insistence that miracles broke these iron clad natural laws proved to be catastrophic for religion in the west as it passed into the Enlightenment. Newton could accept this breaking personally quite easily, on the basis that if God could make them (the laws) He could break them just as well. However, this made God chaotic in His actions, inscrutable and

⁸ Ibid. p. 87

mercurial. Just when you think that you have got all the measuring equipment set up in the lab properly, God comes along and upturns the table, destroying all your work! Obviously, science was not going to take kindly to such an erratic, disruptive deity. Increasingly God became relegated to the private sphere where dotty beliefs such as this could do no harm. And so, Christianity began to decline in the west against the merciless onslaught of rationality and the scientific method.

Partly, this was due to western Christian churches having lost their theological toolkits in their long widening divorce from Orthodoxy and so they were not able to respond creatively to these challenges, (we shall look at this aspect in more detail in the final part of this talk). Additionally, this was because Enlightenment science had not as yet developed sufficiently in its understanding of the natural world to accept that the Universe was not just one great big mechanical device with iron clad laws. This Great Project of classical physics eventually to know all things perfectly was to be seriously undermined in the Twentieth Century with profound implications for religion. More of that later.

In the biological sciences, naturalistic Darwinian theories had much greater explanatory power than a literal divine six day creation in accounting for the development of life over hundreds of millions of years; evident from the fossil record and carbon dating. Natural selection was even observed at work over shorter timescales in isolated populations and niche environments. What sacred text could compete with this?

Signs and Wonders

We must pause now our historical tour of the triumph of science beyond the Enlightenment to consider the reaction of science and secular philosophy to the notion of divinely caused miracles and interventions in the natural order and to understand how hard that struggle was, and continues to be, for an interventionist theology of Newton's type. First, we need to understand what models of Christianity-in-retreat science confronted, none of them, of course, Orthodox.

Some Protestant Christians just surrendered to naturalism resorting to a distant deity who may have spoken creation into being in the dim and distant past but who had not been truly active in the world almost from its inception. These became known as deists, not remotely Orthodox (lower or upper case) in any kind of way. Many of the founding fathers of America were deists. Scientists like Laplace (1749-1827) ["God? I had no need of that hypothesis"] disturbed not these deists, for they had no immediate need of Him either.

Other Christians such as the Protestant theologian Schleiermacher resorted to the inner life in a much-reduced account of God's actions. He spiritualised mostly all extraordinary events in the New Testament so that these became a more agreeable psychological phenomena, including the resurrection, which now became simply the experience of new birth. This roughly correlated to the rise of pietism in the idealist period of the 19th century. His Lutheran successors, neo-Nestorian for the most part, demythologised (their word) the miraculous and presented either a domesticated Christ of Faith divorced from the Jesus of History (Rudolf Bultmann: 1884-1976) or a social reformer stripped of his incarnational divinity (Albrecht Ritschl).

With this rise of sceptical liberal Protestantism in 19th Century German schools, barely concealing its own neo-deism, a reaction set in with conservatives who insisted with Newton that God could and did transgress his own laws, even if that meant arbitrary actions. For Calvinists who took this line, God's grace and providence in favouring the elect was inscrutable and justified Newtonian model of divine intervention. Apart from the more scholastic of these (Barth), the populists of the conservative mini revival became known as fundamentalists. This term was coined because they followed the fundamentals of what they took to be true Christianity, gathering in the supposed invisible elect which had been, in their view, scattered across the splintering Protestant sects, later rather coyly called "denominations." Some of these, the Pentecostals, emphasised the miraculous to the point of drawing huge crowds, which fed into the consumerist aspect of capitalist economies, especially in America. Revivals came and went, but still there was little or no dialogue with science. Miraculous Christianity became strictly a personal individual phenomenon,

perhaps to be shared by consenting adults in private but only to be accepted into the public arena as a money-making commodity on the tele-evangelist circuits, the electronic equivalents of 19th century tent crusades.

The Absurdity of Miracles in the Thought of David Hume

As surely as these Christians gave up on the struggle to relate to modernity, except where it suited them in terms of the use of its technology, so also did atheists advance little or no further in their assessments of alleged divine action than the deist, or maybe atheist, philosopher David Hume had proposed back in the 18th century. What more needed to be said after all? Miracles were absurd. Hume said so! Case closed. We need now to reopen that case and consider briefly David Hume (1711-1776). I am indebted here to Keith Ward and his citation of Richard Swinburne in their effective demolition of Hume's arguments.⁹

Hume defined miracles as: *"a transgression of a law of nature, by a particular volition of the Deity, or by the interposition of some invisible agent."*¹⁰ Such a definition is impossible to conceive except for the legacy and influence of Newton and those who followed him in the 50 years or more before Hume put pen to paper. Hume saw his calling as a philosopher to bury religion once and for all by demolishing divine intervention generally and miracles in particular. As a philosopher, he was supported in this by many deist or atheistic scientists who regarded erratic interventions of a deity breaking their rigid natural laws as a threat to the whole scientific enterprise and method. Law breaking miracles had to be demolished because otherwise the Deity would always be lurking in the corners of the lab, erratically upturning the tables. This could not be tolerated. So, Hume simply excluded the possibility of miracles from the outset. How very rational of him!

⁹ Ibid., pp. 87-90

¹⁰ Hume, David. 1955. *An inquiry concerning human understanding*. Ed. Charles W. Handel. (New York: Liberal Arts Press).

By definition, they do not happen. There is always a scientific explanation for a seemingly miraculous extraordinary events, an explanation which does not break natural laws.

We shall see later how, from the perspective of 20th century science and Orthodox Christian doctrines of creation, this demolition job on miracles was understandable in the Newtonian context, but from an Orthodox perspective, totally unnecessary. For now, it is sufficient to observe that there is an inherent unresolved contradiction in Hume's thought. It was he, in his general works, who insisted on the importance for the scientific method of experience and observation. This is called empiricism. The empirical approach can sometimes present data and conclusions which are counter intuitive or, seemingly, irrational according to conventional criteria; but we cannot know in advance what data with their theoretical implications will present themselves in the future. The theory of quantum mechanics, more than 150 years after Hume, is a classic example of this seeming irrationality, as we shall discover shortly, but remember, these Enlightenment thinkers were still working within the iron cage of Newtonian determinism and laws. Newton was content to see these laws broken by God, but his successors were certainly not. However, it was very "non-Hume", so to speak, for Hume to rule out miracles from the start. How so?

The empirical approach of the scientific method emphasised by Hume might allow for a more accommodating space for the reality of miracle or at an agnostic approach consistent with a future improved scientific understanding of the natural world. It would have been a more honest position, therefore, for Hume to have declared this agnosticism about divine intervention rather than a downright *a priori* rejection. However, being almost certainly an atheist rather than a deist, he could not bring himself to do this. Here perhaps is an early example of 'scientism', which is when scientists or philosophers make judgements about spiritual matters that lie beyond the scope and competence of their own legitimate fields of truth seeking. Anti-science fundamentalist believers transgress that boundary routinely of course when they fight against evolution or suppose a literal six day creation; but so also do atheists when they scornfully pontificate about Invisible Friends! Hume's philosophising about the nature of reality began to erode in the twentieth century

with the development of relativity theory and quantum mechanics, both of which began to unpick simplistic Newtonian determinism, a classical approach which had successfully explained so much of the world we see, but not now of the worlds that we cannot see, both in the realms of the exceedingly small (the atom) and the inconceivably large (the Cosmos).

Before we consider a truly Orthodox response to these issues, we need to complete our journey into the science of the realms of the quantum and light where normal, classical expectations of reality completely break down in a most counter intuitive way.

Waves and Dice

The revolution that happened in science in the twentieth century was quite extraordinary. The old Newtonian account of reality was found to be only an approximation, an approximation that worked very well in the so-called “real world” in which we live and move in our daily lives; but one which broke down utterly at the subatomic and cosmic levels of reality. There now follows a very much simplified explanation and summary of some of these astounding discoveries; confirmed time and time again by experiment. These now form the basis for the established technologies that we all rely on in our “middle world”, whether in the quantum tuned lasers at our supermarket checkouts or in the relativity calibrated positioning of satnav satellites:

In 1900, the physicist Max Planck (1858-1947) developed the first stage quantum theory in which energy and momentum are discrete; that is, delivered in packets or quanta. Only in this way could he account for radiated energy from black bodies. Stand near to a black car on a fiercely hot day and you will readily understand what he was grappling with. In 1905, Albert Einstein (1879-1955) reinforced this theory by experimental observation of the photoelectric effect in light bulbs. Before his time James Clerk Maxwell (1831-1879), the brilliant Scottish physicist, had shown that light behaved as waves of electromagnetic radiation. Planck and Einstein now discovered that light also behaved as quantised energy packets or photon particles, leading to the so-called wave-particle duality theory. This was

then further developed by Louis de Broglie (1892-1987) into a corresponding theory of wave-matter duality, as observed in the behaviour of electrons. Ernest Rutherford (1871-1937) and Niels Bohr (1885-1962) initially described this quantum aspect of electron behaviour classically in electrons occupying different shells around the atomic nucleus, corresponding to varying energy levels. However, the most explosive discovery in the second stage of quantum theory was yet to come. In the ongoing development of quantum mechanics, observations of the very small unleashed on the world a most unwelcome, seemingly irrational and counter intuitive truth. *All is probability*. This was what really threw a sledgehammer into the classical Newtonian system. It was shown that we can never measure simultaneously both the position and velocity or momentum of a particle because the act of measurement itself will always change the other component to be measured. This is called the Uncertainty Principle, as developed by Werner Heisenberg, a committed Christian (1901-1976). The electron shells, therefore, exist in a probabilistic world where their positions or momenta are smeared across a range of values.

Probability, therefore, is built into all observations at the atomic and subatomic levels. This probability is expressed in Erwin Schrodinger's (1887-1961) Wave Function which describes a range of possible values which only become actual when the wave function collapses, which happens *by the act of observation itself!* Before the observation there are a number of possibilities in superposition with each other. By the apparently simple act of observation, only one actual outcome becomes accessible and known. Before observation we can only say that one particular outcome *may* happen. This was described by Schrodinger in his famous thought experiment ¹¹ of the cat in the box which is neither dead nor alive until it is observed. The act of observation itself defines reality (referred to as the Copenhagen interpretation of quantum theory ¹²). Einstein could never himself accept this interpretation as he was still wedded to a classical world where probability was a

¹¹ [Schrödinger's cat - Wikipedia](#)

¹² [Copenhagen interpretation - Wikipedia](#)

weakness in the description of a system, not a fundamental aspect of the system itself. He once famously remarked that “*God does not play dice.*” Apparently, however, He does!

There is one final twist of the story in quantum mechanics. Since the Universe at the quantum level is always in a state of potentiality rather than actuality, it appears that it may be the case that the Universe is always in the process of becoming something else with infinite alternative futures branching out and dividing into a Multiverse or alternate states and trajectories. Maybe God is the Ultimate Observer whose providence is woven from the stuff of our choices and freewill? That is certainly closer to the Orthodox Christian conception of the world as being BOTH dependent (on God) and free (in us). Newton’s deterministic cage of cause and effect may have no final limitations in the actual quantum Multiverse.

These discoveries (all is probability) run alongside insights from Einstein’s relativity theories¹³ (both General and Special Relativity) in which the velocity of light is always constant irrespective of the speed of the observer, and was itself an absolute speed limit within spacetime,¹⁴ a spacetime continuum in which there is no absolute frame of reference for spacetime coordinates and in which the observed phenomenon of massive objects such as our sun bending starlight through the gravitational distortion of space at its rim conforms to Einstein’s explanation of gravity in terms of spacetime curvature.

Although there are tough problems besetting 21st century physics, notably the incompatibility of the two robustly evidenced theories of gravitation and quantum mechanics and the unresolved question as to whether the irreducible structure of matter consists of strings of vibrating energy; the achievements of 20th century science have been astounding and have transformed our modern world. These achievements have broken forever the rigid deterministic universe of Newton with its iron clad laws. Newton had never been able to explain how or why two objects could be gravitationally attracted; he

¹³ [Theory of relativity - Wikipedia](#)

¹⁴ [Michelson–Morley experiment - Wikipedia](#)

merely accounted for what he observed. He never dreamed that space and time could be so united, interdependent, relative and malleable as was indeed demonstrated in the 20th century physics of supermassive black holes, or again in matter being accelerated to near light speeds in particle accelerators. If the world of the very small is probabilistic and uncertain; the world of the very big is an Alice in Wonderland reality where counterintuitive distortions in spacetime became commonplace as masses and speeds escalate.

New Directions

Where does that now leave our theme of miracles and divine intervention? Is the universe a self-enclosed, self-generating system of matter and energy where everything is solid and predictable? Clearly not. Is there room for divine agency, for divine intervention, for miracles? Clearly yes in so far as reality has a certain plasticity rather than rigidity. Agnosticism concerning the existence of God and His activity is the only proper and honest response from within the field of science itself. Hume is now a little passé. On the other hand, respect for science, wherever it may lead, is always and by definition obligatory for believers; not MY science or YOUR science, as if theories were merely competing opinions.

Theories are the currently best, peer reviewed and thoroughly tested models that explain what we observe, and which successfully predict new outcomes. These are bound to change and evolve as science develops but they are not opinions and can never, by definition, in principle and finally be at odds with a theistic view of the world. This comes through informed faith and openness to revelation, which of course we do not require from science which has its own questions and parameters of complementary truth seeking.

Now this may seem like a conclusion, but it is not! Having established that modern science is less hostile to the idea of subjective agency (divine and human) in the operation of the natural world, we need finally to consider the distinctive contribution of Orthodox Christianity to these questions; a contribution that the west has progressively lost over the centuries since the Great Schism. We shall discover that in the logos cosmology of the pre-

Christian Greeks and that of St Maximos the Confessor, and also in the articulation by St Gregory Palamas of the Church teaching concerning the Divine Energies, we have a pathway for the Christian west out of these confusions and antagonisms between faith and science; a quite unnecessary friction generated by late Latin theological problems with divine immanence, as we shall now hopefully explore and discover.

The Hand of God

The Spirit inspired genius of St John the Theologian and Evangelist in the first chapter of his Gospel is that he fuses together a cosmological concept, well known in the Greek world of antiquity, the Logos, with the Hebrew understanding of the Word of God (דָּבָר *dabar*). It is this Word, this Logos, this God¹⁵, that became flesh for us in the Incarnation.¹⁶ He was not the first to make this connection, bridging Jewish and Hellenistic religious culture. This was first articulated perhaps in an explicitly theistic sense by the pre-Christian Hellenised Jew, Philo of Alexandria. For Philo, however, the Logos was a demiurge, a first creation, not God from God as in the Gospel and the Creed. Since “Logos” and “Word” are now synonymous and ontologically identical in Christian incarnational theology as the Second Hypostasis of the Holy Trinity, we should not forget what was brought to the table of the Church’s theology in this crucially important idea of the Logos.

The Logos in pre-Christian Greek philosophy was not strictly speaking a ‘word’ but rather the foundational principle of all created existences (*logoi*, plural). It is hardly surprising therefore that Philo and St John found it to be so useful in helping Greek Jewish believers, later Gentile Greek Christians, to understand Creation in Genesis 1. However, for both Hellenised Jews and then Christians alike, the Logos did not stand alone. The Logos

¹⁵ Here we see of course the inexorable development of the doctrine of the Trinity. The Word as God but not a second God. The Spirit as God but not the third God.

¹⁶ John 1:14

encapsulated all the logoi of created existences. In searching for elucidation online I found this anonymous excellent summary of our evolving theme: -

The Logos is a consubstantial member of the Trinity. The logoi are among God's energies. The act of creation is an energy of God as Logos, Who gives to each created thing a logos, a principle which makes that thing itself. By perceiving the logoi, the noetic vision sees the energies of God in all things.

Rarely have I seen this so lucidly and comprehensively explained. It lies at the heart of the Fathers subsequent development of Logos Christology as in this from St Maximos the Confessor: -

The Word becomes thickened [...] concealing Himself mysteriously for our sakes within the logoi of creatures and thus He reveals Himself accordingly through the visible things as through some written signatures as a whole in His fullness from the whole of nature and undiminished in each part, in the varieties of natures as one who has no variation and is always the same, in composites, as One who is simple, without parts, in things which have their beginning in time, as the One without beginning, as the Invisible in the visible, the ungraspable in tangible things.

(Ambigua, 33: St. Maximos the Confessor)

And now to comment on both summaries ...

Note that in the first summary above, the Logos in His creative activity is the Energy of God for creation, the Divinely Spoken Word that calls everything into being according to its own derivative logos, collectively, the logoi. These logoi are not merely inert ontological descriptors, albeit bearing the imprint of their Creator as “good.” The Divine Energies impart to the logoi their own creative power from God. Recall that in the liturgical litany of creation in Genesis 1, the earth itself has the power to bring forth both the vegetable and animal kingdoms.¹⁷ As an aside let us note that if the earth has an agency in bringing forth

¹⁷ Genesis 1:11,24

life, evolution is entirely compatible with this manner of divine creation. It is only with humanity itself do we see a direct and unmediated creative divine act such that the Logos now has an image and likeness in humans, male and female.¹⁸ Only humanity, therefore, is singled out as special and different (this does not rule out pre-human hominid evolution). The final part of the first quotation refers to the fact that we can only see this creative divine activity in the logoi of ALL things (human, animal, vegetable and mineral) if we have *noetic vision*¹⁹ ... which ... *sees the energies of God in all things*. Without the noetic vision that comes by and in faith, with grace and purification of the heart, we cannot see God²⁰ or Him at work in anything! Without that noetic vision we are reduced to seeing all things as self-subsistent, devoid of glory and intrinsic creativity. They cannot be vehicles of God's actions in and through His Energies. They remain in our intellectual grasp inert and lifeless because sin has dulled us into *not seeing them clearly for what they truly are*. They are not "dead" ... they are alive in God and life-giving. This richness of creation in the logoi is more fully explained in the second quotation from St Maximos the Confessor who magisterially fills out St John's intention in bringing Greek wisdom concerning the logoi to serve Christ who is the Word, Wisdom and Power of God in all things.²¹ This is at the heart of Orthodox sacramental theology, iconography and our appreciation of both the mysteries and miracles of existence. In Christ, the scales have fallen from our eyes. We truly see!

Francis Bacon back in the 16th century was already wrong in robbing the world of its grandeur and creativity. In his love for Aristotle, he saw not the Divine Creative Energies which are God made manifest in Creation, the Divine Immanence. What followed afterwards in both Catholic and Protestant Europe was yet more of the same until God was finally banished from Creation in a final deist puff of smoke, courtesy of David Hume and others. This banishment of God from His Garden was really a self-banishment again from Paradise, clouding in the process mostly everyone's potential for noetic vision, except

¹⁸ Genesis 1:26,27

¹⁹ [Archetype and Symbol II: On Noetic Vision – Orthodox Arts Journal](#)

²⁰ Matthew 5:8

²¹ 1 Corinthians 1:24b

perhaps for such occasional Christian luminaries as George Herbert ²², Thomas Traherne ²³ and Gerard Manly-Hopkins. ²⁴

We have also referenced the Divine Energies, set forward for us by St Gregory Palamas in his teaching on hesychastic prayer whereby that noetic vision of the Divine Light of God in all things may truly be seen, alive and active. In this Divine Immanence in creation God can do wondrous things, not by supposedly violating laws of nature but by working within the true logoi of created things in their life-giving potentials for transformation and transfiguration. Occasionally, in the so-called nature miracles, (the stilling of the storm, the changing of water into wine etc.) God will act to a much stronger degree within the malleable fine structure of matter itself; but as the Fathers reflect, this lies within the capacity of the Logos. Whether we "see" miracles or not depends on the sincerity of our faith and our capacity for noetic vision. God measures His own intervention according to our capacity to receive, which in return depends on our turning afresh to Him each day.

*The world is charged with the grandeur of God.
It will flame out, like shining from shook foil;
It gathers to a greatness, like the ooze of oil
Crushed. Why do men then now not reck his rod?
Generations have trod, have trod, have trod;
And all is seared with trade; bleared, smeared with toil;
And wears man's smudge and shares man's smell: the soil
Is bare now, nor can foot feel, being shod.
And for all this, nature is never spent;
There lives the dearest freshness deep down things;
And though the last lights off the black West went
Oh, morning, at the brown brink eastward, springs —
Because the Holy Ghost over the bent
World broods with warm breast and with ah! bright wings.* ²⁵

²² [George Herbert | Poetry Foundation](#)

²³ [Thomas Traherne | Poetry Foundation](#)

²⁴ [Gerard Manley Hopkins | Poetry Foundation](#)

²⁵ Source: Gerard Manley Hopkins: Poems and Prose (Penguin Classics, 1985)