



Religion and Science: Towards a Symbiosis for the Evangelizing Mission of the Church Today

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Abstract

The relationship between religion and science has been a subject of investigations since classical antiquity. The issue had been addressed by philosophers, theologians, scientists, and other scholars. Perspectives from different geographical regions, cultures and historical epochs show significant diversity, with some characterizing the relationship as one of conflict, others describing it as one of harmony, and still others proposing some form of interaction. The result is that the relation between these two great cultural forces has been tumultuous, many-faceted, and often confusing. This paper examines these positions and discovers greater mutuality between the two God-indwelt realities. The study finally relates the findings to the mission of the Church in human society today.

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1. Introduction

‘What has Athens in common with Jerusalem?’ ‘What has the School in common with the Church?’ (*Quid Athenis et Hierosolymis? Quid academiae et ecclesia?*) are questions asked by Tertullian at the beginning of the Christian era. These questions are always interpreted with yet another similar set of questions: ‘What has Greek philosophy to do with biblical revelation?’ ‘What has reason to do with faith?’ or the ‘*studium* with the *sacerdotium*?’ Today when our world is growing all-too-scientific, technological and cybernetic, when almost everything receives its ultimate explanation from the extent of its relation to modern scientific progress, these questions are recast thus: What has science to do with the Church or religion generally? It should be noted, however, that what is today regarded as science is radically different from what constituted science in Ancient and medieval times. Science then was regarded as philosophy until the modern era when there became a sharp separation between philosophy and empirical sciences. Yet, the same force of argument which sustained the relationship between the Church and medieval science still holds sway today between the Church and modern science and technology.

Man has always been seen not only as a ‘religious’ but also as a ‘scientific’ being. But with the events of today, can a good religious man be a good scientist at the same time? Can a priest combine the demands of his vocation as a director of souls with the work



of a laboratory scientist? Can he be a medical doctor? Or can a 'good' scientist preach the good news? All these questions and more have bugged the minds of many a people. And these people have tried to respond to the problem from their various angles. While some maintain a conflict theory according to which either science or religion but not both must be chosen; others hold total separation theory according to which while recognizing the importance of both, nevertheless, argue that both cannot be brought closer to each other. Science has nothing to gain from religion and religion borrows nothing from science, they insist. Others still buy the amalgamation theory whereby science and religion are brought to a fusion such that science can become religion and religion can replace science. Here, one can really speak of syncretism and practical *monophysitism* of two different realities.

Be it as it may, it is our aim in this paper to proffer a symbiotic theory of interaction and dialogue between these two God-in dwelt realities. The essay represents a matrimonial witnessing by a Catholic Christian without imposing it on all the Christians. For the purpose of this essay, science is seen as an organized body of knowledge be it empirical, artists or human. Religion underscores a binding spiritual relationship between a worshipper and his object of worship, in this case, Christian God. The results of this study would be used in discussing the prospects and challenges of the Church in carrying out its evangelizing mission in a world rife with scientific knowledge and its products.

2. Religion--Science Relations in Historical Perspectives

The problem of the relationship between science and religion has taken different shapes at various times and places depending on the mindset and thought pattern of each religion or people. In African, Hindu, Buddhist, and other ancient religious traditional set-ups, the problem of this relationship was not a hair-splitting one. In their respective religious climates, science and religion could co-exist. Science, of course as they understood it which is highly deviated from what it is today, was seen as coming from the same source with religion. A good African traditional religionist could be a good scientist. He could get at herbs and roots to cure a human illness. He developed his sciences of counting, economics and society. He knew the particular foodstuff and vegetables which he would take to give him a required nutrient. What a good dietician! Ever till date, gifted ones know what to do to make their machetes, hoes, clay pots, prepare their cassava, yam, rice meals. Some of them could make rain or quench it. Believe it or not! They can make musical instruments, hunting equipment, and home property. In fact, they were and are capable of indulging in different projects which can be classified as scientific. Whether they know these endeavours as science or not is a different question. At worst, call them anonymous scientists. Their indulgence in all these, however, is seen to be under the scrutiny of the deities. Their science is religious-inspired and God-indwelt science. Other religious traditions have their versions of the same story.



Even before the known philosophic era in Greece, science and religion were not divorced. Every interpretation of science or religion, god or nature, nature or supernature was sought from the pantheon of the gods. Even these gods like Zeus, Apollo, Dionysos could interfere in the affairs of men. Indeed, things and nature, science and religion were 'full of gods' in the words of Thales. These god-man affairs were the preoccupation of the Greek poets such as Homer, Hesiod, and Sophocles. In fact, there was a fusion of science, understood as '*phusis*' or nature, with religion.

Nevertheless, with the emergence of Greek or Western philosophy, there was a slight shift. Thales and his contemporaries in the 5th century B.C. began to be filled with 'wonder' inherent in how things were seen as changing but at the same time remaining the same. They then began to ask themselves questions of ultimate importance: From what was the world made? What is the basic principle of things? Why is there change in the universe or is it an illusion? Why is there something rather than nothing? All these questions triggered off a moment of reflection, aim of which was to get exonerated from the religious grip in explaining anything at all. But however hard they tried to accomplish this, they seemed not to be able. Their religious background still took hold of them. Thales beside his water-response was still found saying that 'everything was full of gods'. Pythagoras' mathematical explanation of nature still reserved the *tetrakty*, number 10, for the orphic deity. Heraclitus and Anaxagoras were at the same time inviting the divine *logos* to be the moderator of the changing things. But it

was Democritus who arrogated all the qualities of a god to a mere material thing. *Atomoi* (atoms) were given the qualities of eternity, indivisibility, invisibility and immutability. This moment of thought in the relation between reasons (science) and religion was a step towards atheism. The sophistic movement and modern thought were influenced by this. But thanks to Socrates, Plato, Aristotle, and Plotinus, the science-religion gulf was not widened. Hippocrates and Galen could still practise their medicine even within a religious milieu.

Lonchamp (1993) has given a concise history of the relationship between Church and Science. In patristic and medieval times, the problem took the form of arguments on the relationship between faith and reason. Has reason anything to contribute in one's relationship with God? Is faith not sufficient? The Christians believed so much in the power of reason. Sufism and Kabala are the Islamic and Judaic version of this idea. Tertullian, Tatia, Cyprian held that biblical revelation has nothing to do with philosophy and reason. But it was the view of Clement of Alexandria, Origen, Justin, Pseudo-Dionysius the Areopagite, St. Augustine, St. Thomas Aquinas and some others that reason can go a way towards knowing God. The Manicheans, however, denied any compatibility between the two, and even maintained that the flesh is evil out of which the soul must seek to come. On the basis of this, they discountenanced human sexuality, the world and external sciences and took hold to severe austerity and asceticism. Perhaps, Catholic celibacy may have been sourced from this Stoic-Manichaeic thought-world. Hence, while



some medieval scholars advocated for mutuality between reason (science) and faith (religion), others took to a total flight from each other.

More still, among the Fathers of the Church, two opposing views and attitudes to science are discernible. First, there was a tendency to indifference or mistrust. For some, science with its consequent technology was suspect because it came from pagan culture. Cyril of Alexandria had only scorn for the 'idle chatter of the Greeks'. He saw the study of science as diverting Christianity from its primary aim of offering salvation. No wonder anti-intellectualism was prevalent among the first monks. St Anthony had no learning and was proud of it. For Damian, the Bishop of Ostia, scientific study was a demonic activity, but that did not prevent him from being proclaimed a Saint and Doctor of the Church in 1281. St Bernard forbade his monks from practising medicine as it was not an art useful for the salvation of soul. But there are also others who considered science to have some positive value. St Clement of Alexandria stigmatized the laziness of those seeking to avoid all contact with secular science. He rejected all fideism. Origin held that sciences help us to understand scripture better since 'all knowledge goes back to God'. St Augustine's position on this debate was rather mixed. On the one hand, he inherited from Plato a fascination for mathematical numbers and developed a whole mystical numerology. He supported most of his considerations on the soul with demonstrations taken from geometry. On the other hand, Augustine saw the science of Astronomy as an obstacle to the study of sacred scripture.

In the Middle Ages, John scouts Erigena argued that since reason is a gift from God, the scientist interprets the book of nature as authoritatively as the father interpret the Bible. Thus, science enjoys a relative autonomy over religion. Pope Sylvester II of the year 1000 saw a fair equilibrium between faith and science. According to him 'faith needs to be fed by science or reason'. Enthusiasm for science was particularly a mark of the cathedral schools of charters in the 11th and 12th centuries. William of Conches reminds us that 'by knowledge of the creation we arrive at the knowledge of the creator'. Because 'Aristotelian revival' caused some stir in the 12th century regarding the Eucharistic transubstantiation and *creatio ex nihilo*, Averroes and Albert the Great maintained total separation and opposition between science and theology.

But it took a St Thomas Aquinas to draw a synthesis. St Thomas saw a convergence between scientific and theological approaches to truth. For him, disputed questions on dogmas of the Church can be asked based on reason. It is the reply to these disputed questions that made up the '*Summa Theologia*'. This use of reason in the interpretation and understanding of Christian dogma and the bible was rejected by the Franciscan Bonaventure since, for him, with the fall of man, reason has also fallen. But the last straw that broke the Carmel's back of the Thomistic synthesis was the disastrous efforts of the Oxford School led by Dun Scotus and William of Ockham. While Scotus raised a barrier between rational knowledge and intuitive knowledge, Ockham proposed nominalism and the theory of double truth



where a truth in science may not be true in theology.

Science, however, remained at the hands of clerics until the renaissance. This period of rebirth promised free enquiry outside the tutelage of the Church. Hence, the observations of Nicholas Copernicus and Galileo supported by the scientific experiments of Johann Kepler, Tycho Brahe and Isaac Newton overturned the Ptolemaic astronomy on which the Bible was based. It is now the earth moving round the sun and not the sun round the earth. This represents the official beginning of the Church-science hostility. The Church responded in 1633 by way or inquisition forcing Galileo to recant his published findings. During the rise of positivism in France in the 19th century, August Comte had maintained a total separation between science and religion. For him, Christian religion is infantile while science is adult. It was, however, the naturalistic and evolutionist doctrine of Charles Darwin and Thomas Huxley that skyrocketed the disagreement between Church and science. This enmity is resultant upon the Enlightenment bias against every authority especially that of the Church.

More still, with the renaissance, a bright new era was launched. Almost everything divine was subjected to human reason in the name of intellectual and cultural revival. Erasmus criticized the clergy; Luther became allergic to authority divinely instituted. Machiavelli took to authoritarianism in government. Indeed, it was discovered that certain knowledge could be acquired neither by being under the tutelage of the Church nor by reading it from

Latin or Greek texts. Leonardo da Vinci became a good artist without being religious, and Hombolt a good administrator without baptism. Even people from within the religious community contributed to the decline of medieval synthesis of faith and reason. The theory of double truth of Ockham, the mathematicism of Nicholas of Cusa, the formalistic metaphysics of Dun Scotus, contributions of Marcellus of Padua and mysticism of John Eckhart led to this medieval decay.

Furthermore, it was Francis Bacon who introduced a total severity between science and religion. With his *novumorganon* of inductive logic and practical orientated philosophy, Aristotelianism, Thomism and theology were rejected. A turn was therefore made to the practical science of medicine, ethics and mechanics. These became the summit and flowering of knowledge and this knowledge became power. Since theology was rejected in this philosophy, God was also rejected either by explication or by implication. Because of this, a chasm, a caesura, was created between science and religion. The mathematics of Descartes, the monism of Spinoza, the sense perception of Hume, the Copernican Revolution of Kant, absolutism of Hegel, materialism of Marx and Feuerbach, positivism of Comte, God-is-dead of Nietzsche, atomism of Russell, and pseudo-freedom of some existentialists could not allow these to posit the Christian God. Atheism became the consequence.

It is then this modern thought not science itself that shaped the attitude of the scientist towards religion and ethics, all in the name of



enlightenment. The scientist and the religious man look at each other with suspicion. Alfred Jules Ayer and the Vienna Circle dismissed God-concept and language as meaningless, not false nor true but meaningless. The Church killed Galileo and sanctioned Copernicus because they said that the earth moves round the sun. Charles Darwin was condemned because of his theory of evolution. Who knows why Kepler, Newton and Tyndal escaped the inquisition. By this moment, a series of dichotomy was already introduced into the everyday experience of man. There was a separation, for instance, between religion and philosophy, religion and science, nature and supernature, the state and the Church, the Church and the world, philosophy and science, philosophy and theology, reasoning and intuition, sensation and intellection, faith and reason. Surely, the whole of human experience began to be atomized. Teilhard de Chardin who combined being a priest with being a scientist was excommunicated by his religious congregation on account thereof. Today, it is hard to see many priests who are medical doctors. Why?

However that may be, Church-science relationship is assuming a new turn recently. Church and science are experiencing more co-operation than rancour. The Vatican Council I Constitution, *Dei Filius*, holds that science and religion must co-operate even while following their distinct methods, as the lord of sciences is the same lord of theology who does not contradict himself. Also Vatican Council II in its Pastoral Constitution, *Gaudium et Spes* (GS) affirms with Vatican Council I that sciences have their legitimate autonomy within their proper spheres of

competence (GS 60). The document admonishes theologians to cooperate with experts in the various sciences and propose the Church's teaching on God, humanity, and the world in ways that take advantage of recent scientific advances (GS 62). This course of reasoning has ever since been chat by many religious thinkers and scientists. Maurice Blondel, Teilhard de Chardin, Pope John Paul II, Newman, Tillich and Karl Rhaner, on the one hand, are ready examples. John Paul II, for instance, at the inception to the papacy established a Commission to make a careful examination of the Galileo question, an enquiry that led him to remark in 1983, at the 350th anniversary of the publication of Galileo's *Dialogues Concerning Two New Sciences* that the Church's experience during and after the Galileo affair 'has led to a more mature attitude and a more accurate grasp of the authority proper to her'. The Pontiff later apologized to Galileo. Again at the Vatican-sponsored study week held at Castelgandolfo on September 21-26, 1987, to mark the 300th anniversary of the publication of Newton's *Philosophia Naturalis Principia Mathematica*, Pope John Paul II presented a message regarding Church-science interaction. Happily, on the other hand, this *koinonia* between science and the Church is shared by some prominent scientists like Max Planck, Einstein, Eddington, Heisenberg, and Oppenheimer.

Summarily then, the nature of the relationship between Church (religion) and science cum technology can be resolved into four pivotal and typological positions: (1) *Conflict* which makes it necessary to choose either science or religion but not both; (2) *Separationism*,



which relegates science and religion to separate spheres and conceives of no interference with one another; (3) *Fusion* which fuses science and theology together to provide a *tertium quid* in which for instance the Bible can be text book of chemistry and vice versa, and; (4) Dialogue and interaction which proposes dialogue, autonomy, respect and mutual dependence between both fields. Man is *homo scientificus*. He is also *homo religiosus*.

3. Religion and Science: Towards a Mutuality and Dialogue

Science may be regarded as in the relationship of man to nature, and religion as in man's relationship to God. In either case, man is involved. In man, there is a *religiosus* and a *scientificus*, and these two qualities need not fight each other. In their symbiotic existence, science and religion are provided with an opportunity to interact with and be radically open to the discoveries and insights of one another, yet retain their various integrities. While it is true that religion is not founded on science, or science an extension of religion, each can at the same time support the other as distinct dimensions of a common human culture.

Rejection has then to be made to the *conflict theory*, in which a choice must be made between science and religion to the exclusion of the other. This rejection can relate either to two forms: scientism, wherein there is a certain mystical exaltation of science to the point where it becomes a pseudo-religion dispelling what it calls the 'dark clouds of dogma' and 'inaugurating a bright new era of free assent to universally acknowledged truth'.

On the other hand, *religionism* which opposes science in the name of faith cannot do the work of science, nor can the bible function as a textbook of chemistry.

Again, *separationism* must not be accepted. Here, the triumphalist view maintained by revelation over and against science cannot be entertained. Science has something to do with revelation and vice versa. It is the same God who reveals himself either through science or by revelation. Science has a purely pragmatic aim, and should not deny any claims of revealed religion about objective reality. At the same time, *fusion* of the two should not be allowed. They should not be swallowed up in some kind of '*tertium quid*' that would be a higher integration of both. Each field should retain its own principles and its own identity while challenging and being challenged by the other.

The interaction between science and religion is, for instance, a demand of Christian faith, which sees all things as created in and through Christ (Col. 1: 16-17) and as destined to be reconciled through him (Col. 1: 20; Eph. 1: 10). The founding of the universities by the Church is attributed to this faith conviction. In fact, the 'natural' sciences are by no means a threat to religious truth. In the Middle Ages, when the Arab world was the focus of much scientific and mathematical inquiry and discovery, the truths disclosed seemed at first sight to be incompatible with the truth of Islam as set forth in the Quran. The early chapters of Genesis in the Christian bible borrowed fruitfully from the cosmologies of the Ancient Near East which afforded concepts and images that, with necessary



purification, could well serve to communicate revealed truths. Biblical exegesis then cannot proceed without good knowledge of Mediterranean history, geography and archeology. The importance of psychology in the spiritual formation of Catholic clergy in modern times cannot be gainsaid, nor can sociological analysis and modern communication media system be overlooked by the Church which currently sees herself not only as a spiritual community but also as a social institution.

When in the twelfth century, the discovery of Aristotle who represented 'science' to the medieval Christian mind was made, the prospects of reconciling him with the bible looked at first dim indeed. But in the following century, Aquinas not only reconciled much of Aristotle's science with the bible and the teaching of the Church, but showed with skill and brilliance that Aristotelianism enhanced rather than diminished the spirituality of the Church's treasure house. Avicenna and Averroes did the same for Islam, while Maimonides and Ben Judah did it for Judaism.

The 'aggiornamento' of the Vatican Council II has brought a lot of revolution in Catholic thinking. In short, it is only when the window was opened for fresh air to come in even from science that it was noticed that there was a lot of dust that needed to be swept out in the Church's room. One of the post-conciliar Popes, John Paul II, has even often left this room to visit other rooms including those of the scientists. Since that Council, a new outlook was inaugurated. The Catholic Church abandoned the attitude of being always on the

defensive for a more positive orientation. The wall it built around itself began to crack. Reconciliation was sought with the Catholic Eastern Churches, and the title 'separated brethren' was given to non-Catholic Christians. Ecumenism is now stressed and inculturation intensified. Drums can now be beaten and vernacular languages used in liturgies. Cultural symbolization is now on the pipeline such that some theologians reject trans-substantiation in favour of trans-signification and trans-symbolization.

Christian theology, in the same vein, has not ever more than before recognized the importance of sciences. Thus, Pannenberg speaks of theology of history, Karl Rahner of existential theology, Moltmann of theology of hope, and Metz of political theology. From mature appreciation of science then, nothing may prevent a priest from partisan politics or from being a medical doctor. Holistic salvation of the individual should concern him. Recognizing the close connection between the soul and the body will vindicate this claim. If he can cure bodily illnesses through spiritual means, why not also through physical means. The primary task of a priest is formation of a community and sanctifying this with the word, and he can do this primary role from any walk of life, be he a lawyer, a politician, a doctor, an engineer, a mathematician.

Ever since, the Church has been apologizing to Galileo and has settled for a more mature appropriation of scientific discoveries. Some Christians are convinced that the 'big-bang' theory of cosmic origins provides a scientific confirmation of the Christian doctrine of



creation. Others ask whether the scientifically predicted ‘cold death’ of the universe, through the operation of the laws of thermodynamics has something to say to Christian eschatology. Then again, it may be asked whether the ‘anthropic principle’, according to which the universe seems to have been ‘fine-tuned’ from its origins to produce and support human life, gives new relevance to classical arguments from design. Some theologians, moreover, believe that the principle of indeterminacy in Werner Heisenberg’s quantum physics can be helpful in overcoming the dilemmas of freedom and necessity, reprobation and predestination, problem of evil, and showing how providence can act without violating the established order of nature. And Niels Bohr’s wave-particle duality principle could suggest new ways of dealing with mystery and paradox in theology.

Indeed, there is no gainsaying it that science and religious theology are moving towards a methodological convergence. Science no longer committed to reason alone, nor faith to authority alone. Each works with a subtle combination of faith and experience, intuition and reason, imagination and deduction. In fact, science and religion can wed. Hence, the relationship between religion and science can be dramatized as though in a wedding ceremony in the Church. Assume that science and religion are already at the altar. Who is the husband and who is the wife? *Anyone!* Who is the officiating witness? *Christ*, since he is the lord both of science and religion. What is the name of the wedding church? It is *man* who is both *homo scientificus* and *homo religiosus*. In every sacrament, there is the matter and the form. What is the matter in this

case? *Faith!* It is a quality which both the religious and the scientist cannot dispense with. Indeed, at the gate of contemporary science is written: ‘Ye must have faith’. Eddington, Einstein, Heisenberg, Max Planck, and Oppenheimer emphasize this. Acts of faith are demanded for anyone to become committed to scientific enterprise, to learn the current state of the discipline, and to advance toward new discoveries. One, at each stage, must put one’s trust in some idea or principle that could conceivably be false — act of natural or scientific faith. The form of the sacrament is *reason*. Both science and religion employ reason. Religion without reason becomes fanaticism; science without reason is scientism — a cult of science. I have not talked of the wedding ring. *Tradition* can be assigned that! In science, as in religion, development occurs gradually and progressively. Progress would not be possible if past achievements were not remembered and employed. At the same time, *change* is a factor in both religion and science. It can serve as the holy water sprinkling tradition. The wedding is already done. What More! The wedding having taken place, the couples need not fight each other. They must help each other and aim at procreation — the good of man. They must understand each other. Dialogue and interaction will guide them. Joined by Christ-God, let no man put asunder. There should be no divorce. It is forbidden by divine command. Hence, Athens and Jerusalem are now called Married.

Having seen the nature of Church-science relationship in history, may we now turn to the mission of the Church today in a scientific and hyper-technological world.



4. The Mission of the Church in the World

If any person tells you that he can define the Church, take him not serious. The Vatican Council II is very much aware of this. That is why it talks of the Church as a mystery. But note immediately that this term mystery, applied to the Church, implies that the Church is not fully intelligible to the finite mind of man, and that the reason for this lack of intelligibility is not the poverty but the richness of the Church itself. It is because of this richness that models are used to describe the Church. An American dogmatic theologian, Dulles (1978), has outlined five different ways of describing the Church, ways each of which is favoured by different ecclesiological perspective. He writes of the Church as an institution, as a sacrament, as a mystical communion, as a herald, and as a servant of the world. But he is quick to note that 'each of the models has its own weaknesses and that no one should be canonized as the measure of all the rest' (p. 36). The models are mutually complementary. Therefore in this paper, we take the Church as an institution whose external structures can be seen; but also as sacramental precisely as a sign of the unity of men with God and of the whole human race. It is a Church which is called to herald the good news of Christ and serve the world through the continuous inauguration of God's kingdom of justice, peace, love, joy and communion.

The Vatican Council II decree on the Church's Missionary Activity (1965) opens with the statement:

Having been divinely sent to the nations that the might be "the universal sacrament of salvation", the church, in obedience to the command of her founder, (Mt.16:15) and because it is demanded by her own essential universality, strives to preach the gospel to all men... (*Ad Gentes Divinitus*, n.1).

It then follows that the mission of the Church is to carry the message of salvation wrought by Christ to all the corners of the earth in accordance with the mandate 'Go therefore and make disciples of all nations....' (Mt. 28: 18-20). This missionary activity according to *Ad Gentes* includes Christian witness (nn.11-12), preaching the gospel and assembling the people of God (nn 13-14), and forming the Christian community (nn. 15-18). It is to accomplish this mission that the Church took to ecumenical activities and dialogue with other religious activities which were ushered in by the twin documents of Vatican Council II *Unitatis Redintegratio* and *Nostra Aetate* respectively. It should also be remembered that it is the attempt to carry out this mission effectively that crystallized among the protestant quarters the Edinburgh Conference of 1910, the so-called theory of comity, and foundation of the World Council of Churches.

But the mission of the Church also largely includes inauguration of God's kingdom of



justice, peace, love, joy and solidarity. This has been the abiding impetus behind the papal publications of socio-moral encyclical and other documents – *Rerum Novarum*, *Quadragesimo Anno*, *Mater et Magistra*, *Pacem in Terris*, *Ad Petrem Cathedram*, *Humane Vitae*, *Populorum Progressio*, *Justitia in Mundo*, *Octogesima Adveniens*, *Redemptor Hominis*, *Laborem Exercens*, *Sollicitudo Rei Socialis*, *Veritatis Splendor*, *Evangelium Vitae*, *Centessimus Annus*, *Familiaris Consortio*, etc. It is this too that serve as the stimulus for the emergence of various liberation theologies.

Furthermore, this mission which is God's own mission is known for its universal dimension, to all ends of the earth (*Redemptoris Missio*, n. 23). This teaching has always been corroborated by great missionary documents like *Summi Pontificatus*, *Ecclesiam Suam*, *Evangelii Nuntiandi* and *Tertio Millennio Adveniente*. Therefore the mission of the Church can be succinctly noted as 'bringing the good news into all strata of humanity, the scientific and technological community inclusive and through its influence transforming humanity from within and making it new' (*Evangelii Nuntiandi*, n. 18). It is then in the light of this understanding of Church's mission that we can delve into the mission of the Church in a scientific and hyper-technological world.

5. Church's Mission in a Scientific and Hyper-technological World

'The joy and hope, the grief and anguish of the men of our time... are the joy and hope, the grief and anguish of the followers of Christ as well...' (*Gaudium et Spes*, n.1). This is the

opening statement of the Vatican Council II Pastoral Constitution *Gaudium et Spes*. The statement rightly summarizes in a nutshell the Church's attitude to human culture and progress. The Church rejoices with the world at the improvement of life wrought by advances in science and technology. Yet it also grieves with it the dehumanizing dimensions of such advances. It may therefore suffice to adumbrate the mission of the Church in a scientific and hyper-technological world under the following headings:

- (i) The Church should be a prophet to that world.
- (ii) The Church should recognize and use the good technical advance of such a world for the purpose of evangelization.

i. The Church as a Prophet

The Greek word '*prophetes*' means "one who speaks on behalf of someone else". Biblical Theology tells us that contrary to a rather notorious conception, prophecy is not necessarily prediction. Prophecy is more of *forth-telling* than *foretelling*. (Scott: 1969). Within the context of church's mission then, the church is a prophet in the sense that she is called by God to speak on his behalf. The church is called to speak only but the will of God. Therefore, it is this office that the Church of the 3rd millennium is once more called to take in a scientific and hyper-technological world. This prophetic office (*munus propheticum*) demands that the Church should stand up to condemn the excesses and bad forms of technical preoccupation and its attendant spirit just as the prophets of old condemned the moral deficiencies of the



people of their time. It may be ad rem to point out some concrete instances.

a. Human Dignity and Sacredness of life

According to the Lineamenta for the First National Pastoral Congress entitled *Church in Nigeria: Family of God on Mission* published by the Catholic Secretariat of Nigeria, 'the challenges facing human kind are the threat to respect for the sacredness of life' (n.261). Today as some recent advances in biology and biochemistry pose a threat of scientific anarchy for ethics and morality, the Church should stand up against such dehumanizing practices based on bad forms of genetic engineering like human experimentation, abortion, euthanasia and the arms race that smack of a 'culture of death'. The Church should stand for the dignity of labour by denouncing labour alienation and unemployment experienced today by many in a *machinized* world.

b. Ecological Concern

After the creation, God 'saw that all he created was good' (Gen 1:25). He entrusted the care of the earth to men (Gen 2: 15). This brings concrete obligation for every person in the area of ecology. Hence, according to the Post-Synodal Apostolic Exhortation, *Ecclesia in America*, 'the action of believers is more important than ever'. 'Alongside legislative and governmental bodies, all people of good will must work to ensure the effective protection of environment, understood as a gift from God' (n.25). This has led to the development of a made of theology called *ecotheology*.

c. Growing Urbanization

One mark of our time is a strong yearning for urban life (*RedemptorisMissio*, n. 37). At times, this involves cultural rootlessness, the loss of family traditions and of people's religious traditions. As a result, faith is weakened because it is deprived of the expressions that helped to keep it alive (*Ecclesia in America*, n. 21). The evangelization of urban culture is therefore a formidable challenge for the Church. Just as she was able to evangelize rural culture for centuries, the Church is called in the same way today to undertake a methodical and far-reaching urban evangelization through catechesis, the liturgy and the very way in which her pastoral structures are organized (*Ecclesia in America*, n. 21). In short, as a prophet, the Church is called to be 'the light of the word' (Mt 5: 14) and 'the salt of the earth' (Mt 5: 13). Such areas as external debt burden, human rights violations, drug trade, and so on, should be addressed by her.

(ii) The Church Should Recognise and Use the Good Technical Advance for Evangelization

When St. Paul arrived in Athens, he went to the Areopagus, the cultural centre of the learned people of Athens, and proclaimed the gospel in language appropriate to and understandable in those surroundings (Acts 17: 22-31). It is in imitation of this that Pope John Paul II in the Encyclical, *RedemptorisMissio* recommends for the Church the use of modern Areopagus (n.37). The first Areopagus of the modern age is the world of communication which is unifying community and turning it to a global village. Evangelization of the modern culture therefore



depends not only on the influence of the media but also on the languages, techniques and psychology shaped by these new ways of communicating (Vatican Council II, *Inter Mirifica*; *Communio et Progressio*). The Church should adequately use this modern means of mass communication for her evangelizing mission.

But the use of what is in vogue by the Church is not new. The early chapters of Genesis borrow fruitfully from the cosmologies of the Ancient Near East which afforded concepts and images that with necessary purification could well serve to communicate revealed truth. In the middle Ages, theologians borrowed from ancient Greek philosophy a whole panoply of technical concepts such as matter and form, substance and accident to explain the mystery of transubstantiation. Teilhard de Chardin, a Jesuit paleontologist in the 1960's tried to use scientific approach and terms to explain a number of Christian teachings. Moreover, it is becoming fashionable in some theological quarters to describe the real presence of Christ in the Eucharist in terms of what is called 'Real Symboblik' (Rahner, 1965).

Today too, some theologians are convinced that the 'big-bang' theory of cosmic origins provides a scientific confirmation of the Christian doctrine of creation. Others ask whether the scientifically predicted 'cold death' of the universe, through the operation of the laws of thermodynamics, has something to say to Christian eschatology. Then again, it may be asked whether the 'anthropic principle', according to which the universe seems to have been 'fine-tuned' from its

origins to produce and support human life, gives new relevance to classical arguments from design. Some theologians, moreover, believe that the principle of indeterminacy in Werner Heisenberg's quantum physics can be helpful in overcoming the dilemmas of freedom and necessity and in showing how providence can act without violating the established order of nature. A number of theologians, finally, hold that Niels Bohr's principle of complementarity, according to which light exhibits wavelike and corpuscular characteristics, could suggest new ways of dealing with mystery and paradox in theology. While all these scientific principles may not be 'uncritically and overhasty used', they may go a long way to convincing the scientifico-technocratic minds of the 21st century. In this vein then, there may not be any reason why priests cannot be medical doctors except on the basis of agnostic-Manichean dualism by which healing the body is seen as detrimental to the salvation of the soul. The Church should therefore use everything genuinely possible including studies in international relations to meet her evangelizing mandate (*Redemptoris Missio*, n. 37).

This paper will be incomplete if we do not, by way of epilogue, make at least few sentences on Nigeria and Nigerian Church. Nigeria is a technologically developing nation. It is rich in human and natural resources. But it is bedeviled by what the Post Synodal Apostolic Exhortation, *Ecclesia in Africa* calls divisions, social and political difficulties, and intrusiveness of the mass media (nn. 49, 51 & 52). Although technically still developing, Nigeria has breathed in doses of air of hyper-technologism that is anchored on selfishness,



corruption, greed and graft. There are cases of brazen robbery, prostitution, mass destitution on account of maladministration, violation of human rights and dethronement of the rule of law. There are many instances of judicial murder, *politricks* and police hostility. But above all, there is the imposition of Sharia, executive culture of looting, human massacre, and trading on human parts. There is cult of ethnicity and tribalism, sectionalism and nepotism. Skirmishes and at times real war ensue in different parts of the country. All these constitute a *locus theologicus* for the evangelizing mission of the Church in Nigeria. The church in Nigeria is supposed to be the conscience of the nation. It is expected to be the voice of the voiceless and the prophet to the nation. Ehusani (1996) says it all. Nigeria needs a Church that will courageously highlight the evils of society which constitutes the obstacles on the way to peace and prosperity. Nigeria is in dire need of a Church that will integrate her genuine cultural values into salvific message of Christ. It is in the light of these and more that the church in Nigeria will be able to control the influx of the ill-effects of modern science and hyper-technologism already in good doses in the western world.

6. Conclusion

From the above study, it goes without saying that many theologians, philosophers and scientists down the centuries have found no conflict between their faith and science. It seems there is no conflict between true science and true religion, because they both describe reality. It is rather unfortunate to use the metaphor of “warfare” to describe the relations between science and the Christian

faith. The culturally dominant view in the West, even among Christians, that science and Christianity are not *allies* in the search for truth, but adversaries is also ill-conceived. The reasons for our position are quite evident. In the first place, religion furnishes the conceptual framework in which science can flourish. Science is not something that is natural to mankind. As science writer Eiseley (1972) has emphasized, science is “an *invented* cultural institution” which requires a “unique soil” in order to flourish. Although glimmerings of science appeared among the ancient Greeks and Chinese, modern science is the child of European civilization which owes much to the unique contribution of the Christian faith to Western culture. As Eiseley (1958) states, “it is the Christian world which finally gave birth in a clear, articulate fashion to the experimental method of science itself.”

Secondly, science can both falsify and verify some claims of religion. One of the most notorious examples was the medieval Church’s condemnation of Galileo for his holding that the Earth moves around the sun rather than *vice versa*. On the basis of their misinterpretation of certain Bible passages like Ps. 93.1, namely, “The Lord has established the world; it shall never be moved,” medieval theologians denied that the Earth moved. Scientific evidence eventually falsified this hypothesis, and the Church belatedly finally came to admit its mistake. On the other hand, science can also verify religious claims. For example, one of the principal doctrines of the Judaeo-Christian faith is that God created the universe out of nothing a finite time ago. The Bible begins with the words, ‘In the beginning God created



the heavens and the Earth' (Gen. 1.1). The Bible thus teaches that the universe had a beginning. This teaching was repudiated by both ancient Greek philosophy and modern atheism, including dialectical materialism. Such is the case that in 1929 with the discovery of the expansion of the universe, this doctrine was dramatically verified. Barrow and Tipler (1984), speaking of the beginning of the universe, explain, 'At this singularity, space and time came into existence; literally nothing existed before the singularity, so, if the Universe originated at such a singularity, we would truly have a creation *ex nihilo* (out of nothing).' Against all expectation, science thus verified this religious prediction.

Thirdly, science encounters metaphysical problems which religion can help to solve. Science has an insatiable thirst for explanation. But eventually, science reaches the limits of its explanatory ability. For example, in explaining why various things in the universe exist, science ultimately confronts the question of why the universe itself exists. Notice that this need not be a question about the temporal origin of the universe. Even if space-time is beginningless and endless, we may still ask why space-time exists. Park (1980) reflects, 'As to why there is space-time, that appears to be a perfectly good scientific question, but nobody knows how to answer it.' Here theology can help. Traditional theists conceive of God as a necessary being whose non-existence is impossible, who is the Creator of the contingent world of space and time. Thus, the person who believes in God has the resources to slake science's thirst for ultimate

explanation. We can present this reasoning in the form of a simple argument:

Fourthly, religion can help to adjudicate between scientific theories. Particularly in cases in which two conflicting theories are empirically equivalent, so that one cannot decide between them on the basis of the evidence, metaphysical concerns, including religious concerns, come into play.

An excellent example is the Special Theory of Relativity. There are two ways to interpret the mathematical core of Special Relativity. On Einstein's interpretation, there is no absolute "now" in the world; rather what is now is relative to different observers in motion. If you and I are moving with respect to each other, then what is now for me is not now for you.

Fifthly, religion can augment the explanatory power of science. One of the pillars of the contemporary scientific view of the world is the evolution of biological complexity from more primitive life-forms. Unfortunately the current neo-Darwinian synthesis seems to be explanatorily deficient in its explanation of the gradual rise of biological complexity. The gradual evolution of biological complexity is better explained if there exists an intelligent cause behind the process rather than just the blind mechanisms alone. Thus, the theist has explanatory resources available which the naturalist lacks.

Finally, science can establish a premise in an argument for a conclusion having religious significance. Thomas Aquinas always assumed the eternity of the universe in all his



arguments for the existence of God, since to assume that the universe began to exist made things too easy for the theist. "If the world and motion have a first beginning," he said, "some cause must clearly be posited for this origin of the world and of motion" (*Summa contra gentiles* 1. 13. 30). Moreover, there was simply no empirical way to prove the past finitude of the universe during the Middle Ages. But the application of the General Theory of Relativity to cosmology and the discovery of the expansion of the universe during this century appears to have dropped into the lap of the philosophical theologian precisely that premise which had been missing in a successful argument for God's existence. For now he may argue as follows: 1. Whatever begins to exist has a cause. 2. The universe began to exist. 3. Therefore, the universe has a cause. In this syllogism, premise (2) is a religiously neutral statement which can be found in almost any text on astronomy and astrophysics. Yet it puts the atheist in a very awkward situation. For as Kenny (1969) urges, "A proponent of the big bang theory, at least if he is an atheist, must believe that . . . the universe came from nothing and by nothing." But surely that is metaphysically impossible. Out of nothing, nothing comes. So why does the universe exist instead of just nothing? It is plausible that there must have been a cause which brought the universe into being. Now from the very nature of the case, as the cause of space and time, this cause must be an uncaused, changeless, timeless, and immaterial being of unimaginable power which created the universe.

In the light of the above arguments, the Church is not to be averse or antagonistic to

scientific findings. It should rather maintain uphold and use the positive discoveries of science without jettisoning its prophetic duty. It has a role to speak to the world and people of all times whether primitive or contemporary, pre-technological or hyper technological, world of *homo faber* or of *homo machina*. In doing so, the Church must endeavour to address the people of such a world in the language they will understand.

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