

EVALUATING MODERN SCIENTIFIC METHODOLOGY WITH ISLAMIC WORLDVIEW: HUMANIZING SCIENCE THROUGH ENGAGING ISLAMIC ETHICS

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ABSTRACT

In the 21st century, with science culminating with the development of nuclear bombs ending in the annihilations of hundreds of thousands with the bombings of Hiroshima and Nagasaki has raises questions of the progress and goodness of the scientific endeavor. Many today are demanding that science must be constraint and checked by ethics. Scientific endeavors can no longer be considered ethically neutral because some of their results are disastrous. Faruqi's project of Islamization mainly focused on social sciences because the social science dealt with man and society. It had somewhat neglected scrutinizing modern natural science arguing that natural science dealt with nature and therefore neutral and objective. However, it is the natural science methodology that dominates and shapes social science methodology and questions. What more today since natural scientists are no longer satisfied with scientific questions that solely focus on the physical world, but instead wish to apply scientific standards to all spheres setting the standards of what man ought to believe by setting the criteria of judging what are acceptable believes thus encroaching on man's world view and demanding that scientific standards set the man's ethical criteria. We must engage with science, in fact celebrate science but at the same time, we must also constraints science and guide it with our ethico-religious world view that will make science a true blessing for all mankind. In order to do this, we must purify religion from error and superstition, reappropriate science as a study of sunnah Allah and institutionalize critical and rational thinking within society.

Key Words: Ethics, science, methodology, worldview, Islamization

Introduction

Science can purify religion from error and superstition. Religion can purify science from idolatry and false absolutes. [Pope John Paul II](#)

We do not want the fate of Galileo in this land under the rule of the Islamic Republic. We do not want religion to become an impediment for science. We want religion and science to be closely linked, and the former to act as the lights do in a car and not as the brakes do. Abdolkarim Soroush

As the world watched in horror the YouTube video that went viral of men, women and children violently trembling and twitching trying to breath only to breath their last and die torturous deaths due to chemical warfare weapons use on them indiscriminately, the world is again at a crossroad, witnessing the atrocities that science can inflict. These scientists who created these weapons knew what they were doing and what the purpose of these weapons are but still they created these weapons. Unlike the claims of the scientists who created the first nuclear bombs who were challenged to create a bomb so devastating that it would end all wars without ever being used simply because it threat was so frightening. Believing in their abilities to harness the power of nature and their naivety that men of power would never use such devastating power, their egos were challenged by the military brass, they rose to meet that challenge and the result is two atomic nuclear bomb innocently called Fatman and Little boy. These atomic nuclear bombs were not used once but twice on a civilian populations in Hiroshima and Nagasaki killing horribly tens of thousands and continue to inflict pain and suffering through atomic radiation on the unborn. The march of science that has produced so much good for all also has and can produce so much evil and suffering. Questioning the progress and goodness of the scientific endeavor, many today are demanding that science must be constraint and checked by ethics. Scientific endeavors can no longer be considered ethically neutral because some of its results are disastrous. Thus, the critiques of scientific endeavor has demanded a re-evaluation of the scientific enterprise as it is practice today.

The loudest demand is to incorporate ethics into the science is raised in bio-ethics. **Bioethics** is the study of typically controversial [ethics](#) brought about by advances in [biology](#) and [medicine](#)¹. Even though this **The President's Council on Bioethics** is the result of the realization that even science needs constraints and must be guided positively, thus the need to bring ethics into the scientific enterprise, bio ethics considerations and debates do not lead but trails scientific advances. In other words, ethical debate comes after scientific advancements after its been done and only then do we evaluate whether its ethical. This is minimalistic and unhealthy. We have to integrate the ethics into science making ethics the raison detre of science, not the other way around.

Although more and more scientist are begin to realize and recognize that science needs ethics. With innocence lost, no more can we claim that all scientific endeavors are good. Just because there is a growing realization in the scientific community that science needs ethical guidance, it does not mean that there is a call to return science under religious hegemony. Instead some scientist have argue that it is not less science we need ,by making science constrained by ethical considerations but instead they are demanding that we should make science the only criteria, taking out science from its mythical constraints of the physical world and applying it to all areas of human life especially the ethical domain. Science should be determining right or wrong, good or bad by simple weighing the results of it action². Adopting a consequentialist ethics more specifically utilitarian consequentialist evaluation or a adopting pragmatism in which if the scientific endeavors results in producing benefit then the action is good and ethical.

I do believe that the scientific community has concluded that scientific endeavors require an ethical framework. The question is is the utilitarian consequentialist framework sufficient? or should we at least explore other potential ethical frameworks before we settle on one or even settle on more than one.

The question of making ethics part and parcel of the scientific endeavors seems easier to argue for as it has become more and more acceptable. Even though I believe including ethics is the more urgent need however, why ethics was not included in the scientific endeavor in the first place explains a lot why science has problems and it extends greater than just putting back ethics into science. It demands a review the whole scientific exercise, beginning with its purpose, scope and methodology. Thus, I agree with those such Afghani and Abduh who argued for the inclusion of ethics back in science but I can't agree that this sufficient in reforming science. I am not calling for a re sacralization like Nasr of science but rather a reunderstanding of the purpose and limitation of science.

Ibrahim Kalin summarizes the arguments on how to reform science. "Without pretending to be exhaustive, they can be classified under three headings as ethical, epistemological and ontological/metaphysical views of science." I however would like to add that these three approaches also don't have to be totally exclusive. Instead I believe all three approaches have something to say and contributed to solve this problem. Each approach by themselves has deficiencies but when mesh together may compliment each other's deficiency and produce a better answer. Is it possible?, I believe yes. Is it desirable? Again I believe, yes. The challenge is how.

The ethical/puritanical view of science

Kalin aptly defines the ethical/puritanical view of science position by saying

"The ethical/puritanical view of science, which is the most common attitude in the Islamic world, considers modern science as essentially neutral and objective, dealing with the book of nature as it is, with no philosophical or ideological components attached to it. Such problems as the environmental crisis, positivism, materialism, etc., all of which are related to modern science in one way or another, can be solved by adding an ethical dimension to the practice and teaching of science

This position argues that science is neutral and objective. It shortcoming are only in the ethical dimension. Add that and we will be fine.

¹ . **The President's Council on Bioethics (PCBE)** was a group of individuals appointed by [United](#)

[States President George W. Bush](#) to advise his [administration](#) on [bioethics](#). Established on November 28, 2001, by [Executive Order 13237](#), the Council was directed to "advise the President on bioethical issues that may emerge as a consequence of advances in [biomedical science](#) and [technology](#) It succeeded and largely replaced [National Bioethics Advisory Commission](#), appointed by President [Bill Clinton](#) in 1996, which expired in 2001.

http://en.wikipedia.org/wiki/The_President%27s_Council_on_Bioethics#cite_note-EO13237-1

² Sam Harris. *The Moral Landscape: How Science Can Determine Human Values*.

Kalin reminds us of attitudes of the post colonial muslim thinkers [Jamal al-Din Afghani](#) and [Sayyid Ahmad Khan](#) in the nineteenth century who first encountered the power of Western science on their Muslim lands.

The first is that science is a cross-cultural enterprise and that it does not take an "Islamic" or "Western" form. In simple terms, science studies the world of nature and is a tool to make people's lives better. It is not a philosophical project and does not need religious justification. What the classical Islamic civilization had in the past was a scientific tradition carried out in Muslim lands, which was then transmitted to the West, preparing the ground for the rise of modern science. Thus the Muslim world should import science and technology to solve its economic and social problems without fearing their religious or ethical implications.

The Muslims fundamentalists even extremist such as Al Qaeda and the Islamic State see science positively but with one exception.

Muslim fundamentalists acknowledge that the modern European conquest of the abode of Islam has been base on techno-scientific achievements, and they argue accordingly that islam must focus on modern science and technology. Yet they seek to construct alternative formulas, and even to inspire a countermovement in the sciences. They seek to adopt modern science and technology as instrumentalities while de-coupling them from their underlying norms and values.

The recognition of the importance of the missing dimension of ethics in science is being realized by many in the West. This realization did not grow out of humiliation science suffered from such disastrous scientific endeavors such as we had previously the referred to such as chemical weapons and the nuclear bombs which should have made scientist more humble, instead it arose out of scientific confidence that science could and should now be the criteria to resolve all problems. With science growing confidence that it can provide solution to even the problems its creates such as global warming, it now seeks to provide even ethics from a scientific perspective by arguing that science can determine right or wrong based on the consequences of the scientific endeavor, based on utility/benefit.

Sam Harris argues that there is no higher goal to human morality other than benefit of man himself and thus morality should be restricted and limited to what makes man flourish in this world.

"We should reserve the notion of "morality" for the ways in which we can affect one another's experience for better or worse.... Once we acknowledge that "morality" relates to questions of human and animal well-being, then there is no reason to doubt that a prescriptive (rather than merely descriptive) science of morality is possible. After all, there are principles of biology, psychology, sociology and economics that will allow us to flourish in this world, and it is clearly possible for us not to flourish due to ignorance of these principles.

Sam Harris' reponse to this call and demands to include ethics into science is an affirmative yes. But and this is a very big but, he concludes that is what should determine what is right and what is wrong. Science should determine what is ethical. How you ask? The answer is simple. The answer is on the basis of what makes man flourish in this world.

To demonstrate why science should be in the driver seat and not religion in determining ethics, Harris points out that religion can't seem to get itself out issues below the belt, and is remarkably useless in solving man's problems

Religion is remarkably unhelpful on moral questions for many reasons. The most important being that it tends to separate moral concerns from the genuine reality of human and animal suffering. Take, for example, the Catholic Church: Here is an institution that is more concerned about preventing contraception than preventing child rape. It's more concerned about preventing gay marriage than genocide. The moment you realize that Catholic doctrine is not really focused on human well-being, you see that it is not offering an alternative moral framework: it is offering a false one. The Catholic Church is as confused about morality as it is about cosmology.

Harris concludes that Church morality is not truly concern with human wellbeing. Instead he argues that it still has it mind in the gutter and can't remove itself and see beyond sexual issues to the issues that really concern humans today. Thus, true morality should only be concern with human and animal wellbeing. Human and animal wellbeing can be determine by scientific facts. In one stroke , Harris not only removes religion from the moral pictures but that moral relativism is also simply false.

The Epistemic Challenge

Kalin again summarizes the second view.

The second view of science in the Muslim world, which we may call the "epistemic view," takes its cue from contemporary philosophy of science and focuses on the social and historical bases of scientific theories. Its proponents criticize modern Western science on epistemological grounds and make use of the postmodern critiques of natural sciences and their philosophical claims. The epistemic view of science considers the sciences of nature like any other human enterprise: historically grounded, socially bounded, culturally situated, and economically motivated.

Led by the work of T. Kuhn, P. Feyerabend, I. Lakatos, and others, the philosophy of science has gradually become a sociology of knowledge, unearthing the social circumstances, historical prejudices, and tacit assumptions that shape the outlook and

practice of science at any given time in history. There is no such thing as "pure science" untouched by contexts of historical formation; sciences, no matter how objective or precise they may claim to be, cannot claim immunity. The natural sciences are both cultural products and intellectual constructs that seek to understand the natural world in certain specific ways.

Faruqi and Islamization of knowledge had adopted this critical epistemic view as their understanding of modern science calling modern science western science. They argue following Kuhn and Feyerband that the sciences of nature like any other human enterprise is historically grounded, socially bounded, culturally situated, and economically motivated. Kuhn had argued that science instead of being objective is influence by paradigm bound by human spatial construct.³

Even if we accept Kuhn and Feyerband's critic that science is not objective, we cannot just simply turn around and declare that Islamic science is objective. If we are to accept and propagate Kuhn's thesis against modern science, then all science becomes non objective and are infected by paradigm. Damning us to understanding nature only within a tunnel vision, thus reducing science to the best guess estimate at that time

Should we allow pre conceived ideas not borne out of observation, but rather derived from scripture and impose that scriptural dictates onto the scientific enterprise. Would we be doing exactly what the medieval church had done when it demanded that Galelio retract and recant his observations on the movements of the planets concluding that the sun is center of the universe instead of the earth because church doctrine declared that the earth is the center of the universe. Or should we allow the individual observations of science to coalesce uninterrupted and come to its own conclusions.

Left alone science today had dramatically change from its 17th century Cartesian mechanistic worldview to seeing the world as a symbiotic system interdependent, a bio-sphere and working together towards it survival. There is order in all this apparent chaos. It could, therefore point towards a design, and perhaps a designer. Where western scientist demonstrates that the complex and diverse world actually has an order and actually acts to correct imbalances, almost even seems to be working together in a great chain of being, following their disastrous with the medieval church, they refuse to see any higher order than nature itself.

The Muslims on the hand are only too eager to assign science as means to deciphering the signs of God.

The proponents of this view, such as Farid Wajdi, [Said Nursi](#), and the latter's follower [Fethullah Gulen](#), both of whom have popularized the study of science among their followers, assign to the natural sciences the task of deciphering the signs of God in the universe. According to them, science reveals the divinely ordained codes built into the natural order and thus helps us marvel at God's creative act.

What we have to ask ourselves again is "do we really need science to prove religion? Lets not fall into the same trap of the medieval church

The Ontological/Metaphysical view of science

The ontological/metaphysical view of science marks an interesting shift from the philosophy to the metaphysics of science, and its most important claim lies in its insistence on the analysis of the metaphysical and ontological foundations of modern physical sciences

The last major position on science of which we can give here only a brief summary is marked off from the other two positions by its emphasis on metaphysics and the philosophical critique of modern science. Represented chiefly, *inter alia*, by such thinkers as Rene Guenon, Seyyed Hossein Nasr, Naquib al-Attas, and others, the metaphysical view of science considers every scientific activity operating within a framework of metaphysics whose principles are derived from the immutable teachings of the Divine revelation. In contrast to philosophy and sociology of science, metaphysics of science provides sciences with a sacred concept of nature and cosmology within which to function.⁴ At this point, the sacred view of nature taught by religions and ancient traditions takes on a prime importance in the formation and operation of physical sciences, and all of the traditional sciences, regardless of the historical and geographic setting they were cultivated in, were based on such principles⁵

³ Thomas Kuhn, *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press (1970). Refer also to Kuhn, "[The Function of Dogma in Scientific Research](#)", in *Scientific Change*, A. Crombie (ed.), London: Heinemann: 347-69. 1963,

⁴ Nasr uses the word metaphysics as the all-inclusive science of the Divine Principle, which comprises both ontology and theology: 'If Being is envisaged as the principle of existence or of all that exists, then It cannot be identified with the Principle as such because the Principle is not exhausted by its creating aspect. Being is the first determination of the Supreme Principle in the direction of manifestation, and ontology remains only a part of metaphysics and is incomplete as long as it envisages the Principle only as Being in the sense defined.' *Knowledge and the Sacred* (New York: SUNY Press, 1989), p. 136.

⁵ Afghani, 'Lecture on Teaching and Learning', in Keddie, *ibid.*, p. 107.

Yet, despite the clear teaching of the Quran, Fazlur Rahman points out (here, as he did in virtually every book he wrote) the intellectual trends in both the legal and theological spheres tended toward anti-intellectualism. He notes in particular the adoption of 'Ash'ari kalam by the Umayyads as orthodoxy, complete with its rejection of causality and human freedom of will. Both, he observes, undermine the scientific attitude as well as human initiative and eventually sap the Muslim community of its vigor.

Lakatos

Kuhn's descriptions of scientific activity were taken to imply that science was most constructive when it upheld a system of popular, or 'normal', theories, despite anomalies.

Popper's ideas, which changed over time and were interpreted by many in conflicting ways. He contrasted *Popper*, the "naive falsificationist" who demanded unconditional rejection of any theory in the face of any anomaly (an interpretation Lakatos saw as erroneous but that he nevertheless referred to often);

A Lakatosian research programme is based on a **hard core** of theoretical assumptions that cannot be abandoned or altered without abandoning the programme altogether. More modest and specific theories that are formulated in order to explain evidence that threatens the 'hard core' are termed **auxiliary hypotheses**. Auxiliary hypotheses are considered expendable by the adherents of the research programme - they may be altered or abandoned as empirical discoveries require in order to 'protect' the 'hard core'

The strangest thing of all is that our ulama these days have divided science into two parts. One they call Muslim science, and one European science. Because of this they forbid others to teach some of the useful sciences. They have not understood that science is that noble thing that has no connection with any nation, and is not distinguished by anything but itself. Rather, everything that is known is known by science, and every nation that becomes renowned becomes renowned through science. Men must be related to science, not science to men. (...)

The father and mother of science is proof, and proof is neither Aristotle nor Galileo. The truth is where there is proof, and those who forbid science and knowledge in the belief that they are safeguarding the Islamic religion are really the enemies of that religion. The Islamic religion is the closest of religions to science and knowledge, and there is no incompatibility between science and knowledge and the foundation of Islamic faith.