

ISLAM, SCIENCE AND RELIGION AND THE CONSTRUCTION OF NEW RELIGIOUS IDENTITIES: A PERSPECTIVE FROM SOUTH AFRICA

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1. Introduction

Islamic worldview construction emanates from essentially two sources: the Quran and the Prophetic tradition referred too as the Sunnah. This we may regard as a form of direct hermeneutics, in which the holder of faith may receive his/her value orientation through direct interaction with the primary sources. There is also an indirect hermeneutical tradition and influence which casts a pervasive influence that has its origins from classical exegesis, theology and jurisprudence (such as the tafsir sources) or modern scholarly interpreters and activist intellectuals. Each of these sources have acquired varying degrees of dominance or influence over general followers of the faith. The Islamic worldview construction interfaces between individual aspiration, expectations, intellectual models, collective thoughts and precedence.

I must note that the discourses on science in Islam, or Islamic science, have not been entirely influenced by textual injunctions, but the critique of science and subsequent notions of science in Islam have also been influenced by secular thought and philosophical debates in the Western tradition. It is really a question as to whether any worldview is a closed parameter, and that other traditions do not have impacts on religious perceptions. As I will show, and this may be the case with other religions too, that in religion, science is either the enemy or friend depending in which direction religious politics in a particular time is directed.

What is interesting about religious hermeneutics, and largely still remains an unanswered question, is whether sacred text speak by themselves, or whether the discourses of the day influence the way text are read in response to particular situations. Non of this is debatable now, but we should bear in mind this complex tension, which I assert is the interaction of different text-the text of God, the reader, and the social context in which reader and sacred text is to be found, which impact on the way worldviews are constructed.

I will explore two areas of interpretative exercises in Islam to throw some light on the relationship between science and religion. This form of exploration will attempt to tease out the structure of thought informing the current body politic of religion and science. This body of thought emanates in response to a particular polemic and politics that is coming to bear on religion. The first thought structure to explore is the apologetic tradition, and the second, an attempt to critique modern science and to resurrect a notion of Islamic science, by re-examining its history and infusing it with a new exegesis of the Quran. These both impinge on a broader effort in religion, and that is to secure its integrity and identity. I would argue that the intellectual activity here, is no different from other activities in the world of Islam, that is, to resurrect the notions of distinction, 'otherness', and ultimately the sacred and pure. This I believe to be the major psyche operating between the various text and intellectual efforts in modern day Islam.

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As to what is a South African perspective on science and religion is a difficult question to answer. There is very little empirical assessment on Muslim views on science, so from a sociological point of view none of this work has been done. I will however, assess these worldviews from an indirect approach. Most Muslim views will to some extent be influenced by the international debate on this matter. There has been a plethora of books that are obtainable in South Africa published by well known religious scholars, intellectuals and Muslim scientist which have presented various interpretations or views of science and religion. Secondly, I draw on South African literature, mainly newsletters and newspapers, by both conservative and progressive elements in the Muslim community to tease out some of these views. I would argue that the debate is small and located within the domains of specific scholars and intellectuals, since there has been no public dialectic on this issue that enables one to test the strength and depth of these debates from a larger body of people. I have taken the liberty to take this route and hopefully do some justice to the question that is placed before us in this conference. I will merge the international and South African debate as one set of views, because I believe that they are actually inseparable. I will give a brief description of these views in a thematic way and draw the implications of these views on how religion is perceived and the wider world.

2. Some views on science and religion

We cannot continue our discussions without exploring what science and religion is today. While there may be considerable views on what exactly these are, I want to share some of my own perceptions on these two subjects.

Science like religion is an institution, and a collective way of engaging and exploring the world. It is dominated by specific worldviews, and in practise all of which are often constructed by a single individual or groups of them. At the centre of each there is some belief, some way of extracting perceptions. Both ultimately, shaped by human discourse and interests. Non I believe totally objective. If we talk of an objective belief, then we have to ask the cynical question under whose dominance? Both I believe are faced with the challenge of plurality and democratic thought.

In the mind of the populace, science is perceived to be objective, and true. Or at least theories are presented as being the true way in which the world works. We also know that theories change, and loose dominance, once better ones emerge. Considerable work by philosophers, such as Karl Popper, Thomas Khun, Paul Feyerabend and many others have begun to shed some light on how science works, from both the sociological and intellectual level. We have in the 20th century moved away from a strong positivist tradition of science, to a more pragmatic, and even cynical view of science, in what may be described as post-modern scepticism in the matter called 'truth'.

Religion in itself is not singular. If we speak of Islam we have to ask which interpretation, school of thought since they are many, and which practice. There are dominant schools of thought, and there are conservative and progressive views. I am of the view that religion is not static but continuously adapting as social discourse changes and new forms of power in society emerge. Dominance of views is not an eclectic phenomenon it is disseminated by the resourceful in society. These in themselves create perceptions of truth. I know from experience that people would like to create a singular version of truth, but I also know that in the home of Islam differences are many. Religious discourse is shaped by its own socio-economic context. In Islam there is both a peculiar form of religious practice and there is an attempt to create a notion of a singular and universal Islam. It is for this reason that the international dimensions to this discourse needs to be

understood, for it often influences local perceptions and outcomes. What is in fact clear from praxis, is that religion is not one homogeneous entity, there are many versions of religion as there are Gurus, that conflicts over what the meaning of God's word prevail, some taking the form of violence others aggressive scholarly polemics.

3. Religious apologetics and textual authentication

Religious apologetic emerges out of a crisis of identity, and more importantly a crisis of relevance. It is not the presentation of the scientificity of the religious text, but science is used to establish textual authenticity. That this, is not the word of a mere mortal, but the true words of God. For instance, this line of argument is present in a newspaper titled 'Light of Truth', where the idea of authenticity through science is an attempt to show that the words contained in the Quran are not the writings of Mohammed (PBUH), a mere mortal, but that of Allah.² This is also illustrated further in two interesting titles in a local newspaper called 'the Message of the Quran', where its front page headline states: 'Science Proves the Quraan is from an Almighty Power' and then on another page it has a feature article titled: 'Quraan reveals the origin of the Universe with Incredible Scientific Accuracy.' The paper uses these two articles to illustrate that the Quran can only be the word of God and not that of the illiterate Prophet, the author writes:

History and the Quraan informs us that the Prophet was not able to read or write, hence he could not have known about the scientific facts relating to the origin of the universe as he had revealed it 1400 years ago in the Quraan, since he had not studied astronomy, cosmology or cosmogony.³

The question of authenticity is not new, but also pervaded classical Muslim theological debates about the 'ijaz' or the miraculousness of the Quran. It is here repeating itself through another window, or language if you may put it that way, the language being that of science. It is through this reference point that we can establish interesting insights on the relation of science and religion, and the unapparentness of contradiction. This contradiction is apparent, if God's word is pure, and sacred, why then is secular knowledge, and by implication impure because of its human origin, used to support a sacred text, should it not be standing on its own 'two feet'? However, as we will show later, this argument is circumvented by the view that knowledge emanates from somewhere, from God, and if there are certain facts in science that are true, then God has made them known. If they are from God, then they cannot contradict his scripture.

Apologia legitimises the role of science as 'a superior' discourse, in a clumsily constructed view that science and religion reinforce the other. A lot of this kind of discourse emerges out of an era where modern science displaces religion as the predominant form of influence, and conceptual space that religion once occupied in the past. This intellectual displacement has threatened religion, and forces a pattern of apologetic that attempts to reconcile the supposed differences between the two spheres of intellectual influence and to incorporate them as being one and the same truth.

How is this discourse established? First, there is the worldview of the completeness of a sacred text and its infinite wisdom. Secondly, that there is an evolutionary idea of 'secular' or 'worldly' knowledge which affirms this sacred wisdom, so with each era as human beings understand more, so does the text's ambiguity become clearer. This kind of discourse is

2 See Light of Truth, p8.

3 The Message of the Quraan, July 1992, no 1, Quraan Study and Research Foundation.

illustrated in the case where the prohibition of pork, or khinzir, in Islam is argued to be based on the idea that the pig contains impurities.⁴ The notion of impurities (najasa) as it was understood then and how it is understood now is different. This notion of the impure is explicated through medical science, and the presence of the trichinae germ or tape-worm which causes harm to human beings is a way of giving a new exegesis of text through the findings of modern science. This is not only a way of defining a word in the sacred text in a new way, but also a way of pointing to the infinite wisdom and presence of God.

Is this a selective appropriation of science? As I will show, there is an interesting reading in religion about which scientific facts are relevant and which not, depending to what extent they support and affirm specific interpretations and thrust being pursued out of a religious text. It is not the fact of affirmation, but in which way affirmation lends itself to achieving the ends of a specific polemical engagement.

In reading the text of Imaduddin Khalil, I want to draw out some elements of this theme to illustrate the role of apologetics. Khalil makes an interesting point about the relationship of science and religion, he writes:

It is self-evident that Quranic and Scientific data should coincide, and correspond, and it is obvious that there should be no contradiction or barriers between them. After-all, they come from the source.

Science has now returned to the situation in which it functions in harmony with religion.

One needs to note the usage of words, in Khalil's text, such as 'coincide', 'correspond', 'harmony', as a way of expounding the idea that there is no contradiction between religion and science, in fact he is of the view that 'they are from the same source', being of God's wisdom and knowledge. Khalil, uses also the Arabic word 'ilm' which means knowledge to mean science, science as Khalil understands it to be modern science.⁵ The word 'ilm' itself merely means to know, it is not a description of a kind of knowing, or an acceptable 'knowing' which is enshrined within the definition of science as we know it today. We almost have a grafting of meaning, used I believe very differently in the Quran, not only in terms of its lexical context, but historical one too by Khalil.

Khalil while at the same time trying to show that religion and science have the same purpose in life, that is, finding truth, religion needs to emulate science, which appeals to reason and sound methodology, or a sense of objectivity. One notes that Khalil's view are no different from the early 19th century Muslim modernist on this matter, such as Afghani, Mohammed Abduh and Sir Sayyid Ahmed Khan⁶, who responding to the critique of colonialist and orientalist, on the 'backwardness' of Islam, argued that Islam is a religion of reason and encourages the development of science.⁷ Khalil's statement relates to the general

4 This argument is well illustrated in an article published in a popular Muslim newspaper titled: A-Islam, July 1992, vol 3, no 4.

5 It is clear from historical evidence that the word science as it is used today, bears no close resemblance to the notion and practise of science in the classical Greek and Islamic period. This period was dominated by particular theories of the natural world, and some commonsensical investigations of this world. Non of this is similar to the strongly reductionist and empirical tradition of modern science, of experimentation and organization of knowledge through laboratories and scientific academies.

6 While they were responding to the vociferous attacks from Western intellectuals, at the same time these scholars attacked the parochial and superstitious beliefs of many clergy and the Muslim populace. For them these crept into Islam and have destroyed the true basis upon which religion is based. They also cited these beliefs in miracles and other myths as an example of the degeneration of Islam that Westerners have come to view as being 'backward'.

7 See Rahman, F 1979. *Islam*. Chicago and London: University of Chicago Press, second edition.

view that science has taken over from religion precisely, because religion has lost the culture of reason and objectivity that it once had. In other-words, if religion is to reclaim its role in the world, then it needs to examine how science has succeeded to dominate and then model itself on this intellectual tradition. According to Khalil, science is based on sound and rational methodologies. In fact Khalil conceptualises science as being progress, which is what religion is, or at least should strive for. It is also obvious that each of these terms, 'objectivity', 'truth', 'progress', can be questioned independently, and have been done so by other philosophical traditions. However, we note that Khalil fails to interrogate these assumptions.

Khalil also recognises the potential contradictions that can arise from science and religion if it was found to be untrue and contradicts holy scripture, and thus attempts to develop a system in which he states that any scientific fact that is vague or variable cannot be drawn on to support the Quran because of its inherent uncertainty and potential to change, whereas permanent scientific facts can be used to explicate the Ayah(verses) of the Quran.

Khalil is not the only one who had faced this dilemma scholars in the 10th and 11 century AD also had to address this question of the relation of foreign sciences to the holy text. At the time of Al-Ghazali⁸, orthodox theology, viewed the intrusion of 'foreign' sciences, that is Aristotelian and Platonic philosophy, which found its new champions in the form of a-Farabi and Ibn Sina, as posing a certain danger to Islamic principles if they were shown to be true. To this question, Ghazali, in his *Tahafat a Falasifa* responds and argues that if scientific conclusions are not demonstrably true and in contradiction to the literal sense of the Quran they should be rejected. If they are true, and contradict the literal sense, they must be interpreted metaphorically as God does not create demonstrably true statements that are contradictory.⁹

Ghazali was also of the view that Muslims should have a basic knowledge of the ancient sciences, as necessary, and not delve excessively, like the heretical philosophers, as this will lead them to loose faith in Islam. What we see both in the modern and classical tradition, the tension between the relation of religious and secular sciences, which has not been entirely resolved even up to today. On the one hand they have a certain religious utility, on the other they could be a source of contradictions.

4. Islamization of knowledge and the creation of a sacred science

The Islamization of knowledge debate is not new, in fact its roots can be traced to the early modernist intellectual movements, of the late 18th and early 19th century. It is different today in that there is not only a serious attempt to purify Islamic knowledge, but infuse within secular knowledge an Islamic cultural garb. This is what I would describe as an attempt at 'epistemological' purity. This like the early revivalist movements was an attempt to create a pristine Islam free from modern influences.¹⁰ Faruqi one of the leading modern figures in this drive for Islamization, is also different from the early modernist, in

8 A-ghazali is regarded as the last defender of Muslim orthodoxy. His thoughts are best epitomised in his celebrated compendium of works the *Ihya-Ulum-uddin* (The Revival of the Religious Sciences).

9 Marmura, E M, *Ghazali's attitude to the secular sciences and logic*. Source unknown.

10 Mohammed, Y 1991. *Islamization: A revivalist response to modernity*. A paper presented at the conference: Approaches to the Study of Islam and Muslim Societies, University of Cape Town, 17-19 July 1991.

that while they saw the need to study and acquire modern sciences,¹¹ Faruqi is of the idea that this is not enough, as modern science is embedded in particular values systems and ideology which in themselves need to be purged.

... many great Muslims have attempted to reform Islamic education by adding to its curriculum the subjects constitutive of an alien view. Sayyid Ahmad Khan and Mohammed Abdu were champions of this cause. All their efforts ... rested on the assumption that the so-called 'modern' subjects are harmless and can only lend strength to Muslims. Little did they realize that the alien humanities, social sciences, and indeed the natural sciences as well, were facets of an integral view of reality, of life and the world, of history, that is equally alien to that of Islam ... That is why their reforms bore no fruit.¹²

When you adopt modern science, you also potentially bring with it contrary ideological and cultural values to Islam. The efforts of Ismail Faruqi can be considered to be the next major step in the modernist debate on the relation of Islam to other secular sciences. Faruqi was responding to the educational dichotomy that existed between Islamic education on one hand, and modern sciences on the other. Faruqi was also addressing the loss of young Muslim minds to secular institutions, and the influence that Western sciences were beginning to have on these minds. It was in Faruqi's view that real cultural conversion and even 'corruption' of Muslim values were being experienced in secular western institutions and hence the urgent need to address these by offering an alternate cultural experience while benefitting from the progresses in modern secular learning. This gap could be breached through the process of Islamization.

There is an assumption that in early or classical Islam this dichotomy that Faruqi is so eager to address did not exist. Where did the singularity of the idea of sciences originate from? It seemingly comes from Faruqi's view of tawhid, that is, the oneness, universality, and uniformity of knowledge. That they all spring from one truth and value network, this Faruqi would assert is the distinguishing factor of early Islam. However, the historical picture of the relationship of Islamic sciences in the classical period, from 8th century AD to 13th century, is one of cross-cultural influences, a polemics between rational philosophy and orthodox religion, and the patronage of royal courts and the investigation of Greek, Indian and Persian sciences.

It is not clear that there was any sense of a unitarian view of sciences, and a unitarian view of religious experiences and secular intellectualism. Berggren¹³ makes an interesting and challenging observation, that when we speak of any particular Muslim thinker and scientist, it must not be assumed that they were representative of all Muslim thinkers. In fact he goes on to argue that they each represented a particular cultural context and intellectual attitude reflecting the places in which they resided and intellectual traditions and influences they have encountered. To add another dimension to Berggren's view, the fact that Muslim scholars engaged in foreign sciences did not mean that the whole of Muslim society did so, or that there was general acceptance and teaching in Muslim institutions of learning in these fields. It is likely that most were loners in their own intellectual endeavours.

11 For instance Sheik Abdu, was so concerned about the lack of knowledge of modern sciences in the Islamic colleges of A-Azhar, in Egypt, that he called for reform in the educational system, and the introduction of modern sciences in the curricula.

12 11 Faruqi, R I 1982. Islamization of knowledge. International Institute of Islamic Thought, ppiv-v.

13 See, Berggren, J L 1992. *Islamic acquisition of the foreign sciences: A cultural perspective*. The American Journal of Islamic Social Sciences, Vol 9, No 3, 310-324.

Faruqi attempts a real revolution, in that his Islamization requires a re-thinking, a reworking, a reconstruction of theory and methodology in western sciences, so that they are in harmony and confined to the principles of Islam.^{14,15}

Faruqi's views did not go without critique, a great contemporary Muslim scholar Fazlur Rahman, while not openly rejecting the Islamization of Knowledge paradigm was certainly of the view that it would create intellectual parochialism. Rahman's critique as I read it, calls on a reflection on what is meant by Islam as a first instance, what is meant by good Islam and secondly, whether Islamization of Knowledge does not amount to dictating the way Muslims must think. Rahman, was legitimately concerned, that instead of enriching Muslim intellectualism, it would actually destroy minds. Rahman was also of the view that there is no mechanical or logical step that one can pursue in a way that is able to transform meaningfully Western sciences into Islamic sciences, this would border on the ridiculous.

So far as the problem under consideration-Islamization of Knowledge-is concerned, I, therefore conclude, that we must not get enamoured over making maps, charts of how to go about creating Islamic knowledge. Let us invest our time, energy and money in the creation, not of propositions, but minds.¹⁶

It is this paradigm of a pure essence, a pure epistemology embedded in religion, that has originated a whole resurgence in the Muslim world of the idea of a religious science, that is, Islamic science. There are two connotations to this word, one that there is a notion of a sacred science, which is manifested in the writings of people like Sayyid Hossein Nasr and others, and the other a science set within a particular cultural and political setting, and that being of Islam. What is of interest to us, is the notion of a sacred science.

Nasr defines Islamic science as the following:

Islamic science is rooted in the Quran, grounded in the doctrine of Unity, which is central to the Quranic revelation and has developed in the framework of the Islamic conception of the Universe on the one hand and of knowledge on the other. For over a millennium muslim scientists developed this body of science drawing from earlier scientific traditions but always integrating whatever they adopted from these sources into the Islamic world view, thereby creating one of the major scientific traditions of the world. It is this tradition which constitutes what we mean by Islamic science.¹⁷

Nasr, argues that Islamic science must lead to Unity, or the oneness of God. This science if also holistic, 'the framework must always be the whole, the totality of cosmic reality'.¹⁸ Islamic science in its approach should correspond to reality. Nasr also holds that this Unity of knowledge is a spiritual experience which makes a Muslim move from one height of consciousness to another. Islamic science also used multi-methodologies and was not committed to singular and reductionist methods of modern science. Causality according to Nasr is not only a material or physical one, but there is also vertical causality emanating from the will of God. All cause is not physical phenomenon, but also the result of the Will

14 Mohammed, Y. op cit, p13.

15 As a result of this idea, Faruqi created the Association of Muslim Social Sciences (AMSS) to carry out this projects vision. Elsewhere similar institutions were set up, like the Muslim Association for the Advancement of Science (MAAS), which was formed in 1983, soon after the Islamization of knowledge Conference held in Islamabad in 1982 where Faruqi's ideas were first presented and debated.

16 Rahman, F 1988. *Islamization of knowledge: A response*. The American Journal of Islamic Social Sciences, vol 5, no 1, pp3-11.

17 Nasr, S H 1994. *What is Islamic Science*. MAAS Journal of Islamic Science, vol 10, no 1, pp10-20.

18 Ibid, p12.

of God. It is his linking of science to a kind of spiritualism that marks a significant historical innovation. This for Nasr is the essence of Islamic science. Nasr declares:

In Islam the subject which studies and knows, namely, a-aql, can never be separated from the sacred and the light of revelation.¹⁹

In a sense, anything that Western science is, Islam is not. Nasr here creates his own version of an Islamic ethos and manages to fit this over science in general, both the past and the future activities that are to take place in a Muslim world. Nasr also manages to simplify the history of science in Islam to present his own version of its sacred endowments. This is also reminiscent of orthodoxy's attempts in the 8th and 9th century AD, to reject the idea of a 'heathen knowledge', with the Hellenization of Islam. This is illustrated in the refusal to accept Greek medicine as being pure and of utilitarian value to Islam. Instead orthodoxy generates its own version of an acceptable medical tradition, that of Prophetic Medicine, (Tib a Nabawiya). This was to install in the mind of the populace that this medicine was also sacred medicine and stigmatise an emergent medical tradition in the Muslim world based on the foreign sciences.²⁰ What emerges out of Nasr's work is the idea of a non-material science that is informed by scripture and in turn by a spiritual psychological state that is in one with God, and this in itself is the basis for a pure science.

5. Concluding remarks

The crisis of identity, and the need to be relevant in a modern world of competing ideologies and values which threaten the perception of an 'authentic religion', a 'chosen people', and the 'pure word', means that there are new opportunities presented to re-invigorate this conception of pure being and text- the idea of a pure state dwells.

Apologia is one version of this attempt to reclaim authenticity. In apologia we not only note a new way of expounding text through new forms of knowledge, but also a process of textual authentication and the fact that the text is sacred and the true word of God.

In the second, there is the notion of pure knowledge, embedded in sacred text. This is either in the form of pure conscious, on unadulterated chain of cultural transmission. The case of the historiography of science in Islam does not represent only a new way presenting this history, but to infuse in this history a sense of uniqueness, otherness and intellectual purity. Islamic science is of pure minds, pure will and pure disposition.

The idea of purity is deeply embedded in the Muslim psyche, it emanates from the discourse on/of the 'other'. It is clear that this under-current also pervades the example of the relation of science to religion in Islam. These are not simple issues of right and wrong, but the struggle to maintain a uniform identity in a world which threatens to disrupt the self into many personalities and forms. It goes to the heart of the Muslim idea of the self and existence.

¹⁹ Ibid, p17.

²⁰ See Ullmann, M 1978. *Islamic Medicine*. Islamic Surveys Series No 11. Great Britain: Edinburgh University Press.