From Epistemological Dissension to Purposeful Accommodation: The Pursuit of Truth in Academia in the Light of the Religion and Science Debate

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Abstract

Beliefs based on personal presuppositions and perception of reality drive everything: from science to religion, through politics and the economy. Beliefs are shaped by a complex system of overlapping and revolving factors. The interpretation of the scientific data always involves the scientist's personal presuppositions; likewise, interpreting religious texts, traditions and experiences is always influenced by the faithful's personal life-stories and presuppositions. This complex interaction between personal belief systems and all human endeavors results in a major conflict of interpretation and makes the pursuit of truth a very complex undertaking.

Science and religion differ in their epistemological claims and assumptions, but they, with all other academic disciplines, are united around one common purpose: The pursuit of truth. Academia is the only institution where all methods of knowing are accommodated into a culturally responsible structure providing a multiplicity of angles from which a vision of truth can be obtained. However, proponents of scientific naturalism and religious extremism have tried to reduce the university into a tool subservient to a single method of knowing. This paper examines the epistemological dissension between science and religion and argues for the absolute necessity for both science and religion to uphold Academia's fundamental mission of pursuing truth in all its dimensions and complexities.

Introduction

Personal belief systems (which include the more or less compatible notions of personal presuppositions, preconceptions or perception of reality) drive everything: from science to religion, through politics and the economy. An adequate definition of belief is difficult to come about. Whether belief is spontaneous, mind dependent or involuntary is a matter of on-going debate. Suffice to say that personal beliefs are shaped by a complex system of overlapping, revolving, environmental and existential factors. In our pursuit of truth and knowledge, the way we interpret reality is directly dependent upon our personal belief systems. Furthermore, the kinds of truth we pursue are generally those in which we are interested. Therefore, the pursuit of truth is a complex undertaking that requires the application of diverse methods of knowing and the support of institutional standards. This paper examines the epistemological claims of science and religion and argues for the absolute necessity for all seekers of truth, regardless of their epistemological assumptions, to uphold Academia's fundamental mission which is to pursue truth in all its dimensions and complexities.

Conflict of Interpretation in Science and Religion and the Role of Academia

I concur with many professors like myself who teach research methods that the most challenging aspect about that job is teaching students how to properly interpret their research findings. We can teach students all the various methodological, ethical and compositional research rules. We can help them develop proven strategies to design, collect and analyze the data. But when it comes to teaching them how to interpret their research findings, the rules are often inadequate to address the complex issues of interaction that exists between the data and the personal perspective and insight of the researcher. While researchers must abide by rigorous methodological rules to maintain the integrity and objectivity of the research, too often in the interpretation phase, researchers tend to read more meaning in the data than the data really warrant. Likewise, researchers, both experienced and inexperienced, tend to overlook important clues that might lead to a fuller interpretation of the data because of their personal or paradigmatic presuppositions.

A variation of this same observation is sometimes described as theory-ladenness to refer to the idea that a scientist's preconceptions and biases affect not only the interpretation of the data but even the quality of the data that is collected. Thomas Kuhn surprised many logical positivists and scientists in 1962 when he suggested in his landmark book, *The Structure of Scientific Revolution*, that a scientist's interpretation of the scientific data depended on the researcher's scientific paradigm.[1] Because of the complexity of the interpretation task in modern scientific research, the methodology that is used to arrive at any conclusion must be carefully documented not only to allow for the possibility of replication but also to help others examine the basis for interpreting the data in any given way.

In the same manner that I find it challenging to teach students how to interpret the research data, I find it equally challenging, as a professor of biblical hermeneutics, to teach students how to interpret religious texts. As students are taught the principles of text interpretation, they are introduced first to the various exegetical tools and techniques that will help them uncover the original meaning of the text. These tools, the one more complex than the other, may include the study of ancient languages, church history, textual transmissions, translation philosophies, literary genres, historical and textual criticism, linguistics, etc… Students can learn how to use all these tools and techniques to research the historical background of the text, analyze the literary context of the text and draw exegetical conclusions. However, after they have done all that, all they may have accomplished is to uncover the objective meaning of the text. They still have to go beyond that point to determine the meaning or implication of the text for the modern reader, or to interpret the text at a personal, existential or communal level. G. K. Osborne describes this process as follows: "The hermeneutical process culminates not in the results of exegesis (centering on the original meaning of the text) but in the homiletical process (centering on the significance of the Word for the life of the Christian today)."[2] It is when that aspect of hermeneutics is attempted that the hermeneutics often breaks down into all sorts of interpretation possibilities.

This multiplicity of interpretation possibilities are driven by the interpreter's personal life-stories and religious journeys. They are explained by the interpreter's personal religious sensibilities and how these have been affected by various theologies or religious background, philosophical presuppositions, ideological tendencies, previous religious experiences, etc. It is a common phenomenon to observe how the authoritative religious text of a given religious

[1] Thomas Khun, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 1996).
[2] Grant R. Osborne, *The Hermeneutical Spiral*, (Downers Grove: Intervarsity, 1991), p. 343.

tradition can be interpreted in so many different ways as to result in the formation of so many distinct religious groups and religious tendencies interacting with each other with varying degrees of rapport and hostilities.

In summary, the interpretation of the scientific data always involves the scientist's personal beliefs and presuppositions. It is often these beliefs and presuppositions that give impetus to the research interests in the first place. Likewise, the interpretation of religious texts, traditions and experiences is always influenced by the faithful's personal religious feelings and religious predispositions.

Science and religion are the two most prominent rivals which are constantly contending for the role of final arbiter for truth. Yet, they are guided by epistemological claims that are often subject to external, sometimes uncontrollable rules of interpretation. This conflict of interpretation existing in science, religion and everything else suggests at least two things: 1) That the pursuit of truth is too complex an undertaking for any single human enterprise to claim to be its sole or final arbiter (Science and religion are considered to be human endeavors); 2) That truth is concerned with both objective reality and meaning (Observation of phenomena, theory or explanation of these phenomena and how our understanding of these phenomena integrate into our personal belief system)

For centuries, academia has been the only institution where science, religion and all other methods of knowing are accommodated into a culturally responsible structure capable of providing a multiplicity of angles from which a vision of truth can be obtained. In the current explosive context of the religion and science debate, Academia has been under attack by extremists in both camps who want to make the university an instrument subservient to a single method of knowing. Certain critics of religion think that everything, including even our own

children, must be rescued from the tyranny of belief, without realizing that even such a position emanates from a personal belief system.[3]

Scientism, postpositivism, academic elitism, ivory-towerism are all symptomatic expressions of the epistemological power struggle that exists within academia and which tend to shape or reshape Academia's mission. Lynda Stone characterizes the notion of scientism as "a pervasive western game" which plays itself out in Academia by way of two well established myths: The myth of prediction and the myth of positivism (knowledge certainty).[4] While many are still playing the game of prediction, only a small remnant is still caught up in the game of positivism. Most notably due to Khun's influence on the philosophy of science, positivism has been on a slow death sentence.

Parallel to these elitist trends in Academia, there is also a form or religious anti-intellectualism which is increasingly hostile toward science, especially the kind of science that is perceived to exist for the purpose of discrediting long-held religious beliefs. It must also be noted that fair criticisms leveled against both science and religion are sometimes labeled as intolerance by the adverse party.

To make the university subservient to the agenda of any form of scientism or religious extremism is to ignore the complexity of truth and to make truth into a sort of customizable commodity while denying Academia's historic role in pursuing it. Despite the fact that science and religion differ in their epistemological approach, they, like all other academic disciplines, are united around one common purpose: The pursuit of truth. As Fraser Watts (1998) argues, science and religion "are each concerned with truth, and there cannot be multiple truths which

[3] In *The God Delusion* (2006), Richard Dawkins denounced the abuse he said children of religious parents are subjected to.
[4] Linda Stone, *Postpositivist Teaching: Beyond the Myth of Prediction* (Eric Document #356 187, 1992) pp.4-5

are completely unconnected with each other."[5]

The role of Belief and of Interpretation in the Historic Epistemological Dissension between Science and Religion

All throughout the history of civilization, both religion and science have struggled with the formidable challenge to pursue truth. Science has struggled with its own methodological limitations and its attitude about what can be accepted as true knowledge. The most notable scientific revolutions that have occurred in the history of civilization illustrate the struggles of science to discover and understand the world. Likewise, religion has struggled with deepening mysteries that are revealed in religious texts, or metaphysical claims whose interpretations are debated endlessly on the battlefield of theology and philosophy. While science has sometimes appealed to philosophy in order to clarify or redefine its methodology, religion, in contrast, has had to make a more extensive use of scientific tools to verify and interpret some of its claims. For example, Biblical archeology has assumed a very prominent role in modern Bible studies and Bible interpretation. Likewise, linguistics has played a critical role in Bible translations, hermeneutics and textual criticism.

The resulting view which has been widely promoted since after the Enlightenment is that religion, to be credible, must submit its claims to scientific verification. Lynda Stone brilliantly describes this presumptuous modern outlook on the certainty of knowledge in what she calls, "the foundational equation of modernity" which is thus stated: "Modernity equals knowledge equals science."[6] Many people think that when a proposition, process, knowledge or procedure is associated with the notion of science, that such an association automatically adds credibility to these things. For example, a news analyst might pretend that his or her

[5] Fraser Watts (ed.) *Science Meets Faith: Theology and Science in Conversation* (London: SPCK, 1998), p. 13.

analysis of the news is scientific, or a teacher might pretend that his or her method to teach French is scientific. These positions express the underlying myth that scientific notions provide unquestionable proof about how the world operates.

This overrated scientific framework has given rise to what has come to be known today as the scientific study of religion: Interpreting the claims and the proposed evidence of religion from a scientific perspective. Depending on the belief systems that motivate these scientific examinations of religion, the resulting interpretations have sometimes contributed to widening the gap between those who hold conservative religious views and those who are sensitive to liberal religious sentiments. Admittedly, conservative scholars, just like their counterparts, have used all available useful scientific tools and techniques to promote and defend conservative religious views.

The use of scientific tools and techniques to affirm or discredit religious claims has created a subculture of conservative and liberal scholars whose position on a fundamentalist-conservative continuum is determined by one's proximity to scientific naturalism or religious faith when it comes to interpreting religious propositions. Consequently, the need to conform to the demands and expectations of modernity constitutes the main problematic in this religion and science debate, and represents the central argument set by those who question the reasonableness of religion. It also reinforces the assumption that any alliance between science and religion is forever marred by what may be called an epistemological dissension: Science relies on testable, provable evidence to substantiate its claims, whereas religion appeals primarily (not exclusively) to revelation and faith in supernatural processes to explain its most fundamental religious tenets. As they cling to their separate epistemology, both science and religion continually revise the way each interprets the world based essentially on the same set

[6] Linda Stone, *Postpositivist Teaching: Beyond the Myth of Prediction* (Eric Document #356 187, 1992) p. 6.

of objective reality that have existed for centuries. As the writer of Ecclesiastes says, "There is nothing new under the sun" if not our constantly refreshing vision of reality and how that imparts meaning to our lives.[7] Thus, the question that needs to be answered is "how should we understand the alleged epistemological superiority of the scientific model to which religion and everything else must conform in order to justify their understanding of the visible and invisible world?"

The Impact of the Standardization of the Scientific Method on Interpretation

The pursuit of knowledge through scientific means has gone through a process of refinement not only by the discovery of new methods of investigation but also by the advent of increasingly more powerful instruments and mathematics to observe the natural world, build theoretical and experimental models, collect, analyze and interpret data. This, coupled with the undeniable success of science has given rise to the blatant optimism that science can do anything even the things God is best known for. This illusion by many scientists and science consumers inspires faith in science as a conqueror of every form of knowledge and imposes the belief that if science cannot deliver the needed solutions to the problems of our time, nothing else can. A small group of science fanatics are promoting the reductionist view that not even the notion of God should be spared from the scrutiny of scientific validation. This view is well represented in Richard Dawkin's assertion that 'the presence or absence of a creative super-intelligence is unequivocally a scientific question." [8]

Is everything possible for science? Should the world be interpreted only through the lenses of science? The vast majority of scientists think not. Theoretical physicist, Dan D.

[7] Ecclesiastes 1:9
[8] Richard Dawkins, The God Delusion (Boston : Houghton Mifflin, 2006)

Barrow, explores several aspects of the question of the limitations of science in his book, *Impossibility*. He presents many compelling evidence of the impossibilities that science faces. One example has to do with the famous *incompleteness theorems* of Kurt Gödel which illustrate the impossiblities that exist in an area of inquiry whose precision and validity have often been taken for granted.[9] The impossibilies that are inherent in the social, cosmological, technological and even economic makeup of modern societies lead Barrow to even hint at the possibility that science might be approaching the end of its discovery rope.[10]

In the end, because of all these impossibilities that exist, the final resolve of many scientists is to believe in the unprovable. Scientists will always believe even in things that have been proven impossible by others. Barrow rightly describes the essence of the scientific spirit when he says that "science is only possible because some things are impossible."[11] What makes the impossible possible? Nothing but belief does. John Brockman exposes the extent of the problematic of belief in a recent book entitled *What we Believe but Cannot Prove.* In this paperback whose cover displays a satirical chicken and egg picture, Brockman parades what he describes in the book's subtitle as "today's leading thinkers on science in the age of certainty."

As science continues to deal with what many consider to be impossibilities, the science community is often reminded how early promoters of science dealt with these difficult questions. The scientific method has evolved from a close affinity to mystical processes as in the case of medieval alchemy both in Europe and in the Islamic world. In retracing the emergence of science long before the Christian era, Felipe Fernandez-Armesto explained how magic and religion have given impetus to scientific attitudes vis-à-vis the challenge to interpret

[9] In Gödel's *incompleteness theorems*, he has proven that it is impossible to come up with a completely adequate axiomatic expression that can logically define and explain the concept of natural numbers and the operations they yield in elementary arithmetic.

[10] J. Barrow, Impossibility: The Limits of Science and the Science of Limits (Oxford: Oxford University Press,

the world and to domesticate its mysteries. Religion, magic and science were associated not as strange bedfellows, but as complementary elements of a rather successful epistemology: prayer incantations supplementing well documented medical procedures and therapies, or engineering feats theoretically inspired by religion as in the case of the Egyptian pyramids.[12]

Some would go further and argue that the mystical elements, if they ever totally disappeared from science, are reappearing suggestively in certain observed or theoretical processes that are strangely unpredictable like the many string theories. Edward Witten who proposed the M-theory to unite the five superstring theories that might eventually lead to a theory of everything, sarcastically (I supposed) refer to the M as "magic, mystery, or matrix, according to taste,"[13] thus feeding the opinions of philosophers of science such as Paul Feyerabend that science often makes claims that are beyond its actual reaches or that "success by scientists has traditionally involved non-scientific elements, such as inspiration from mythical or religious sources."[14]

However, the success of the scientific method in the west is often credited on the early efforts, principally after the Enlightenment, to keep science far apart from non-naturalistic and non-experimental hypotheses. By the time Laplace had determined that there was no longer a need for the God hypothesis in his cosmology, science had come to rely on a methodology that was essentially naturalistic and the contention between science and religion took on a new definition.

Even after having gone through that type of rigorous standardization, the presence or

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1998), p. 154.
[11] Ibid, preface (vii).
[12] Felipe Fernàndez-Armesto, *Truth: A History for the Perplexed* (New York: St Martin's Press, 1997), pp. 130-137.
[13] Edward Witten , *Magic, mystery, and matrix* (Notices of the American Mathematical Society), 44 (9). p. 1129.
[14] Wikipedia contributors, "Paul Feyerabend," *Wikipedia, The Free Encyclopedia,* http://en.wikipedia.org/w/index.php?title=Paul_Feyerabend&oldid=128174727 (accessed May 31, 2007).

absence of the God hypothesis in scientific practices, inasmuch as a scientist was personally concerned, depends largely on the scientist's personal conviction about reality and the nature of truth. Contrary to what certain skeptics suggest, a scientist's belief or not in the God hypothesis, both in the distant past and in the present, has never paused a significant threat to scientific progress. This fact is well attested by the undeniable and acclaimed competence of many scientists who profess a religion but whose faith does not get in the way of their scientific rigor.

While some are promoting the idea that religion is slowing down progress, the notion of progress itself is likely to be put on trial as a possible culprit in science's own demise. It all depends on one's perception of the usefulness of science and the risks that are associated with progress and how these risks might affect one's livelihood. Most Einstein biographers affirm that Einstein has regretted his advice to President Roosevelt to create an Atomic Bomb because his perception of the usefulness of science has later come in conflict with his belief in pacifism. Speaking about technological progress, Barrow explains that "progress makes existence more complicated and disasters more devastating…but our general response should be to make sure that our analyses of risk and our standards of safety, progress hand in hand with technology."[15] Was Einstein's attitude about war technologies challenged chiefly by his pacifism or by his lack of faith in the abilities of governments to exercise restraints? The answer depends directly on how he interpreted the issues of war and pacifism before and after the invention of the A Bomb. The lack of faith in the abilities of governments to manage responsibly the proliferation of nuclear weapons is one of the saddest realities of modern civilization.

[15] John D. Barrow, Impossibility: The Limits of Science and the Science of Limits (Oxford: Oxford University. Press, 1998), p. 153.

The Challenge that Belief Poses for a Shareable Definition of both Science and Religion

The notion of science remains largely a human construct not easily definable.[16] For example, this paper begins with the assumption--albeit context specific--that scientific research is something that involves the collection of data through quantifiable instruments. Of course, many will argue that such an understanding of science is too restrictive and in no way accounts for the whole truth about what science is and does.

In the current religion and science debate, evolutionary biology is often taken to be the prototype par excellence of scientific research; however, Charles Darwin built his theory of evolution on qualitative type observations typically associated with social science research. Darwin's observations were designed to corroborate his preconceptions and speculations about human origin. Those who argue that Darwinism is not science are simply operating from a different understanding of the notion of science. That in itself might indicate why a large aspect of the debate on evolution and creationism is based on semantics.

If scientific theories are human constructs, they are nevertheless intended to be a coherent explanation of phenomena to be eventually verified by natural observations or experiments. The element of faith that underlies these theories can be explained by the fact that the scientists who formulate these theories believe that the evidence to substantiate them exist out there in the natural world and eventually they will be discovered. As scientists investigate the world of nature in search of the evidence to prove or corroborate these theories, sometimes they find what they are looking for; sometimes they find surprises that force them to reformulate their theories or to adjust their beliefs about certain realities. Sometimes they discover evidence that reinforce the mysterious nature of the reality with which they are dealing. They may marvel at what they find. If they believe in God, they will see purpose and

meaning in creation. If not, they will still see mysteries that might inspire them or depress them.

Religious faith does not require the same rigor because it can be accepted on a personal, private basis, whereas scientific knowledge must be publicly shareable and verifiable. However, despite the rigor of the scientific method, the dilemma remains that these results of scientific inquiries that are supposed to be publicly verifiable are still defined or explained from the perspective of a scientific paradigm. Thus, to some varying degrees, the element of belief remains stubbornly a part of the scientific knowledge and inquiry making the scientist a naturally and permanently skeptical appraiser of the interpretation of the scientific record.

The notion of science can also be approached from a number of philosophical perspectives. Depending on the school of thought in the philosophy of science to which one subscribes, the scientific method may involve a number of processes that are mutually exclusive. The challenge is to establish a demarcation between what science is and what science is not. Mainline science practices seem to adhere to a large extent to the principle of falsifiability proposed by Karl Popper. In its basic formulation, falsibiability requires that all scientific claims be logically capable of being proven wrong in order to be valid. However, not even a mainline verification principle like falsiability is accepted by all as a totally adequate principle. For example, Thomas Khun questions the usefulness of falsifiability in explaining the development of science from one revolution to the other. Many science observers and practitioners agree that there is no generally agreed upon scientific method. Some science critics like Feyeraband simply rejects the notion that method is important.[17] When method is deemphasized, creativity is heightened. As William McComas explains “scientists approach

[16] John Bowker, in Watts, 1998, p. 13
[17] Paul Feyerabend. *Against Method*. (London: NLB, 1975).

and solve problems with imagination, creativity, prior knowledge and perseverance."[18]

Like science, religion is also a social construct that is not easily definable. The notion of religion is freely attributed to a number of attitudes and practices that sometimes fall outside the mainline definition of religion. For example, religious critics of evolution sometimes refer to Darwinisim as a religion and its views about human origin as a doctrine. Based on the teaching of Paul in Colossians 3:23, certain Christian religious traditions teach that there is no difference between what is sacred and what is secular. However, such a belief clearly poses a problem of definition that contradicts certain modern theories about religion and religiosity which define religion in terms of a sacred-secular duality.[19]

Each major religious tradition comprises several schools of interpretation that determine the various beliefs, rituals, and moral codes at work within these traditions. There is no completely monolithic religious tradition. For example the Christian religious system is divided into an incalculable number of bodies ranging from major traditions, denominations, cults, and independent groups that are multiplying with the passage of time. All these groups trace their roots to the authoritative Bible text which may, in some cases, be completed by private revelations. Some of the differences are superficial while others express major contradictions on fundamental doctrines.

Facts, Textual Witness and Interpretation

There is a common perception that scientists are only concerned with facts and that they are particularly dispassionate and objective in their analysis of the scientific record. There is no question that competent scientists are careful in their analysis of the data, however, there

[18] William McComas, "Ten myths of science: reexamining what we think we know." *School Science & Mathematics,* Vol. 96 (01), p. 10.

are reasons to believe that they are limited in terms of how objective they can be. The fact of the matter is that science is as much about facts as it is about the explanation, interpretation and even the speculations, extrapolations and inferences that are made around the facts. This delineation is important because it explains why competent scientists analyze the same set of data and come up with different conclusions. For example, what one believes the fossil records are saying about a presupposed anthropological past reality determines what types of inferences are made about these records and to what extent these inferences are stretched to justify these presuppositions.

Granted that stretching the facts might be attributed to bad science, these actions are nevertheless conducted in the name of science, and usually it is the results of such inferences and interpretations that are published as facts in school textbooks. Once the first false characterization is made and is published, the original error is disseminated in gene-like pattern, to allude to Stephen Jay Gould's observation regarding that matter. Gould illustrates the practice of multiplying science myths in school textbooks in his essay, *The Case of the Creeping Fox Terrier Clone.*[20]

The fact that scientists do not always speak with unanimity on scientific matters is also well attested by what usually happens in scientific conferences where scientists literally tear each other apart while interpreting the same set of data. Apart from any real issue of internal validity or the quality of the data collected, typically, the contention among scientists rests upon what the parties believe or do not believe that the data is saying. As Khun explains, what they believe is typically determined by their loyalty to a scientific paradigm. And usually, what people in the general public believe and accept as scientific facts are not the facts themselves,

[19] Emile Durkheim. *The Elementary Forms of the Religious Life.* (London: George Allen & Unwin,1976), p.36.
[20] Stephen Jay Gould. "The case of the creeping fox terrier clone." *Natural History* 96(1): 16-24.

but the interpretation that scientists make of the facts or the type of interpretation that coincides with their personal belief system. Even if only the facts were considered, there is no guarantee that these facts were collected free of observation bias.

In the same manner that science is believed to be only about facts, there is a common perception that religion is believed to be only about the content of authoritative texts or sacred writings. The fact of the matter is that the practice of religion is not so much about the content of sacred writings as it is about what people believe these writings are saying or what people are taught that these writings mean. In an effort to customize interpretation, some religious traditions utilize confessions and creeds as a primer, but one of the drawbacks of these confessions and creeds is that they further isolate the interpreter from the textual evidence.

In his book '*The End of Faith*," Sam Harris (2005) quoted several passages in the Koran and in the Bible to build the argument that religion is a source of social destabilization.[21] But Harris' flagrantly biased hermeneutics which is rooted in his personal political ideologies hardly express the mainline interpretation views of these religious texts, which is what is critical. It's a gross oversimplification to try to gain insight from a religious text by reading it the same way one reads the editorial of a newspaper, meaning through the lenses of political ideologies.

The arrogance displayed by certain scientists in certain scientific circles is disconcerting to both ordinary observers and to scientists who know better. Such display of arrogance by, sometimes, eminent professors from prestigious universities do in fact reveal a certain degree of ignorance concerning the limitations of science, and especially, the dilemma of the present full-blown conflict of interpretation that exists in science and in religion. Such unrestrained arrogance further signals a lack of respect for competent and honest colleagues in Academia who are engaged in the pursuit of truth. No one has a handle on truth outside the

realms of belief. The history of civilization has taught us that we have to constantly adjust our understanding of the natural world because of new discoveries. This is inherent in the scientific method itself: long-held beliefs about the natural world and the human experience are potentially replaceable not by definitive facts but by new beliefs. Essentially, we navigate from one belief to another.

It is interesting to observe how many scientists through the ages who have embraced the hobby of amateur philosopher (amateur in the sense that this is not their primary vocation). Some of the most popular books on the reading charts are written by famous scientists not for the purpose of teaching science but for the purpose of influencing public opinion as to how the body of scientific knowledge should be interpreted for personal meaning. It is usually expected that a religion or philosophy writer would seek to influence the reader's beliefs on a wide range of issues. But there is something curious about a scientist who is awkwardly manipulating theological concepts and categories in an effort to influence public opinions on matters of religious convictions. Wearing the mantle of pop philosophy adorned with academic reputation, these scientists--amateur philosophers are powerful opinion leaders whose views continually influence the individual's personal conviction on a science – religion continuum. The recent book by Richard Dawkins titled "The God Delusion", is an example of the sort in which the famous Oxford evolutionary biologist made the case against religion with a logic that The New York Times' Jim Holt describes as "occasionally sloppy"[22]

Purposeful Accommodation

Based on the above analysis, the pursuit of truth in both science and religion is not

[21]S. Harris, The end of faith : Religion, terror, and the future of reason (New York : W.W. Norton & Co., 2005)
[22] Jim Holt. "Beyond Belief." The New York Times (Oct. 22, 2006)

simply a matter of collecting evidence or observing reality; it is also concerned with the interpretation of the available evidence.

The pursuit of truth posits two basic, age old philosophical problems. The first problem has to do with the source of truth and asks the questions “where can truth be found?” Is the source of truth in the natural world or is in the mind of God? The second problem is a problem of method which asks the question “what is the best way to arrive at truth?”

These questions are concerned with the issues of evidence and meaning, or data and interpretation, and they are at the heart of what Academia exists for? Traditionally, academia has used every available means or methods to pursue truth. Religion, philosophy and the arts were among the oldest methods that have been used to pursue truth and these methods remain an integral part of Academia’s toolbox. The scientific method as it exists today is the newest of these ways of knowing and because it limits its investigation to the natural world and to the more tangible aspects of reality, its success and reputation have been more easily attainable and unquestionably phenomenal in modern time. But science remains one among many methods of knowing and Academia, in its wisdom, has not rejected any of its tools.

In Academia, there are experts and scholars in every known field of knowledge: Religion, philosophy, the sciences, the arts, the professions, etc… All these fields of knowledge and the scholars who are leading in them are all united through a common purpose: the pursuit of truth. Whether these fields can or cannot be united from the standpoint of method, they can and they should seek to accommodate each other from the standpoint of purpose. The very existence of Academia depends on such purposeful and mutual accommodation of various fields of knowledge. As each field of knowledge fulfills its mission within Academia, this makes possible the multiplicity of angles from which a true vision of

truth can be obtained.

There is the legitimate fear of one field contradicting the other as it has been the case in the current religion and science debate, but of all places, academia is the place where contradictions should not only be welcome, but should also be entertained as an essential element to advance knowledge. Academic freedom has often been a subject of controversy because there are academicians who use it irresponsibly as an instrument of corruption and dishonesty. Academic freedom is a good thing inasmuch as it provides legal, moral and otherwise unrestricted channels to pursue truth wherever it may be found.

In the human quest to interpret reality and to discover truth, belief is pervasive and quasi permanent and the only way to escape belief is to discover the complete truth or to get a full vision of it. An essential part of the scientific method can be summed up through the words of Jesus that only the knowledge of the truth can set one free. It is interesting to note that neither religion nor science allows a definitive passage from belief to truth. We live constantly in a state of belief, whether we move from one belief to another or we maintain the same belief all the time. The essence of the Christian religion is faith in the God who is the author of everything and who is ultimately the finisher of that very faith that people have placed in Him. In other words, the full revelation of truth can only be made possible by God Himself.

Likewise, for the scientific method, all scientific knowledge are kept constantly in a state of temporary belief (or temporary knowledge or partial truth) until a clearer vision of the truth can be obtained. Some scientists say that ultimately, that full vision of truth will be made possible only when and if a theory of everything is discovered.

Both religion and science have their mysteries and are fascinated by them. The main reason for that fascination is the curiosity they inflame in people and the anticipation of

celebration that the unveiling of these mysteries inspires. Likewise, both science and religion have their myths and there is such a fascination about them that they are exploited to the fullest.

Conclusion

From the standpoint of method there will always be a separation between science and religion. Efforts to eliminate or even to lessen the impact of that inherent epistemological dissension is futile and unnecessary. However from the standpoint of purpose, I have argued that science and religion must accommodate each other in order to tackle the complexities of truth and ultimately to make life fulfilling. In this paper I have presented several points of similarities between science and religion bought about by the role of personal belief systems in the interpretation and ultimately, the meaning one might find in scientific and religious pursuits. It is at this critical juncture that Academia's role becomes indispensable to provide an avenue for competent, honest, and creative seekers of truth to not only apprehend reality in the light of all known and acceptable standards of inquiry but also to express this truth in meaningful ways.

I would like to use the illustration of an orchestra whose purpose is to play music for its audience. Consider the orchestra as a symbol of academia or which is a very complex whole. There are musicians of various backgrounds, personal talents, intensities, inspirations, sensibilities, experiences, etcetera; there are instruments of various natures (strings, woodwinds, winds, percussions (comprising claviers)); there is the music which is anchored in its own sets of complex circumstances; there is the conductor who struggles between personal taste, the injunctions of the composer, the consideration of musical epochs, the qualities of the

instruments, the personal abilities of each musician, and even the acoustics of the music hall. The only way the listener will hear music is through purposeful accommodation of all these complex elements toward the one purpose: music. Each musician is in his/her position doing his/her own thing using techniques that are peculiar to his instruments, producing sounds that are different in tone, pitch and register. Yet despite these differences, they must listen to each other and make the necessary adjustment to maintain the unity of purpose. The more they concentrate on the goal to accomplish, the more accommodating they have to be. There are instances when a solo instrument or one group of instruments will dominate the scene, but that does not destroy the unity of purpose.

After the music is played and is evaluated, the orchestra has accomplished an aspect of its purpose, knowing full well that ultimately, the standards to judge its music lie primarily outside of itself.

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