IQBAL REVIEW

Journal of the Iqbal Academy Pakistan

Volume: 54 October-December 2013 Number: 4

IQBAL ACADEMY PAKISTAN

The opinions expressed in the Review are those of the individual contributors and are not the official views of the Academy

IQBAL REVIEW
Journal of the Iqbal Academy Pakistan

This peer reviewed Journal is devoted to research studies on the life, poetry and thought of Iqbal and on those branches of learning in which he was interested: Islamic Studies, Philosophy, History, Sociology, Comparative Religion, Literature, Art and Archaeology.

Manuscripts for publication in the journal should be submitted in duplicate, typed in double-space, and on one side of the paper with wide margins on all sides preferably along with its CD or sent by E-mail. Abstracts in English should be typed double-spaced on a separate page. It is assumed that the manuscripts sent to *Iqbal Review* are not under consideration for publication elsewhere.

Publication of material in *Iqbal Review* means that the author assigns copyright to *Iqbal Review* including the right to electronic publishing. Authors may, however, use their material in other publications acknowledging *Iqbal Review* as the original place of publication.

In order to facilitate academic review and production, authors must conform to the following: 1) the name of the author, address, phone numbers, title, and name(s) of universities must appear on the title page of the article; 2) footnotes are to be numbered consecutively; 3) all foreign words must appear underlined/Italic with properly placed diacritical marks. Ten off-prints of the articles and two copies of book reviews will be sent to authors.

All contributions should be addressed to the Editor, Iqbal Review, 6th Floor, Academy Block, Aiwan-e-Iqbal Complex, Egerton Road, Lahore, Pakistan.

Tel: 92-42-36314510, 99203573, & Fax: 92-42-36314496

Email. into@iap.gov.pk Website: www.allamaiqbal.com

Published annually: *Iqbal Review* Two issues (April and October)
Iqbaliyat Two issues (January and July)

ISSN: 0021-0773

Subscription

PAKISTAN	
Per issue	Rs.150/-
Per year	Rs.600/- (for one year.)
(Postage included)	
FOREIGN	
Per issue	$ 6.00
Per year	$ 20.00 (for one year.)
(Postage included)	

CONTENTS

OUR CONTRIBUTORS

Dr. Abdul Khaliq
Ex-Chairman
Department of Philosophy
University of Punjab,
Lahore

Dr. M. H. Qazi
Ex-Vice Chancellor
University of Lahore,
Lahore

Dr. Musarrat Jabeen
Professor International
Relations,
Faculty of Contemporary
Studies,
National Defense University,
Islamabad.

Mr. Wahid Pervez
M.Phill Scholar
English Literature

Dr. Tahir Hameed Tanoli
Assistant Director Academics
Iqbal Academy Pakistan
Government of Pakistan
Lahore

IQBAL'S VISION OF GOD-KNOWLEDGE: THE INTERSECTION OF MYSTICISM, SCIENCE, AND METAPHYSICS

Dr. Abdul Khaliq

ABSTRACT

In *Reconstruction of Religious Thought in Islam,* Allama Muhammad Iqbal discusses the knowledge of God as the highest stage of religious life, where metaphysics gives way to psychology, and the religious quest becomes a direct experiential encounter with the Ultimate Reality. He critiques Immanuel Kant's view that knowledge is limited to phenomena, with noumena (ultimate reality) being unknowable. While Kant's conclusion is valid within the confines of reason and sense perception, Iqbal argues that mystical or religious experience offers an alternative, valid form of knowledge, providing direct insight into the Ultimate Real. Iqbal differentiates his stance from traditional mysticism (including Sufism), which is often viewed as detached from worldly life. Instead, Iqbal promotes a positive, empirical approach to mysticism. There are three kinds of mysticism: *Purgatory mysticism* which focuses on self-purification by removing internal obstructions to divine realization, *Love mysticism* which centers on the development of intense love for God, making Him the ultimate ideal and *Contemplative mysticism* which emphasizes contemplating nature, human society, and history to draw closer to God, which aligns with Iqbal's vision of a "scientific form of religious knowledge."

Iqbal contrasts his view with that of Sir Syed Ahmad Khan, who reconciled religion with the deterministic science of the 19th century by downplaying metaphysical elements in Islam. Iqbal, however, engages with the indeterminism and creativity of 20th-century science, arguing that the Qur'an supports a dynamic view of God as constantly creating, in line with modern scientific understanding. Iqbal examines traditional philosophical arguments for God's existence, such as the cosmological, teleological, and ontological arguments. He finds them inadequate, arguing that they fail to capture the dynamic, infinite nature of God. Instead, Iqbal emphasizes the importance of observing nature as a means to knowledge of God, likening it to a form of worship. He highlights the Qur'anic perspective that nature is a system of signs pointing to the Divine, urging humanity to engage with both the physical world and the metaphysical realm. In conclusion,

Iqbal advocates for an experiential approach to God-knowledge, wherein nature serves as a reflective surface for the divine. This aligns with his concept of the "Ultimate Ego," where human egos mirror the divine but remain distinct, allowing for personal growth in the knowledge of God. Iqbal's perspective resists pantheism and upholds the individuality of the human ego in its relationship with the Divine.

Allama Muhammad Iqbal, in his *Reconstruction of Religious Thought in Islam,* has consistently — though obviously in different contexts — built up a case for the knowledge of God. Divine gnosis or God-consciousness, according to him, in fact denotes the elitist stage of religious life wherein metaphysics of the rationalists "is displaced by psychology, and religious life develops the ambition to come into direct contact with the Ultimate Reality".[1] In order further to bring into limelight the possibility of this supreme experiential contact he refers to the view of Immanuel Kant that only the appearances, the phenomena, can be known : the noumena, comprising, what he calls, the reality as such, are unknowable. Kant is well-known for building up a case for the possibility of *a-priori*, synthetic judgements and for his claim that all knowledge whatever is entirely conditioned by forms of perception *viz,* space and time, and categories of understanding such as quantity, quality, relation and modality. Hence the impossibility for him of the epistemic awareness of the Ultimate Real which, by it very definition, is beyond and outside the defining limits of these conditionalities! Given the premises affirmed by him, Kant was justified as regards his conclusion. But sense perception and reason, says Iqbal, are not the only available modes of knowledge. Beside and beyond them there is religious/mystic experience also, veracity of the claimants of which cannot be easily denied nor does this experience have any mystification or esotericism about it. Both sense experience and mystic experience are qualitatively the same[2], according to Iqbal. The only difference is that the former gives us knowledge of the so-called appearances whereas the latter gives us knowledge of the Ultimate Real. The latter is no doubt essentially a state of feeling but it does have a cognitive content also. It is by dint of its cognitive character, he says, that it can be communicated to others in the form of judgements whose truth is duly guaranteed by a successfully profitable application to them of, what he calls, 'the intellectual test'.[3]

In view of the above, Iqbal takes care to distinguish his position from that version of mysticism (including the so-called Islamic mysticism or sufism)which — alongwith / despite its claim to God-knowledge — has, in common parlance, put on the connotation of

being a life-denying, fact-avoiding attitude of mind directly opposed to the radically experimental / experiential outlook of modern times . He has no sympathies for this nihilistic colour of mysticism. Accordingly, he adopts a positive, empirical approach in this regard.

After bringing out the nature of what really stands for mysticism, and differentiating it from all of its fake varieties, it can be enumerated and explained in three major kinds insofar as its approximation to the ideal of *ma'rifat-e Ilahi* is concerned *viz,* 1, **Purgatory mysticism** which emphasizes eradication by the person concerned from his own self all alloy and rust that happens to have been deposited over it in the form of unnatural accretions behaving as veils and obstructions against the incoming of the Divine; 2, **Love mysticism** which lays stress on the development of love *('ishq*) for God, initially as a consequence of the knowledge of the *sifat* of His being like Gracious, Benevolent, Forgiving, Loving, as regards His relationship with human beings. Intense and absolute love of God in its own right, that gradually develops, makes the love of everything / everyone else as relative and insignificant making Him the grand Ideal of fascination to be proximated closer and closer; 3, **Contemplative mysticism** which gives priority to the method of contemplating by man over his own self, over the physical nature outside him and over the historical development of human societies and their destinies. All these phenomena of 'nature' — in a very broad sense of the term — being the doings of God must of course have very evidently an intimate relevance to His existence as well as to His attributes and so must be thoroughly tapped by man towards bringing out that relevance. Allama Iqbal would have no objection to any one of these mystical approaches to the knowledge of God. However, presently, we shall concentrate on the last one i.e. the routing of the process of the acquisition of God-knowledge through the observation of, and contemplation over, nature. This incidentally, amounts to seeing Him in the broadest daylight. In general, it would provide, what Iqbal terms, a 'scientific form of religious knowledge' which alone the modern mind can easily understand and appreciate and which has duly been emphasized in the *Reconstruction.*

We are reminded here of the standpoint of Sir Sayyid Ahmad khan, an elder contemporary of Allama Iqbal. The former too had attempted to bring out the scientific face of religious consciousness by emphasizing that the subject-matter of natural sciences is the work of God whereas the revealed Divine message comprising the Qur'an is the word of God: thus there can be no disharmony

between the two. Accordingly, Sayyid Ahmad reconstructed Islamic religious thought against the context of his contemporary 19th century science, which incidentally happened to be deterministic through and through; and, as a consequence, sought to divest the Qur'anic teachings of all supernatural content including the possibility of man's knowledge of the Divine Being. What Allama Iqbal, on the other hand, lived was the atmosphere of the 20th century physical sciences which, instead, demonstrated free creativity and indeterminism; and, accordingly, providing a room for the veritability of the yet-to-be, the realm of the unknown and, in general, the possibility of metaphysics. This, according to Iqbal, demonstrates 'the Qur'anic view that God is in a state (of glory) every moment.[4] Thus the Ultimate Real is knowable as a free creative movement, as a rationally directed creative life. In Islamic orthodoxy the instrument of encounter with God has been technically known as *salat* (prayer);[5] and Iqbal observes that the scientific observer of nature too is involved in the act of prayer.[6] "The knowledge of nature", he says, "is the knowledge of God's behavior. In our observation of nature we are virtually seeking a kind of intimacy with the Absolute Ego". It is very suggestive to point out here that the word *ayah* (pl.*ayat*) has been used by the Qur'an for anyone of the verses in it as well as for a phenomenon of nature. This adequately shows the affinity between the Divine and the natural orders. "Nature's laws", Khalifa Abdul Hakim very succinctly remarks, "are God's thoughts thinking themselves in orbits and tides. As there are signs of God's power and wisdom and beauty in all nature outside man, so there are signs inscribed in the hearts of all men… the verses of God's revelation are inscribed in the letters of light in the starry heavens, in the prophetic consciousness and in the minds and heart of those who reflect rightly on nature within and nature without".[7]

God, according to Allama Iqbal, is an Ego — the Ultimate Ego, the Great I-am; as from the Ultimate Ego only egos proceed, the whole furniture of the universe too comprises egos. "Throughout the entire gamut of being runs the gradually rising note of egohood until it reaches its perfection in man."[8] Providing details of this affinity between nature and God, Iqbal variously observes:

> Nature is human interpretation put on the creative activity of the Absolute Ego.[9]
> Nature is the habit of Allah.[10]
> Nature is to the Divine Self as character is to the human self.[11]

(Nature's) passage in time offers the best clue to the ultimate nature of Reality.[12]

Observation of nature is only another form of worship.[13]

God is the omnipsyche of the universe.[14]

God is imminent in nature.[15]

Against the background of Allama Iqbal's statements regarding nature-God mutual organic concern, as given above, the question arises how exactly and in what sense is the experience of nature relevant to, may be an argument for, a person's God-consciousness. At the beginning of the second Chapter (entitled 'The Philosophical test of the Revelations of Religious experience') of his *Reconstruction* Iqbal refers to the three well-known nature-based arguments for the existence of God viz. Cosmological, Teleological and Ontological, briefly examines them and duly regards them as "a real movement of thought in its quest for the Absolute. But regarded as logical proofs… they are open to serious criticism and further betray a rather superficial interpretation of experience.[16]

The Cosmological argument derives itself from the indispensable phenomenon of causation in the universe. Every effect has a cause which itself is the effect of another cause, and so on. Due to the unthinkability of the infinite regress thus envisaged we have to stop at a cause which must be recognized as the Uncaused First Cause. This Uncaused Cause is God. The argument, says Iqbal, commits a number of fallacies. Firstly, it nullifies the very principle on which it is based. That the existence of God has no cause contradicts the law of causation itself. Secondly, any particular effect i.e. an event in nature — which is necessarily finite and bounded in character — can only give a finite cause or, at the most, an infinite series of such causes: it cannot at all give us the concept of the existence of God as the Absolute Being Who is without any limitations whatever. Thirdly, the cause ultimately reached by the argument cannot be regarded as an autonomous, self-directing being for the simple reason that in a 'cause-effect' relationship both the terms are necessary to, and equally dependent upon, each other. We can add to these points of criticism raised by Iqbal at least one more. In a causal relationship, once the cause has produced its effect (which in its own right assumes the role of a cause to produce its own effect, and so on), the cause, by and large, becomes inoperative. So, the Uncaused Cause of this argument — once upon a time — simply set the ball rolling in the form of various subsequent cause-effect nexuses in nature. Presently, the ball rolls on of its own and the nature as we observe it, is rendered independent of God, the Uncaused First

Cause, for all practical purposes; meaning to say that He would at the most, be a deistic, an absentee God having practically nothing to do with the affairs of the world here and now. In the end, Iqbal observes:

> … the infinite reached by contradicting the finite is a false infinite, which neither explains itself nor the finite which is thus made to stand in opposition to the infinite. The true infinite does not exclude the finite; it embraces the finite without effacing its finitude, and explains and justifies its being. Logically speaking, then, the movement from the finite to the infinite as embodied in the cosmological argument is quite illegitimate; and the argument fails in toto.[17]

The Teleological argument originates from the traces of foresight, order, uniformity, adaptation and purposiveness in nature and infers that there must exist a Self-conscious Being of infinite intelligence and power Who presides over it and guarantees that its order is not disturbed and that the meaningfulness inherent in it duly evolves towards the realization of this order. Evidently this argument does not give us a creator but only a designer who has worked/is working on an already existing material which, by its own nature, is *ex hypothesis* just a disorderly hodgepodge of objects; and

> even if we suppose him to be also the creator of his material, it does not credit to his wisdom to create his own difficulties by first creating intractable material, and then overcoming its resistance by the application of methods alien to its original nature. The designer regarded as external to his material must always remain limited by his material, and hence a finite designer whose limited resources compel him to overcome his difficulties after the fashion of a human mechanician.[18]

The Ontological argument has its premises not in the outer world but in the mind or self of man himself. Originally presented by St. Anselm, it has been put forth by the philosophers in different forms. Its simplest formulation, as given by Descartes, is this: There is a 'concept of the perfect being' — howsoever vague — in our mind. Now, if this being does not exist, the concept cannot be perfect because non-existence implies a defect: how can a being which has this defect be a perfect being. The concept of a perfect being necessitates that this being must be existent also. The conclusion is that perfect being i.e. God must necessarily exist. This argument, as is evident, proceeds from the conception of existence to the factual objectivity of existence. Kant's criticism of this argument has become proverbial: the notion of three hundred dollars in my mind cannot prove that I do have them in my pocket.[19] Says Iqbal:

> All that the argument proves is that the idea of a perfect being includes the idea of his existence. Between the idea of a perfect being in my mind and the objective reality of that being there is a gulf which cannot be bridged over by a transcendental act of thought.[20]

All the three traditional arguments taken together, according to Iqbal, aside their individual frailties, incongruities and fallacies, "betray a rather superficial interpretation of experience".[21] A modern writer sums up Iqbal's critical position in this regard when he says: Dividing reality into the irreconcilable opposites cause/effect (cosmological), designer/designed (teleological) and ideal/real (ontological) creates an internal contradiction in each of these arguments and divides experience into an irreconcilable dualism of thought and being.[22] H.J.Paton, bringing out the barrenness of these arguments, writes in the same strain: "They appeal …. not to a rich and full and diversified experience but to its bare bones. The inference, so to speak, is not from the levity body of experience but only from its skeleton. Hence "the cosmological argument" — which of course comprises all the argument which infer the existence of God from a particular aspect of cosmic nature — "is arid"[23]

Happily, the Qur'an, while building up its metaphysics, does not abstract in this way. Its reference is always to experience as such. It accepts organic wholeness of nature that is revealed to sense-perception as a system of signs of the Ultimate Reality, which signs we are almost duly-bound to observe and speculate over. Those who are oblivious of the facts of experience here and now will, according to it, remain deprived of the vision of the Ideal in the Hereafter.[24] The Qur'an says:

> We shall show them Our signs in all the regions of the earth and in their own souls.[25]
>
> 'Surely, in the creation of the heavens and of the earth and in the alternation of night and day: and in the ships which pass through the sea with what is useful to man and in the rain which God sends down from heaven, giving life to the earth after its death and in scattering over it all kinds of cattle; and in the change of the winds and in the clouds that are made to do service between the heavens and the earth are signs (of God) for those who understand.'[26]

Further:

> 'And it is He Who sends down rain from heaven, and We bring forth by it the buds of all the plants and from them we bring forth the green foliage and in the close growing grain and palm trees with sheaths of clustering dates and gardens of grapes and the olives and the

pomegranates like and unlike. Look at the fruits when they ripen. Therein are signs for people who believe.[27]

And so on.

The Qur'an records a number of instances where Prophets themselves had to attend towards observation of nature as a pre-requisite for their knowledge of God. When prophet Moses expressed his wish to see God, he was directed to look towards the mountain, [28] which is after all a natural object. Prophet Abraham, the "Upright Muslim" and the Unitarian *par excellence*, found his way to God through a strong realization, based on observation and experience of the ephemeral character of the stars, the moon and the sun.[29] Even when he had acquired faith in God in this way he had to have a recourse back to the world of experience in order to confirm his faith in the supremacy and omnipotence of God and in order to be at peace with himself.[30]

However, all these Qur'anic references do not imply that even the diverse phenomena of nature as such do in any way provide sufficient proofs for the existence of God and His Unique Peerlessness. There can, strictly speaking, be no logical argument worth the name for the existence of God in which nature, **even in its organic wholeness**, is accepted as the major premise. Nature is finite and temporal: God is infinite and eternal. Neither a deductive nor an inductive reasoning is, in principle, applicable here because in both these types of argument the premises and the conclusion must mutually have at least a continuity of reference and must belong to the same universe of discourse. We may extend finitude to whatever degree we desire: It would never be transformed into infinity. Nor can any number of moments of time joined together give us even a glimpse of eternity. Eternity is simply timelessness and infinity is the very negation of all finitudes and determinations. God is Wholly Other. There is absolutely nothing and no one like Him.

Now, how to bridge up the gulf between nature and God so that we may have God-Knowledge 'the natural way', as envisaged by the Qur'an? In other words, how is a natural theology possible? Nature, we have already shown, is a system of signs or symbols pointing towards God. So, plainly speaking, knowledge of God should be a matter of interpreting these signs and giving them the appropriate meaning rather than resorting to a logical argument proceeding from the signs to what these signs ultimately signify. In order to perform this interpretative function, it is necessary, although of course not sufficient, that we observe well and find out, on the premises of

naturalism itself, as to how things happen. What we are required to have, in addition, is a cosmic vision, or – in the beautiful phrase of Iqbal – 'the vital way of looking at the universe'. This cosmic vision, which is duly presided over by an I-Thou encounter with God, comprises *iman b'al-ghaib* or faith in the Unseen. The Qur'an says:

> This Book, there is no doubt in it, is a guide to those who keep their duty, who have faith in the Unseen...[31]

By 'faith in the Unseen' is meant faith in God, the angels, the Day of Judgement and other metaphysical realities mentioned in the Qur'an which are not open to ordinary observation. However, more generally, it implies an overall supernaturalist attitude of mind. For a stark naturalist or a thorough empiricist, the world of experience is the only reality and a talk of anything beyond it is a nonsense, pure and simple. Hume, the well-known British Empiricist, for instance, says:

> If we take in our hand any volume of divinity or school metaphysics, for instance, let us ask, Does it contain any experimental reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact or existence? No. Commit it then to the flames for it can contain nothing but sophistry and illusion.[32]

In modern times this position was taken up by Logical Positivists. With their principle of verifiability in hand, they rejected the validity of everything that was outside the purview of positive sciences. "The theist may believe, " says Ayer, one of the pioneers of the Logical Positivist movement, "that his experiences are cognitive experiences but unless he can formulate his knowledge in propositions that are empirically verifiable, we may be sure that he is deceiving himself."[33] As opposed to this positivism, the kind of attitude that the Qur'an requires from its readers is that they should have a firm conviction that there are realities beyond those of the sensible world. This is what may be meant by faith in the Unseen. Only those observers of nature are capable of going beyond the appearances, which are directly encountered, and of having a vision of Reality beyond them, who are in principle convinced that Reality does exist and that the world of sensible experience is not the end-all and the be-all of everything. It is truly at this level of his attitude towards God that a scientific observer of Nature can be identified with the religious seeker after the Ultimate Reality. It is at this level alone that he realizes that the spatio-temporal world is not simply a three-dimensional world: it has a fourth dimension as well. "Every thing we experience in the course of our lives," says Herbert Butterfield, "is not only what it is; it can be psychologically a symbol of

something more."[34] The Qur'an condemns the strictly matter-of-fact type of people. It is about them that it says that their hearts are sealed:

> Allah has sealed their hearts and their hearing and there is covering on their eyes.[35]
>
> They have hearts with which they understand not, and they have eyes with which they see not and they have ears with which they hear not; … nay, they are more astray.[36]

The phrase roughly corresponding to the "sealing of the heart" is "expanding of the breast":

> Whomsoever Allah intends to guide, He expands his breast for Islam.[37]

This "expansion of the breast" helps the individual to develop in himself a more and more profound vision and understanding. He begins understanding the true, esoteric meaning of the word as well as the work of God and is thus transported from finite nature to God, the Infinite. Iqbal most probably has this level of experience in mind when he says that the observation of nature sharpens our inner perception so that we can have a deeper vision of it (i.e. nature).[38] Once we have that vision, our normal perception, our reason and understanding, are, in turn, thoroughly metamorphosed against new perspectives. "Positive views of ultimate things, " Iqbal rightly observes, "are the work rather of Inspiration than Metaphysics."[39] Elsewhere, indicating the inadequacy of natural-cum-rational approach to God, he quotes with approval the saying of Ibn 'Arabi that God is a percept as differentiated from the world which is a concept.[40]

Observation of nature as the basis, the prelusion or the preface of God-Knowledge has been emphasized by the Qur'an, as shown above, due to the simple fact that nature furnishes pointers to God and suggests the right direction in which a search for Him can be fruitfully undertaken. It is thus only an evocative technique and simply furnishes the occasion to have a knowledge of God Who thus, in spite of its relevance to Him, retains His singularity and autonomy. This can be made clear with the help of an illustration given by I.T. Ramsey in his *Religious Language*.[41] Suppose, he says, I have to bring home the existence of a circle to a person who has a peculiarly developed geometry which is completely without curves. I will ask the person to draw a regular polygon with a certain number of sides. Then I shall ask him to make more polygons each time adding one side more to the last figure already drawn. If the process goes on, there generally comes sooner or later a point of disclosure.

The man realizes with a flash of insight that his activity of drawing polygons with more and more of sides is imperceptibly leading to an absolutely new kind of figure i.e. a circle, which these figures are approaching more and more nearly but which he will never reach. The circle is then, according to Ramsey, the "infinite polygon". The word "infinite" is significant here. It implies that we may add as many sides as we like to our polygons, but still the difference between the circle and the polygons, nearest to it will be as wide as between the infinite and the finite. Yet, the circle is definitely relevant to the growing polygon and presides over the whole series. On the same analogy, nature is relevant to the existence of God, but still it cannot be equal to Him, nor can it furnish a sufficient proof for His existence.

The entire above account speaks eloquently for a need to undertake a process of self-culture on which the Muslim mystics in particular have invariably laid special emphasis. Iqbal, also speaks of ego's gradual growth in self-possession, in uniqueness and intensity of his activity as an ego. "The climax of this development, " he says, "is reached when the ego is able to retain full self-possession, even in the case of a direct contact with the all-embracing Ego."[42] So, it is only a full-grown, well-integrated ego who can afford to have personal knowledge — knowledge by acquaintance, roughly speaking — of the Divine Being. From the very beginning, the seeker of God must learn to discipline his attitudes and be most sincere in his efforts for the realisation of the ideal. Daily canonical prayers are generally begun with the declaration: "I have turned my face towards Him Who created the heavens and the earth and I am not one of the polytheists." So also the observer of nature should always have in mind the attainment of the Ultimate Truth as the grand objective of his experimentations and researches and should never divert his attention elsewhere, however strong the temptation. There is no holiday in the spiritual life of man.

God-Knowledge, which is pursued with such absorption and single-mindedness and with the discovery of the true I-amness in the background, is, of course, not 'knowledge' in the discursive or analytical sense of the term. It is not the sort of knowledge in whose case it would be possible to make a watertight distinction between the knower and the known and also we could understandably talk about the known object in normal everyday language. It is rather of the nature of what the sufis call *ma'rifat* or gnosis where the gnostic develops a kind of unicity with God and, not very infrequently,

comes out with the spontaneous eruptions like "I am the creative truth" or "I am holy; how great is my majesty" and so on. The distinction between discursive knowledge and gnosis can be well brought out by referring to a corresponding distinction made by Bergson between a man's knowledge of a city which he gathers from the hundreds and thousands of photographs of that city taken from all possible angles and viewpoints and another man's knowledge who lives in that city, roams about its streets and has a living contact with its human as well as non-human environments.

Incidentally, the unicity of the human ego with the Divine Ego and the spontaneous ejaculations of certain mystics in that regard (which have been known as *shat-hiyyat* in *sufi* literature) can very easily be interpreted in terms of pantheism. Iqbal scrupulously guards against this interpretation. "The finite ego", he holds, "must remain distinct, though not isolated, from the Infinite.[43] "… unitive experience is not the finite ego effacing its own identity by some sort of absorption into the Infinite Ego; it is rather the Infinite passing into the loving embrace of the finite."[44] Talking specifically of the well-known words of Hallaj "I am the creative truth", Iqbal say: "The true interpretation of his experience… is not the drop slipping into the sea, but the realization and bold affirmation in an undying phrase of the reality and permanence of the human ego in a profounder personality."[45]

Notes and Reference

[1] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, p.143
[2] Cf. The account of 'the characteristics of mystic experience', *Ibid*, pp.14-19
[3] Allama Iqbal defines 'intellectual test' as the "critical interpretation, without any presupposition of human experience, generally without a view to discover whether our interpretation leads us ultimately to a reality of the same character as is revealed by religious experience", *Ibid*, p.21
[4] Qur'an, 55:29
[5] Ibid, 38:75
[6] Allama Muhammad Iqbal, *op.cit*., p. 91
[7] Edward F. Barrett (ed.), *University of Notre Dame Law Institute Proceedings*, pp. 35-36
[8] Allama Muhammad Iqbal, *op.cit*., p.
[9] *Ibid*, p .45
[10] *Ibid*
[11] *Ibid*
[12] *Ibid*
[13] *Ibid*
[14] *Ibid*, P.110
[15] *Ibid*, p.85

[16] *Ibid,* p.23
[17] *Ibid* pp.23-24
[18] *Ibid* p.24
[19] Cf. *The Critique of Pure Reason,* trans. N.Kemp Smith, p.505
[20] Allama Muhammad Iqbal, *op.cit* p. 25
[21] *Ibid* p.25
[22] Muhammad Suheyl Umar and Dr. Basit Bilal Muhammad Iqbal A *Contemporary*, article by Basit Bilal Koshal, p.98
[23] H.J. Paton, *The Modern Predicament*, pp.193-94
[24] Qur'an, 2:164
[25] *Ibid*, 41:53
[26] *Ibid* 2:164
[27] *Ibid* 6:99
[28] *Ibid* 7:143
[29] *Ibid* 78:80
[30] *Ibid* 2:260
[31] *Ibid* 2:2-3
[32] Fred Wilson, the External World and our Knowledge, g.t: Hume's Critical Realision an Exposition and a defence, University of Toronto press, 2008, p.680
[33] Quoted by G.S. Spinks, Psychology and Religion, p.187
[34] Qur'an, 2:7
[35] *Ibid*, 7:179
[36] *Ibid*, 6:125
[37] Allama Muhammad Iqbal, *op.cit*., p.72
[38] *Ibid*, p.91
[39] *Ibid*, p.144
[40] *Religious Language – An Empirical Placing of Theological Phrases*, *p.*69
[41] Allama Muhammad Iqbal, *op.cit*. p.94
[42] *Ibid*, p.88
[43] *Ibid*, p.110
[44] *Ibid*, *P.*77
[45] *The Reconstruction of Religious Thought in Islam*, Allama Muhammad Iqbal, p. 77

Exploring Consciousness: Integrating Physics, Neurophysiology, and Iqbal's Insights into Self and Religious Experience

Dr. M. H. Qazi

ABSTRACT

This article aims to develop a unified theory of ego (consciousness, mind, and self), synthesizing insights from metaphysics, neurophysiology, and modern science. Building upon discussions of Iqbal's philosophy, especially his exploration of religious experience and self-discovery, the article explores the structural and functional aspects of the brain, specifically the Prefrontal Integration Modules (PIMs). These modules integrate sensory and motor information and play a crucial role in consciousness and behavior regulation. The article delves into recent advances in neurophysiology and examines how the PIMs contribute to sensory processing, motor actions, memory, and decision-making. Drawing from the works of prominent figures like Eccles and Popper, the article compares dualistic and monistic approaches to consciousness. Eccles' dualistic theory of interaction between an immaterial self and the material brain is highlighted, along with the concept of a self-field acting probabilistically on brain functions. These ideas are critically compared with Iqbal's philosophical framework, emphasizing the intersection of metaphysical insights and neurophysiological findings. The article also discusses recent advances in consciousness studies, including theories that relate quantum mechanics to the emergence of consciousness. Notable thinkers like Penrose and Bohm offer perspectives on quantum indeterminism and its connection to the brain's processes. Ultimately, the article seeks to align Iqbal's vision of the self and consciousness with emerging scientific discoveries, highlighting the ongoing relevance of metaphysical considerations in understanding human consciousness.

To develop a unified theory of ego (encompassing consciousness, mind, and self) that can be tested against both metaphysical and scientific frameworks, we have explored Iqbal's perspectives on the rationality of both normal and religious experiences. In his analysis of "Is Religion Possible?" Iqbal identifies three stages of religious adherence: (a) the collective acceptance of religion as an unconditional command, without rational understanding (the theological approach), which may have social and political significance but does little for individual inner growth; (b) the rational understanding of religious discipline and authority (the scholastic approach), which borders on metaphysics and seeks a logically consistent worldview with God as part of it; and (c) the shift from metaphysics to psychology, where life aspires to direct contact with ultimate Reality. According to Iqbal, this final stage occurs when an individual, freeing themselves from the constraints of law, discovers the true source of law within their own consciousness (ego). These categories, as defined by Iqbal, are difficult to contest. However, the last phase has historically posed significant challenges to scientific understanding. The words of a Muslim Sufi, who states that "no understanding of the Holy Book is possible until it is actually revealed to the believer, just as it was revealed to the Prophet," may be of interest to religious scholars. This notion of the connection between the finite and the infinite has been central to our discussion, and we will continue to explore this theme. In this paper, we aim to review recent advances in physics and neurophysiology, which may enhance our understanding of consciousness (ego, mind, and self), with a particular focus on Iqbal's emphasis on inner religious experience.

An understanding of neural networks between these structural elements (afferent and efferent) may give us a possible clue to the operational mechanism of consciousness as explored by neurologists. (Pico 2000)[1] has presented an excellent account of the same in his book: "Consciousness in Four Dimensions". For our purposes we will present a simplified version of the same for comprehending the hypothesis involved. Some parts of the brain which may be of interest to us include: the neocortex, the prefrontal integration modules (PIMs), the somato-sensory areas of the cerebrum, the thalamus along with hippocampal complex, the amygdla, the subiculum and the reticular nucleus. The transfer of afferent

(sensory) and efferent (motor) messages between thalamus and neocortex has already been emphasized. *However, of utmost importance is the prefrontal area, one in each frontal lobe which has been identified as the site of integration of all sensory and motor activities of the brain. Each prefrontal area is comprised of three modules designated as prefrontal integration modules (PIMs). The PIMs are interconnected within the same prefrontal area and also with PIMs of the corresponding prefrontal area in the other hemisphere of the brain*. The hippocampal complex (which includes subiculum, amygdla and reticular formation) is for storage and retrieval of all kinds of memory based on learning and experience. With these structures in our mind we can now appreciate how the PIMs play their integration role in computing sensory and motor activities when the sensory messages converge upon it and motor messages emerge from it. It must be re-emphasized that the computational code employed by the PIMs is in no way identical to computational code of a machine like the computer. In spite of several advances in neurophysiology, the neural code has yet to be discovered, although some preliminary indications for this are available in the theories of Hebb[2], Eccles[3] and Watson[4].

Based on the neurophysiological and behavioral evidences, we can visualize the basic inventory of potential afferent (sensory) axon sources reaching the PIMs. These include (a) sensory projections from association neocortex, parietal, temporal and prefrontal cortex; (b) hippocampus, (c) memory system projections from subiculum, entorhinal and para hippocampus regions,(d) thalamus and (e) brain stem reticular nuclei and basal forebrain projections. Thus, the afferent stimuli converging on the PIMs arrive from external and internal three dimensional (3D) sensory worlds, spatial environment, recent and past sensory moments (memories) and the coordinating functional activity of thalamus. As these sensory messages are computed in the PIMs they are transmitted for necessary action to the efferent fibres which emerge from the PIMs. These include: (a) those connecting the adjacent PIMs, (b) those connecting the homologous PIMs, (c) those connected with neocortical regions, (d) those connected to entorhina-hippocampus complex (spatial), (e) those connected to memory cortex system and (f) those connected to subcortical thalamus and basal ganglia. A complete understanding of this diagram is a *sine qua non* for a fuller appreciation of the computing and integrating role of the PIMs, since some of the theories advanced by physicalists as well as neurophysiologists rely heavily on the pivotal role of PIMs in brain function, and possibly on consciousness.

On the basis of above description, it may be argued that there is one complete operational cycle between the stimulus (sensory) that arrives at the PIM from various parts of the brain and that which leaves (motor) the PIM. If such is the case then one can easily conclude that there should be a time lag between the incoming (sensory) and outgoing (motor) activities regulated by the PIMs. This has been worked out by Pico (2000) through an equation in terms of efferent representation. Now, since PIMs have an intimate relationship with the memory system of the brain, it has been suggested that: *"the converging past and present information may be highly similar, resulting in a positive correlation between afferent (sensory) and efferent (motor) representation in the PIMs." On the other hand, "if the afferent inputs of the past contain very different or contradictory representations, a negative correlation is computed by the PIMs."* Accordingly, PIMs may influence behavioral action (at that moment) with strong inhibition or slight inhibition; strong reinforcement or slight reinforcement, as the case may be, depending on no past experience. In this way fields of PIMs produce a millisecond to millisecond influence on the exiting state of the overall nervous system operation. It may, however, be realized that nature invariably provides escape mechanism and it may not be construed that PIMs performing the major integrating function is the only brain area assigned with this task. It appears that "the PIMs have the capacity to bind in time only higher order sensory representations which do not fall within the purview of sensations of light, sound, touch or taste, lying outside the bounds of brain stem. The following quotation on this count from the same author (op. cit.) may be illustrative:

> What occupies the PIMs in an informational structure carried in wavefronts of neural activity that conveys the current contextual parameters derived from two dimensional or three dimensional combination of internal and external sensory energies (stimuli) and their historical beneficial or decretory (non beneficial) impact (obviously based on past experiences and memory).

In summary then, at a given time, the incoming sensory influence and the outgoing motor action proceed at a pace which has a direct relation with (a) the genetic code; (b) the association (assemblies) of neuron which become functional during development, and (c) the nature of the stimulus. Apart from this no other computational analysis is necessary for the nervous system to continue its moment to moment function. Nevertheless when higher order informational comparison of context and memory that cannot be performed anywhere else in the nervous system, the PIMs" computational output may create an efferent code (motor) that has a significant

biasing role on the ongoing behavioral flow of life. This leads to the conclusion that efferent outflow of a PIM either reinforces various behaviors or internal functions, modifying them, or, at most, inhibiting the continuation of a previously ongoing behavior. Thus, when such multidimensional computations are involved embracing past to future movement calculations, the PIM subserves all those activities which fall under the definition of such terms as working memory, attention, understanding, social awareness and moral judgment (Pico 2000). Now the question may be raised that "for all their convergent and higher order computation activity, where in the fields of PIM activity do we need to invoke a focal PIM of consciousness for a given activity at a given moment?" In answer to this question a functional shifting of the dominant focus from PIM to PIM across neural activity time has been proposed.

Viewed in the perspective of evolutionary time scale we can consider the emergence of human consciousness from a preconscious animal brain in a four-dimension time-space reference, resulting from genetic modifications. The complicated yet efficient manner in which prefrontal integration modules organize awareness through input (sensory) and output (motor) computational integration is posited by scientists as the seat of consciousness (physicalist view). However, whereas consciousness and prefrontal integration modules have evolved in parallel and have added to the survival value of human species as claimed, it is difficult to conceive that consciousness and PIMs constitute a single package, since consciousness, for all intents and purposes, does not occupy any space, Nor do we know about the computational code operating in the nervous system. This is further complicated by the non-linear nature of action potentials as they move along the axons pushing the messages past the synaptic zones. More important, however, is the question raised by John Searl (1995)[5] as to *"What Does Evolution Really Tell us About the Function of the Mind?"* Whereas he identified the intentionality of thought as a key element in consciousness, the same does not fit well with evolutionary theory and for this reason to reduce (explain) the mental activity of intentional thought in terms of some non-mental process e.g., physical brain events, and/or evolutionary advantage, cannot succeed. On the same subject, a secular neurophysiologist, M. Glynn (1993)6 offered the following skepticism about consciousness which appeared in the Biological Reviews of the Cambridge Philosophical Society: I want to discuss a problem which was first posed a century ago, which is important, which is still not solved, and yet which is very largely neglected.

Glynn certainly does not subscribe in his discourse to the idea that consciousness is simply an epiphenomenon of the brain and an evolutionary artifact of Darwin's struggle for existence. For these reasons we continue to maintain, in agreement with Iqbal that coming into existence of the universe was the result of élan vital, or what he calls the 'Directive Force (Amr). It is the same force which, a priori, unleashed the evolution of the organic from the inorganic and of the living from the organic. The Directive force continues to operate unabated in the arena of genetic modifications during each cycle of human development in a probabilistic quantum mechanical manner. We will have more to say about this when we deal with higher consciousness and inner religious experience. Now having examined the status of brain structure and function especially the PIMs, we may revert to some recent studies on consciousness (self and ego) which encompass both monistic materialism (reductionism) and dualism. Materialistic monism is the philosophical view which states that there is no reality other than of space-time, matter, energy, universe and that there is no immaterial or spiritual reality. On the other hand, dualism is the philosophical view holding that material and spiritual domains have real existence.

This is how the two opposing philosophies have dominated the human mind during the last few centuries. A monistic solution of the mind brain problem is taken to be the proper scientific goal of neurophysiology, by a majority of researchers in this field. They believe that scientists must always believe or at least work under the assumption that everything in the universe has its full explanation in the properties of atoms, and the laws of physics and mathematics (Iqbal's own thesis contradicts pure physicalism). Such an inflexible position taken by physicalists is at best limited, if not erroneous. Conception of science - a conception based on prejudice against the God of the Qur'anic Muslim Faith or the biblical Christian Faith. The prejudice of physicalist is abundantly evident, for example, in the article of Nobel Laureate, F.H.C. Crick (who received Nobel Prize for his discovery of DNA structure in 1959)[7]. In one of his articles: "The Brain", he observes:

> Is there any idea we should avoid? I think there is at least one: The fallacy of the homunculus (i.e., the hidden personal intelligence in the brain) ……. The reason is that we certainly have (merely) the illusion of the homunculus: the self.

It was Descartes who proposed that mind and brain interact in a mysterious way. This dualistic interaction philosophy was like a beacon of light to guide many neuroscientists through the complexities encountered in studies on consciousness. Our poet-

philosopher's thoughts in the early twentieth century were not different. Reading carefully through the *Reconstruction* the dualist approach of Iqbal becomes obvious, especially, when he continues to distinguish between the reality both of normal experience (verifiable) and religious experience (ordinarily not verifiable). However, as predicted by Iqbal, we now have streams of new thought supporting dualism in spite of an onslaught of materialistic monism. See for example S. Searle (1995)[8]; Glynn (1993)[9], and Watson (2003)[10]. The bias expressed by Dr. Crick, a public atheist, is revealed when he declares that a monistic solution to brain-mind problem is the only possible one for a scientist, though this position is considerably weakened when he accepts that he has no explanation for his 'illusion' of a heomunculus. In the same vein whn Dr. Crick published his book: *The Astonishing Hypothesis* (1994)[11] supporting materialistic monism as the only solution to understanding consciousness. J. J. Hopfield reviewing Crick's book in the Journal, "Science" (1994)[12], pointedly referred to the following comments of another Nobel Laureate– Physicalist Richard Feynman:

> Richard Feynman, who throughout his life had spent considerable time pondering the question of how his brain worked, replied that consciousness was a fascinating subject that he had not been able to define in an operational sense. It was therefore not amenable to experiment or to mathematics and thus lay beyond the confines of the science.

Again, Hopfield concludes his review of the "Astonishing Hypothesis" in the following words:-

> The Astonishing Hypothesis is full of contradictions …. In my view until an operational definition is given to 'awareness' independent of the brain of humans, there is no way a science can be made out of consciousness. I side with Faynman in that regard. Crick in side stepping this issue, in the long run defeats his own programme. Like many acts of heroism, this one fails to reach its good.

On the strength of the critique on materialistic monism from various renowned physicalists and neurophysiologists, it can be safely assumed that dualism is as yet not a dead philosophy. It has its own adherents with equally forceful evidences which we will now proceed to examine. In doing so we will keep in view the thoughts of Iqbal, while exploring at the same time the new avenues, hitherto unattended by the students of ego (consciousness).

It is now positively recognized that great progress in understanding of biochemical and neurological mechanisms has not yet led to the comparable progress in understanding of higher cognitive functions of the mind (consciousness, ego, self). Nor, so

far, we have been able to evolve a unified theory of cognition. Attempts have been made by students of artificial intelligence to provide a human face to computational sciences. Yet, the model of John Anderson (1975)[13] constructing high level cognitive phenomena or the one started by Xerox PARC Company to design Model human processor have met with little success. Similar caveats have been cited in the "unified theories of cognition (Newell, 1990)[14]. At best, using the computational neuroscience some success has been achieved which is restricted to low level cognition (Amit, 1989; Churchland, 1992; Murze, 1992)[15,16,17] In spite of these advances, understanding about consciousness has remained elusive and primarily maintained at a philosophical level (Hofstadier, et. al.; Dennet, 1991)[18,19]. Some exceptions which apparently seem successful, however, may be of help in a futuristic time frame (Baars, 1988; Edelman, 1989; Taylor, 1991)[20,21,22]. Notwithstanding this advanced literature; consciousness as Iqbal originally conceived cannot be referred to anything particular. "It is not a thing; it is rather an experience or many different experiences that we label as consciousness. What then is the real problem, and how should it be tackled? (Duch 1995)[23]." He makes an incisive comment on the understanding of consciousness in the following words:

> Some physicists think a unified theory of everything (TOE) will explain consciousness together with everything else, for example, Penrose (1994) writing on consciousness, quantum gravity and unified field theories concedes that consciousness is indeed some thing. It is not clear what they mean. Of course such a belief goes along the respected reductionist tradition …. However, in case of consciousness this is not and will never be sufficient! The reason is rather subtle and not hard to follow. Understanding depends not only on the ability to draw logical conclusions but also on relation of these conclusions to our experiences.Understanding of classical physics agrees with our sensory experiences. Understanding in quantum mechanics refers to abstract objects, such as the wavefronts, and since these objects are not directly accessible to our senses the feeling that we really understand is very hard to achieve ….. understanding of the mind in abstract physical terms derived from quantum mechanics or quantum gravity is not satisfactory because we have direct precept of mind while we do not have such perception of quantum wavefunction.

This bold assertion of a computer scientist, pointing in a forceful and logical manner the inadequacy of the sciences to the understanding of consciousness through reduction, throws the field of consciousness (ego) in the lap of psychologists, and philosophers, but more-so, with those who advocate the veracity of inner religious experience based on revealed knowledge (for example Iqbal (1930)[24];

Eccles (1994)[25]; Watson (1993)[26]. Let us now turn to some recent views on the subject and try to explore the requirements for a good theory of consciousness and also find out as to what extent these views support Iqbal's thesis.

John Eccles was a young medical student when he applied himself to Descartes *dualism* because, as he thought, separating *res extensa* and *res cognita* "gave a secure status to human soul or self." He, however, did not fully subscribe to dualist dictum of Descartes, yet he continued to adhere to dualist interaction as Iqbal did between non material self (consciousness, ego) and material brain. But his approach was different. In 1963, he received the Nobel Prize for his pioneering work on 'Action Potentials' and Synaptic (where axons meet the dendrites) neurophysiology. This monumental work is fully explained in his Nobel lecture delivered on December 11, 1963. However, more precise contents of his theory of self-consciousness are available in Popper and Eccles (1977)[27], Eccles (1994)[28]. Popper a well known philosopher of modern times, and Eccles a physicist jointly authored a book entitled: The Self and Its Brain (An argument for interactionism. The research was a deft binding of Popper's philosophical insight with the scientific knowledge of Eccles. Popper stated comprehensively that:

I wish to state clearly and unambiguously that I am convinced that selves exist.

Extending this statement he proposes the hypothesis of three worlds: **World one** according to him is the objective world of Schrodinger. This is the universe of physical entities in which the interaction between physical objects is governed by laws of physics and mathematics. It is this world in which a reductionist resides. **The second world** lies beyond the inner self of ideas: pain, joys, sorrows, love, schemes, striving and songs that are jumbled together with memories of the past and hopes and fears of future, The inner reality belongs to this world. **The third world** is the world of human culture. It includes all the products of human mind such as stories, myths, scientific theories, problems, social institutions and works of art. These categories are almost identical to those proposed by Plato and reproduced recently by Penrose (1994)[29]. Having described this, Popper makes an interesting statement which we quote from Alwyn (1995)[30]:

> Careful consideration of world three can illuminate the mind body problem. He presents three arguments to support this view and the first is this: Although world three's objects are abstract, they are also real, for they can change world – 1. But world 3 affects world-1, only through human intervention, because it involves a world-2 process. we therefore

have to admit that both world 3 objects and the processes of world 2 are real – even though we may not like this admission, out of deference, say, to the great tradition of materialism.

Further, two points may be noted. First, the world 2 belongs to the "states of soul" as envisaged by Plato. Second, any definition of self must include all the three worlds but intervention of the World 2, either way, has a significant involvement. Yet, what is crucial, and what has still remained elusive so far is the space-time relationship of world 2. Iqbal identifies that this is understandable as it happens in the serial time. Implicitly, Iqbal also identifies the inner experience of the self in world 2 with what lies beyond worlds 2 and 3 which, according to him, happens in Divine time and Divine space. Soon, we will revert to this issue. For Popper, there is nothing mystical about 'self' and he states that "the integrity and identity of the self have a physical basis. This seems to be centered in the brain." It remains to be examined, however, whether the self as recognized by Iqbal and that identified by Popper are the same? Perhaps not? Popper in support of his argument provides evidence that "flawless transplantation of a brain, were it possible, would amount to transference of the mind, or the self." Perhaps on this point both physicalists and non-physicalists would agree (Scott, 1995)[31].

Whereas Popper is in favour of monistic materialism assigning the behavior of mind-self to the brain, Eccles has different views, somehow closer to dualism. His work may be appreciated on two counts. **Firstly**, his contribution to the physics of neurons and synapses, and **secondly** his theory of dualism in which by generalizing intentionalism, he proposed interaction of two distinct entities – the spiritual self (world 2 of Popper) and the material brain (world 1 of Popper). About his physical theory of neuronal activity and the way the message is conveyed from one neuron to the other, he made a breakthrough contribution by showing how at the nerve end where axon branches come in contact with the dendrons or muscle fibres, the gap at the junction is bridged by the release of chemical substances which convey the stimulus from one side of the gap to the other side. For this pioneering work, which is now an accepted physiological principle, Eccles received Nobel Prize in 1963 (those interested in further details are invited to read his Nobel lecture delivered on December 11, 1963). In spite of being an empiricist by training, he became a dualist interactionist, when in 1994 he published his book: "How the Self Controls its Brain." However, his work neither follows nor precedes the philosophic doctrine of dualist-interactionism in the form postulated by

Descartes. Nor does his work reflects or support dualism's currently popular alternative material monism. For a better understanding of Eccles dualism, let us examine some of the major features of his theory and then subject it to critical analysis. We must, however, bring to the attention of the reader that by the empirical approach of Eccles one may not be misled that he subscribes in any way to monistic materialism. Indeed, if anything, he rejects it philosophically. We summarize below the important features of his dualism theory:

(i) Some electric processes in the cortex are quantum mechanistically probabilistic. The substances released at the synapses are delivered in probabilistic quanta;

(ii) The self (the mind) is a probabilistic field not a material entity in space and time. It acts on the brain through what he calls "self field';

(iii) Poppers ontology of three worlds is presupposed in the theory;

(iv) World 2 is the equivalent of self and it interacts with World 1.

(v) World 2 throws light on the mind-brain problem through the hypothesis that the non-material mental events relate to the neural events of the brain (the world 1 of matter and energy) by actions that are in conformity with the physics of quantum theory;

(vi) Self does not carry any mass or energy but exerts effective action at micro-cites in the brain;

(vii) The probabilistic field of self alters the release of chemical substance, released at the synapses in the cortex (interaction of immaterial self with material brain;

(viii) The self starts the brain's behavior; it controls the brain's behavioral output;

(ix) Self survives after death;

(x) Since the self is immortal, the physical conservation laws are not broken. This removes the major obstacle in the way of dualism;

(xi) All mental states and experiences, in fact the whole of the sensory inner and outer experiences are composite of elemental or unitary mental experiences at all levels of intensity and each of these mental units is linked in some unitary manner to a dendron. The proposed mental units have been named psychons. *Psychons are experiences in all their diversity and uniqueness. It is the property of psychons to link together in providing a unified experience (1994). This constitutes the binding hypothesis within the framework of the theory.*

Since the time when the *Reconstruction* was written, a voluminous literature has appeared on two opposing philosophies of monistic

materialism and dualism. In each case, consciousness has occupied the central stage in the minds of researchers. As we study the history of thought in philosophy and science we find only Eccles work, who, being a physicist and therefore an empiricist, has thrown his full weight in support of dualism (the approach, of course, being somewhat different from that of Descartes). Now comparing the work of Eccles prepared in the company of a philosopher of Popper's fame, we find abundant similarities between Eccles and Iqbal on the subject of self, ego and consciousness. We have chosen to bring out the comparisons, and also the contrast, if any, between the two in order to visualize what aspects in the two can be retained for developing a unified theory of consciousness, ego and self (Table – 1). It may be noted, however, that whereas Eccles fully subscribes to the three worlds proposed by Popper, Iqbal does not clearly bring out this distinction, though by implication, his several views spelled out throughout the *Reconstruction* lead to the same vision as that of Popper (1974). Additionally, Iqbal recognizes a fourth world, beyond perceptive boundaries of Worlds –1 and 3 of Popper. The world 2 of Popper is almost identical with that of Iqbal. This world 2 being reminiscent of Plato's "states of the soul."

Table 1: Comparison of Eccles' (1974, 1995) and Iqbal's (1930) approaches to dualism.

	Theoretical Framework	**Eccles**	**Iqbal**
1.	Three Worlds of Popper	Yes	Yes, but only by implication. Also, recognizing the fourth world beyond the three worlds.
2.	World 2 of Popper (soul, self, ego and consciousness)	Yes	Yes
3.	World 2 (soul etc.) important for interaction of Worlds 1 and 3.	Yes	Yes. But also interaction of World 2 with World 4.
4.	Electrical Process in the brain; substances released at synapses; both are probabilistic (quantum physics)	Yes.	No indication.
5.	The self is a field not a material unity in space	Yes	Yes, but not that self is a field and acts probabilistically.

	Theoretical Framework	**Eccles**	**Iqbal**
	and time. It acts on the brain		
6.	Self does not have mass and energy but exerts actions on the brain.	Yes	Yes, but Iqbal proposes it as a Directive force (Amr.)
7.	The probabilistic field of the self alters the release of chemicals at synapses quantum mechanistically.	Yes	No
8.	Self controls brain's behavioral output.	Yes	Yes
9.	Self is immortal (Quantum laws not applicable, possible survival after death.	Yes	Yes
10.	Mental units are composite of various mental experiences.	Yes	Yes
11.	Theoretically proposed mental elements are psychons which unify all experiences (binding).	Yes	Not in this form.

Note: Being an empiricist, which Iqbal was not, Eccles use of the properties of self as a field which acts on the brain, and psychons as binding forces is to relate the non-material state with quantum physics. This is an attempt to remove the objection of modern physicists.

The study of the contents of Table 1, will reveal that, on the basics, there are no differences in Iqbal's conceptual framework, and that of Eccles on self, ego and consciousness. Both agree that self (ego) is immortal. Both agree that self (ego) survives death. Both agree with World 2. Both agree that self controls the brain. Both agree that self has no mass or energy, since it is not a substance in time and space. Where then lie the differences? The **first** difference which may be noted lies in the fact that Eccles was a physicist and being so he had to satisfy the physicalists and thus had to evoke the quantum physics approach to the properties of self. This is why he used the word "self-field" which acts probabilistically on the brain. Same is true of the chemicals released at nerve endings, which, in turn, depend upon the strength of the stimulus under the sway of "self-field". As a product of the action of the self-field *psychons* have

also been proposed to suggest a novel, though hypothetical, mechanism of binding for all experiences, past and present, into a unitary response. On the other hand Iqbal was a philosopher of unmatched understanding of Islamic thought and had only limited access to the new physics which was in the process of making at that time and, more so, the structure and function of the brain. Even then, it is amazing to note the elegance with which he used physical engineering to construct the theory of self; drawing inspiration at the same time from the revealed knowledge in the Qur'an. Eccles theory of the self coming out as late as 1995 after Iqbal's *Reconstruction* (1930) is simply an advancement of Iqbal's own masterly treatment of the subject. One may wonder at the similarities between the approaches of Eccles and Iqbal! Some may attribute it intellectual compatibilities. Yet, the answer may lie in the simple fact that Eccles was a devoted Christian and Iqbal was a devoted Muslim. Both had complete faith in the spiritual aspects of life ordained by God. However, Iqbal presents a more logical thought on association of metaphysics of the Directive force (Amr) with ego (self, consciousness) which we have already discussed.

Notwithstanding the ingenuity of Iqbal and Eccles, as described above, there are a number of alternate proposals (both positive and negative) which bring into discussion several aspects of consciousness. However, some amazingly attractive views published recently have a merit to be discussed here. For example, Watson and Williams (2003) have written an excellent critique on Eccle's Model of the Self Controlling its Brain. The critique is based on Watson's own theory of Enformy (1993, 1997)*[32,33]which he named as "The Theory of Enformed Systems (TES)". (Watson 1997, Watson *et. al*; 1998; Schwartz; *et. al.,* 1998)[34,35,36]. The conceptual origin of TES is that "there exists a fundamental conserved capacity to *Organize*, denoted by his term enformy. This may be compared with Law of entropy. In this way disorganization is opposed when enformy organizes and sustains four dimensional fields of randomness (this is called enformation). The fields and domains are called SELF, sustained by enforming and capable of reproducing and evolving.

> This SELF apparently corresponds to the "Self" described by Eccles. In simple words "self" of Watson (1993) simply means linking by memory of conscious states which are experienced at various times during the lifetime.

It is presupposed in the continuity of mental states, particularly the continuity bridging the gaps of unconsciousness. For example, the continuity of our self is resumed after sleep, and after temporary amnesia (loss of memory) during concussion and convulsion.

Furthermore, the "SELFS" are not limited to humans. They correspond to the organization inherent in all coherent systems, ranging from photons to humans and beyond. Because they are continuous in space-time, but discontinuous in three dimensional spaces, their fundamental behaviors account for the non-local phenomena observed in parapsychology, for instance, telepathy (Watson, 2003)[37].

> This brings out three features of the self: (1) organizing its own state at a given time; (2) organizing various states of selves, and (3) organizing past and present in space-time. The last named attribute accounts for telepathy, remote viewing, precognition and psychokinesis.

Now let us find out how Watson (2003)[38] uses TES for testing the validity of Eccles model. **First,** as mentioned above, in principle the 'self-field' of Eccles seems identical to "SELF" of Watson, because like the former it organizes elements of matter and energy-mass (in this case brain) to submit to and conform to the organization (enoformy) of the SELF. SELF is thus a guiding map (what Eccles calls fields) for physical systems in time and space, which is the basis of origin of life (remember life originated by enformy (organization) of organic molecules which according to Iqbal is part of the *élan vital* in perpetuation). **Second,** Watson turns to the "self field" of Eccles by stating that organization of SELF (enformy) can be modified, augmented or effaced. They contain the memory that provides the continuity of mental experience as conceived by Eccles. Thus, brain is not necessary for memory content– "this is why searching for it in the brain has proven futile (Schecter, 1996)[39]. Like Eccles, Watson reaches the same conclusion that SELF, in the TES, replaces "self-field" of Eccles thus solving time old mind-brain problem. Watson (1993, 1996)[40,41] on the basis of these arguments concludes that "under TES, neither mind nor body is a primary topic of interest, yet the theory inheres a comprehensive stratagem for consciousness. That is, by explaining the organization of all holistic systems– including their fundamental properties and behavior– TES explains all the elements attributed to "mind" and "body", and life itself, quantum physically, and parapsychologically. It therefore satisfies both the binding problem and the mind body problem (Watson, 1973, 1997 b)[42].

Eccles also made a brilliant theoretical contribution when he postulated the theory of psychon fields. It appears to us that the updated theory of Watson described above falls in line with the concept of Eccles. It also receives support from other sources as well. For example, Sheldrake's study of morphic fields (which applies

to biological systems in general) including mentality, is defined by him in the following words:

> A field within and around a morphic unit which recognizes its pattern of structure and activity; morphic fields are shaped and stabilized by 'morphic resonance' from previous similarly morphic units, which were under the influence of fields of the same kind. They consequently contain a kind of cumulative memory and tend to become increasingly habitual.

This description of biological 'morphic fields' can exactly be superimposed on psychon fields. In the same way Eccles' psychon theory appears to be a special case of the Egon theory of Christy and Jones (1998)[43], who apply their concept of egons not only to biological and psychological phenomena but to non-living systems as well. It is interesting, and a lot more difficult for physicalists to understand and accept that Egon theory which regards "all of the identities in nature as minds and their properties as communication of those minds." Thus, we can confront a physicalist (reductionist) that "Physics can be understood intuitively as a hierarchy of consciousness, and that nature consists of nothing but conscious experience". (Christy and Jones, 1998)[44].

In summary then, all what has been described above brings Iqbal's viewpoint on higher consciousness, ego and inner religious experience closer to the fringes of science, as if waiting for its fuller realization through experimental verification. Sherdrake suggests that "consistent with Platonic theory of creativity, all possible morphic fields exist timelessly, awaiting their expression in physical systems." This is what Iqbal calls Amr Rabbi (Directive force). However, we have yet to establish the process of conservation of these fields. Not surprisingly, as of today we do not find such a phenomenon of conservation, for example, in the electromagnetic fields (Watson 2003)[45].

Now, physical approach to consciousness appears in several guises. There are a number of new studies ranging from one extreme to the other. Important among them include Baars (1993)[46]; Chalmers (1995)[47]; Crick (1994 a,b)[48,49]; Dennet (1992)[50]; Eccles (1992)[51]; Harth (1993, 1995)[52,53]; Hebb (1942, 1980)[54,55]; Penrose (1994 a,b, 1989)[56,57,58]; Searle (1992)[59]; Strapp (1993), Watson (1924). The reader may refer to these works for further extending his information. However, a few of these studies are of significance for our discussion on physicalism and dualism. If recent intellectual history is any guide then, as is claimed, materialism remains the only rational way to approach the study of mind. John Searle remarks:

> Modern materialism appears in a variety of guises ranging from the claim that mental states do not exist (eliminative materialism), to the view that a computer that successfully mimics human behavior must have thoughts, feelings and understanding (computer functionalism).

For Searle, this attitude is implausible. In spite of this he takes a position with physicalists when he concludes that "the existence of consciousness can be explained by the causal interaction between elements of the brain at the micro level, but consciousness itself cannot be deduced or calculated from the sheer physical structure of the neurons without some additional account of causal relations between them." This in our opinion is another form of reductionism with several logical inadequacies inherent in the statement. On the subject of consciousness some bold assertions have been made by Penrose (1989, 1994a. 1994b) in his best selling books; "The Empors New Mind" and "Shadows of the Mind". Penrose himself a reductionist, confronts the physicalists with a number of interesting and logically valid ideas. **First**, without attempting any definition of consciousness, he rejects the physicalists belief that "everything (including consciousness) is a digital computer." **Second**, he presents powerful arguments to reject the claim made by functionalists in the artificial intelligence community that what the brain does can be reduced to an algorithm and duplicated 'in principle', on a digital computer. For him the activity of brain is non-linear and therefore only non-linear mathematics has to be applied in order to conform to the putative methods of physics and mathematics. This is why he asks the questions: (a) can computer have a mind (from the examples of chess games he has given – the answer emerges – 'No'), and (b) where lies the physics of mind? (the answer is that physics and mathematics of mind have yet to be discovered). **Third**, philosophically, any mathematical idea perceived makes contact with Plato's world, the world 3 of Popper. For example, "when one sees mathematical truth, his consciousness breaks through in the world of ideas, and makes direct contact with it (accessible via intellect)". "This be so, it must be noted that man has not created mathematics, he has only discovered it. **Fourth**, considering awareness as a preliminary to consciousness, "awareness can be evoked by physical action of the brain, but this physical action cannot even be properly simulated computationally". The major conclusions he then draws from his ideas include: (a) since the physical activity of the brain cannot be simulated on a computer, therefore, the extent of physical laws may lie outside the purview of physical organization of the brain, and (b) the non-computable physics, according to him, (starting with the single cell paramoccium, who uses his cilia for getting awareness of surrounding obstacles) can be found in the micro-tubular structure of paramoccium. He concludes his arguments in the following words:

> Let us then accept the possibility that the totality of microtubules in the cytoskeleton of a large family of the neurons in our brain may well take part in the global quantum coherence– or at least that there is a sufficient quantum entanglement between the states of different microtubules across the brain – so that an overall classical description of the collective actions of these microtubules is not appropriate.

Whereas, the validity of this hypothesis has yet to be established to any reasonable extent, a student of biology, however, sees some merit in it. The merit lies in the fact that emergence of consciousness, reaching its climax in the human species, can be explained on the basis of a widely accepted view that the process of organic evolution has gone through a four-dimensional time frame. Furthermore, it is unlikely that physical actions like the one proposed by Penrose in the microtubules cannot be simulated. There is little doubt that so far we have not touched even the threshold of this reductionist approach.

In his interesting book: 'The Creative Loop' (Harth, 1993) presents an attractive analysis of consciousness, starting with the incisive remarks that "being familiar with the quantum theory, which denies predictability at the atomic level, and the theory of relativity, which mixes the concepts of time and space, physicists need not be overly impressed with philosophical conclusions that are based on scientific perspectives of nineteenth century". After identifying several characteristics of consciousness (selectivity, exclusivity, chaining and unitarity), he presents a theory essentially based on Hebbs concept of cell assemblies (previously discussed), through which he constructs the loop of consciousness, starting with afferent sensation (e.g. light) through nerve cell assemblies. Interestingly enough, for him (Harth, 1993), dualism is not quite as dead as some would have us believe. He, like Penrose dismisses the idea of physicalists that "even a most powerful computer cannot think, but perform a prescribed computational task in the service of client." Another physicist – Henry Stapp- in his book: Work, Mind, Matter and Quantum Mechanics (1993) came up with an intriguing set of arguments. He thinks, that it is a wild goose chase to find answer to consciousness in classical Newtonian dynamics, since "Nothing in classical physics can create something that is essentially more than an aggregation of its parts. For this reason he turns to Hisenberg's formulation of quantum mechanics for an explanation of the properties of consciousness. Without quantum mechanics he states the evolution of the physical units would be exactly the same whether subjective conscious experience exists or not." The process of evolution *per se* is generated by quantum mechanics, because of

choosing one possibility from the other (Natural Selection). "This is attributed to the wavefunction for the universe in the perspective of Heisenberg's principle or in conformity with Schrodinger's deterministic equation. Both appear to control the universe. He seems to agree with Eccles' probabilistic solution according to Quantum Mechanists in fields of neuronal-axonal-synaptic complex. The wave function can collapse at any of these stages.

We have been repeatedly referring to the relationship between consciousness and quantum theory. We have noticed that the theory in the hands of physicalists as well as dualists has taken different interpretations. One such interpretation, which is of interest to us, and which is likely to be of some significance when we make an attempt to up-date Iqbal's views on consciousness, ego and self, has been put up recently by Pratt (1977) in his article: 'Consciousness, Causality and Quantum Physics'. The standard interpretation of quantum physics assumes (a) indetermination; (b) quantum systems exist objectively only when they are being measured or observed; (c) the claim that mathematical description of the quantum world allows the probabilistic or experimental results to be calculated with high degree of accuracy, yet there is no consensus as to what it means in conceptual terms. Thus, according to the "uncertainty principle the position and momentum of a subatomic particle cannot be measured simultaneously with accuracy greater than that of Plank's constant", (d) the particle can never be at rest, but is subject to constant fluctuations even when no measurement is taking place, and that

> these fluctuations are assumed to have no causes at all.

In conclusion, it follows from (a) – (d) that quantum world is believed to be characterized by "absolute indeterminism, intrinsic ambiguity, and irreducible lawlessness.

> Taking exception to this classical view of quantum physics (Bohm and Hiley, 1993; Bohm and Peat 1989), have expressed the view that abandonment of causality had been too hasty: "It is quite possible that while the quantum theory, and with it indeterminacy principle, are valid to a very high degree of approximation in a certain domain, they both cease to have relevance in new domain's below that in which the current theory is applicable.

In our opinion, this is a highly intriguing statement which plunges us from science straight into metaphysics. This means nothing but an ontological interpretation of quantum theory, rejecting the two major assumptions of the theory, namely, absolute indeterminism and objective existence of quantum systems only when they are measurable and observable. Does this mean, as Bohm *(op. cit.)* suggests "that the quantum events are partly determined by subtler

forces (presently unknown) operating at deeper levels of reality? We believe that this concept of Bohm brings him closer to the concepts of Eccles (synaptic fields) and that of Iqbal (Directive Forces).

Physicalists tell us that a quantum system is represented mathematically by a wavefunction which is derived from Schrodinger's equation. The wavefunction can be used to calculate the probability of finding a particle at any particular point in space. However, if wavefunction is assumed to provide a complete picture of quantum system, then this would mean that between the measurements the particle dissolves into nothingness of quantum world, and is probably present in different places at once. It has been agreed that wavefunction collapses in a mysterious way– violating the Schrodinger equation. This has no explanation in the classical quantum theory at the micro-level; though, it operates precisely at the macro-level. We have brought this concept into discussion for the reason that theorists claim that "collapse of wavefunction (in the brain) is caused by consciousness thereby creating reality." The theory also emphasizes that "only self conscious beings such as ourselves can collapse wavefunction". In view of the above, it should be legitimate to assume that "the whole universe must have existed as 'potentia' in some transcendental realm (Directive Force) of quantum possibilities until self conscious being evolved and collapsed themselves and the rest of the branch of their reality into material world and the objects remain in a state of actuality only so long as they are being observed by humans" (Goswami, 1993) The other view that even non self-conscious organisms or even electrons can cause wavefunction collapse has also been put forward (Herbert, 1993). Whatever may be the case, the fact remains that the idea of wave packets spreading out and collapsing is not based on hard experimental evidence. This is why we are inclined to go along with Bohm's ontological interpretation that wavefunction gives only ill-defined and unsatisfactory notion of wavefunction collapse. Alternately, he suggests the real existence of particles and fields:

> Particles have a complete inner structure and are always accompanied by a quantum wave field; they are acted upon not only by classical electromagnetic but also by a subtle force, the quantum potential determined by quantum field (Bohm and Hiley 1993, Bohm and Peat, 1989; Hiley and Peat, 1991) See also Eccles (op. cit.)

We cannot go into a detailed entanglement of Bohm's arguments, however, suffice to state that particles are guided by quantum potential and provide connection between quantum systems. This represents a vast energy pool, recognized by standard quantum vacuum, underlying the material world. Very little is known about

quantum vacuum (zero potential field) but its energy density is astronomical (10^{108} J/Com^3). On this basis he postulates that:

> It is quite possible that while the quantum theory, and with it the indeterminate principle, are valid to a very large degree of approximation in a certain domain, they both cease to have relevance in new domains below the ones in which current theory is applicable.

It is noteworthy that, according to his view, observation is not required to confirm the existence of the quantum world when it falls beyond the scope of measurable phenomena, i.e., below the recognized quantum realm. He thus rejects the positivist notion that "what cannot be measured or precisely known cannot be said to exist." In essence, he draws a clear distinction between epistemology and ontology. In alignment with Iqbal, we cannot help but echo Karl Popper's statement: I wish to state clearly and unambiguously that I am convinced that selves exist.

Notes and Reference

[1] Pico, R. M, *Consciousness in Four Dimensions*, Mc Graw-H+ill. New York, 2001.
[2] Hebb, B.O., *The Organization of Behavior*, Wiley, New York, 1949.
[3] Eccles, J. C., *How the Self Controls its Brain*, Springer-Verlag, Berlin, 1994.
[4] Watson, D. E., Enformy: The Capacity to Organize, in *Thinking on the Edge*, Eds. R. Kapnick and A.A Kelly, Agamemnon Press, California, 1993.
[5] Searle, J. R., *The Rediscovery of Mind*, MIT Press, Cambridge, Massachusetts, 1992.
[6] Glynn., *Biological Reviews of the Cambridge Philosophical Society*, 1993.
[7] Crick, F., *The Astonishing Hypothesis: Scientific Search for Soul*, Scribner's Sons, New York, 1994.
[8] Searle, J. R., *Ibid*., 1992.
[9] Glynn., *Ibid*., 1993.
[10] Watson, D. E., Eccles' Models of the Self Controlling the Brain, *Neuroquantology*, 1:19, 2003.
[11] Crick, F., *Ibid*., 1994.
[12] Hopfield, J. J., *Neural Networks and Physical Systems with Emergent Collective Computational Abilities,* Proc. Natl. Acad. Sci. USA, 79:2554, 1982.
[13] Anderson, P. W., *More is Different: Broken Symmetry and Nature of the Hierarchical Structure of Science,* 17:393, 1972.
[14] Newell, *Unified Theories of Cognition*, Harvard University Press, Cambridge, MA, 1990.
[15] Amit, D. J, *Modeling Brain Function*, Cambridge University Press, UK, 1989.
[16] Churchland, P. S. and Sejnowski, T. J, *The Computational Brain*, MIT Pres, Cambridge, MA. 1992.
[17] Mure, J. M., *Learning and Categorization in Neural Networks*, Erlbaum London, 1992.
[18] Hofstadier, D. R. and Dennet, D. C., *The Mind,* Basic Books, New York, 1981.
[19] Dennet, D. C., *Consciousness Explained,* Little Brown, Boston, 1991.
[20] Baars, B. J., *A Cognitive Theory of Consciousness*, Cambridge University Press, Cambridge, 1988.

[21] Edelman, G., *Theory of Consciousness*, Basic Books, New York, 1989.
[22] Taylor, J. G., Can Neural Networks be made to Think? *Physics Today*, World I: 4, 1992.
[23] Duch, W. A., *Physics of Consciousness, National Conference on Models of Biological Systems,* Krakow (1-2.06) 1995.
[24] Iqbal, M., *op. cit*., page 1.
[25] Eccles, J., *How the Self Control Explained*, Springer-Verlag. Berlin, 1994.
[26] Watson, D. E., *op. cit.,* 1993.
[27] Popper, R. and Eccles, J., *The Self and its Brain*, Springer-Verlag. Berlin, 1977.
[28] Eccles,J., *Ibid.,* 1994 .
[29] Penrose, R., *Shadow of Mind*, Oxford University Press, UK, 1994.
[30] Alwyn, S., *Stairway to the Mind*, Springer-Verlag, New York, 1995.
[31] Watson,D. E., *Ibid.,* 1993.
[32] Watson, D. E., *Enformy and Enformed Gestalts: A Redical Theory of Consciousness.* The Explorer 32 (3). 1997.
[33] Watson, D. E., Memories of Sir. John Eccles, *The Neotic Journal* 4(1), 1998.
[34] Watson, D. E. Schwartz, G.E.R and Russek, L. G. S, Comprehensive Theory of Consciousness:.Enformy and Enformed Systems, *The Neotic Journal* 3(2) 159, 1999.
[35] Watson, D. E and Williams, O., Eccles' Models of Self Controlling the Brain. *Neuroq Uantology* 1: 19, 2003.
[36] Schacter, B. L., *Searching for Memory*: *The Brain, The Mind and the Past*, Basic Books. New York, 1996.
[37] Watson, D. E., *Ibid.,* (1997).
[38] Christy J.W and Jones, F. J., *Interpreting Physics in terms of Consciousness: Making the Solution of the Hard Problem Possible*, 1998.
[39] Barss, B. J., *Ibid.,* 1988.
[40] Chalmers, D., Facing to the Problem of Consciousness, *The Journal of Consciousness Studies* 2(3), 200, 1995.
[41] Crick , F., *Ibid.,* 1994.
[42] Dennet, D. C., *Ibid.,* 1991.
[43] Eccles, J., *Ibid.,* 1994.
[44] Harth, E., "Self-Referent Mechanism as the Normal Neuronal Basis of Consciousness", in *Toward a Science of Consciousness*, S. R. Hameroff, A.W. Kaszniak and A. C. Scott., Eds., MIT Press, Cambridge MS, 1995.
[45] Hebb, B. O., *Ibid.,* 1949,
[46] Penrose, R., *Ibid.,* 1994.
[47] Penrose, R., *Ibid.,* 1992.
[48] Stapp, H. P., *A Quantum Measurement and the Mind-Brain Connection. Symposium on the Foundation of Modern Physics*. Lahti and P. Mitterstaedt eds., World Scientific, Singapore, 1991.
[49] Watson, D. E., *ibid.,*1997.
[50] Penrose, R., *Ibid.,* 1992.
[51] Penrose, R., *Ibid.,* 1992.
[52] Penrose, R., *Ibid.,* 1992.
[53] Harth, E., *Ibid.,* 1995.
[54] Pratt, D., Consciousness, Causality, and Quantum Physics. *Journal of Scientific Exploration*, 11:1 page: 69, 1997.
[55] Goswami, A., *The Self Aware Universe: How Consciousness* World. Putman, New York, 1993.
[56] Herbert, N., *Elemental Mind*: *Human Consciousness and Physics*, Dutton, New York,

1993.

[57] Bohm, D. Hiley, B. J., *The Undivided Universe: An Ontological Interpretation of Quantum Theory*, Routledge, New York. 1993.

[58] Bohm, D and Peat, F. D., *Sciences Oder and Creativity*, Routledge, London, 1989.

[59] Hiley, B. J. and Peat, F. D., *Quantum Implications: Essays in Honor of David Bohm*, Routledge, London, 1991.

LEADERSHIP, RESPONSIBILITY, AND THE DEVELOPMENT OF THOUGHTFUL INTELLIGENCE: A FRAMEWORK FOR PERSONAL AND SYSTEMATIC CHANGE

Dr. Musarrat Jabeen

ABSTRACT

In 2008, Khizra assumed the role of head of department at the university. During the result announcement, a student, Hidayatullah, approached her to report that he had been unfairly marked zero for his research report. Upon investigation, it was discovered that the report had been mistakenly left unattended in a cupboard by the staff. This negligence could have severely impacted Hidayatullah's academic progress. Khizra took responsibility for rectifying the issue, advocating for the student with higher authorities and ensuring a fair inquiry. After four months of persistent efforts, Hidayatullah's report was properly evaluated. Khizra reflected on the leadership lesson that taking responsibility for system errors and correcting them with integrity is crucial for modeling righteousness. Khizra's mentor, Qareeb, emphasized the importance of adapting to one's environment to guide direction and goals. This concept ties into "thoughtful intelligence," a higher order of thinking that shapes intentions and actions. Thoughtful intelligence is the ability to understand and evaluate the long-term impact of one's thoughts, words, and actions on individuals, groups, and nations. It requires recognizing the effects across time and space, defending moral values, and developing resilience against internal and external threats. To cultivate thoughtful intelligence, individuals must align with a clear purpose, adjust to circumstances, and act with compassion and integrity. The article outlines a framework for developing thoughtful intelligence, which includes understanding the purpose of life, self-assessment, individual and systematic competencies, and the automation of thoughtful change through practice. It emphasizes responsibility, courage, and compassion as core elements for personal and collective growth, highlighting that thoughtful intelligence can be acquired and practiced to achieve moral excellence and positive influence.

Khizra became the head of the department at university in 2008. At the time of result announcement, Hidayatullah (a student) moved fervently in her office to complain that he was marked zero in the research report column. The matter was investigated and found that he submitted the research report but his report was left unattended mistakenly (by the staff) in the cupboard. This grave negligence could have cost Hidayatullah another term at the university.

Khizra went all alone to contest his case with the higher authorities. The inquiry committee was established, and the case was interrogated several times to ensure the *procedural justice*. Finally, Hidayatullah's research report was sent for examination and marked with significance. The entire process took four months. Khizra had to rush from office to office to get things positive in all dispositive trends. That day Khizra counted that the leader has to *take the responsibility* for any mistake that arises in the system and has to correct it thoughtfully for modeling righteousness.

Khizra's mentor Qareeb advises, "We must count on what goes on around us as we weave our path in life, to adjust our direction and goals as necessary to fit the environment we are operating within."

Thoughtful intelligence is the higher order of thinking to train the mind-set to produce intention and actions. Thoughtful intelligence can be struggled for and acquired. It comprises of capacity to understand and realize the impact of one's thoughts, words and actions on the survival, dignity[1] and development of individuals, groups and nations. The impact can be realized in 'Time' (for how many days, weeks, months or years the impact will continue) and 'Space' (for how far geographical land with or without human beings will be effected). It establishes thoughtful thoughts. Per the inner paradigm[2]: Thoughtful intelligence establishes and defends moral values in the individual against internal and external threats. This defense includes detection, prevention and response to threats through the use of moral beliefs, values, rules and practices. Thoughtful intelligence visions the eyes to observe and gives the courage[3] to understand befittingly suited to difficult times; and reveals compassion[4] for moral development.

To secure thoughtful intelligence following standard operating methods can be realized:

I. Context to acquire thoughtful intelligence

II. Vision of thoughtful individual

III. Self Assessment for thoughtful change

IV. Required Individual competencies for thoughtful change

V. Required systematic competencies for thoughtful change

VI. Automation of thoughtful change

I. Context to acquire thoughtful intelligence

The context to acquire thoughtful intelligence reels on realization of purpose of life and realization of gain and loss.

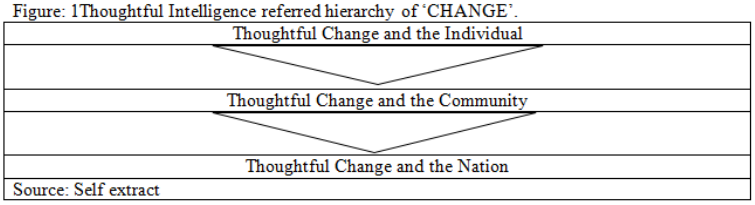
Realization of the Purpose of life: The purpose of life must be identified keeping in view the connectivity with the creator, and creations. We must touch upon the most important and the central theme of Rumi's philosophy and poetry which the world needs now more than ever before; the quest for Divine Love. It is the love for fellow human beings, without regard to color, race or religion. That leads ultimately to path of the Divine Love[5]. The following *Seven* principles will help.

1. Realize life is a gift and a profound responsibility: demonstrate genuine sense of appreciation for the privilege of family, community and nation, and an authentic sense of personal responsibility to positively affect your family, community and nation.
2. Reinvent yourself: demonstrate the ability to try new approaches to solve life problems. Acknowledge that the approach being taken is not working. Change your way of thinking and interacting with family, and companions.
3. Teaching and mentoring: take time to teach and mentor, and to be taught and mentored.
4. Making difficult decisions: take the ownership of problems and challenges and make tough decisions. Mobilize the people around to consider the best approaches and communicate the rationale for decisions that are made and provide information as to the outcomes and effectiveness of the decision.

5. Set a great example: make the appearance in the situation by modeling righteousness.
6. Cultivate talent: provide appropriate support to people around you in family and profession to be successful in new endeavors.
7. Care about the right things: the words and actions should communicate and preach about the righteousness.

The performance of intentions and actions must be organized on the bases of appropriation to situation in future terms interlocking the existing ones. Individual mind-set expands into collective mind-set (see Fig: 1).

Figure: 1Thoughtful Intelligence referred hierarchy of 'CHANGE'.



Source: Self extract

Realization of gain and loss: The realization of gain and loss referred past sets the mind of thoughtful individual. The quality and quantity of realization depends on the feeling of gain & loss after the gain & loss of something of value[6].

II. Vision of thoughtfully intelligent individual

The vision should be clear and realistic regarding the physical and metaphysical part of the human life. The faculties are as follow:

Vision based on Knowledge of Oneness of the Creator: The thoughtful individual visualizes the fact of the oneness of Allah. "Prosperous are those who purify themselves, remember the name of their Lord, and pray[7]." The thoughtful individual visualizes the practice of 'Namaz'as the best prayer, the way to thank Allah. Medical Science Proved:

- Long prostration Sajda: Decreases heart problems. Increases eye sight, brain work and face beauty.
- Rukoo with straight legs: Reduces knees/joint problems.
- Straight standing after rukoo: Reduces Back bone problems.
- Muslim prayer improves digestive system, it is a full body tonic[8]

Iqbal says:

پھر دلوں کو یاد آ جائے گا پیغام سجود
پھر جبیں خاک حرم سے آشنا ہو جائے گی

The hearts will again recall the message of prostrations. The foreheads will become acquainted with the Harem's dust[9].

Vision based on Knowledge of Character of The Holy Prophet Muhammad (PBUH)*:* The thoughtful individual visualizes The Holy Prophet Muhammad (PBUH) as the best personality model to follow.

Iqbal says:

نگہ بلند دل نواز جان پُر سوز
یہی ہے رخت سفر میر کارواں کے لیے

High ambition, winsome speech, a passionate soul
This is all the luggage for a leader of the Carvan[10].

"The messenger of Allah is an excellent model for those of you who put your hope in Allah and the Last Day and remember him often[11]." The Holy Prophet Muhammad (PBUH) was the ever best leader. He is found on the *height of mercy*. He was lenient to *forgive* all misdeeds upon him for example the lady who threw daily garbage on him; when she got sick. The Prophet went to wish her health.

Vision based on Knowledge of Righteousness: The thoughtful individual visualizes the knowledge of truthfulness, justice, and bravery.

Iqbal says:

سبق پھر پڑھ صداقت کا، عدالت کا، شجاعت کا
لیا جائے گا تجھ سے کام دنیا کی امامت کا

Read again the lesson of truth, of justice and valor!
You will be asked to do the work of taking on responsibility for the world[12].

Vision based on Knowledge of Love: The thoughtful individual visualizes love among humanity, irrespective of cast and color. Being 'Loving' towards others simply makes you feel better. This is indeed the case, but there is another good reason all human beings have an inherent dignity, and your conscious choice to be a loving and kind person is a powerful way to honor that dignity. 'Ishq' is the term used for intense love, be it for humans or for the beauty of nature. Sometimes it can be related to abstract feelings like freedom, justice and so on. But the states and degrees of attachment, attractions or

love are different. For example, a child's love for his mother is different in nature from a mother's love for her child. The love between husband and wife is yet different from those two. But all relationships between soul-entities have one common factor: they are two sided, mutual and interdependent. A two-sided relationship demands expression, manifestation and continued confirmation from both sides to keep alive and blossoming. One sided love would not yield union. The love between Allah and man is also two sided it cannot be that the Supreme Beloved would ever remain un-expressive and unresponsive to the supplication of worshipers[13].

Vision based on the Knowledge of Shaheen (Eagle) and Marde Momin (An ideal believer): The thoughtful individual visualizes the knowledge about Shaheen (Eagle) and Marde Momin (An ideal believer). Shaheen (Eagle) is a bird and used as a symbol (by Muhammad Iqbal in his poetry) of an ideal believer due to its certain traits: it has expansive vision, it has high flight, and it is self-reliant because it manages its own prey, contains self-respect, it does not confine to specific space and it is universal. It does not believe in specific abode as it likes highness and diversity.

Vision based on Knowledge of Nature: The thoughtful individual visualizes the knowledge of nature. **"**Ponder about nature: (Prophet), do you not see that Allah causes the night to merge into day and day to merge into night; that he has subjected to sun and the moon, each to run its course for a stated term, He (Allah) is aware of everything you (people) do."[14]

III. Self-assessment for thoughtful change

Self assessment is a process to realize and witness one's actions, attitudes, or performance. Each aspiring individual is obliged to go through a process of self-assessment.

"Truly man is a clear witness about himself.[15]." The self assessment must be designed to assess the intangible competencies; that can be loyalty, courage, humbleness, integrity, justice, identity, responsibility and self-governance. The loss of above qualities causes the downfall of the individual.

Iqbal says:

سبب کچھ اور ہے، تو جس کو خود سمجھتا ہے
زوال بندۂ مومن کا بے زری سے نہیں

With ease you can divine to something else is due:
Penury can't cause decline of Muslims True. [16]

Exercise

Track the vices inside you to establish your weaknesses. Track the virtues inside you to establish your strengths.

IV. Required individual competencies for a thoughtful change

The urge for change is the foremost requirement of change to approach thoughtful intelligence. The urge for change must be defined with righteousness and positive thinking. The Last Messenger of Allah (PBUH) said, "There is no *good* for me in a *day* that rises upon me and my knowledge does *not* increase that *day*[17]." Rasul Allah (PBUH) said: "He whose *two days* are equal, is a loser. He wants his inner self to be *better* today than it was yesterday and his tomorrow to be *better* than today. Thus, a Momin's *two days* are *not* equal[18]. The following are linear changes to comprehend the thoughtful change.

1. No vagueness: Sensitivity to ambiguity and vagueness is essential to good thinking. There should be clarity in thought; e-g all the prophets argued that "Love for others" is one of the most important elements of humanity.
2. No pending - Do not say of anything, 'I will do that tomorrow[19].'
3. Commanding good & forbidding evil: Encourage positive actions and discourage the negative practices.
4. You can make the difference. A sparrow was asked, "How the drop in its beak can extinguish the fire meant for Abraham?" The sparrow replied that on the Day of Judgment my name would be in the list of fire fighters.
5. Commitment : "A fog can't be dispelled by a fan (fragile commitment)[20]." You have to work with commitment.
6. Self-Governance: To be self-controlled, avoiding extremes, and not to be excessively influenced or controlled by others[21].
7. Thoughtful word and action.

V. Required systematic competencies for thoughtful change

There are more chances of thoughtful change when it is appreciated by the immediate system (other individuals) around the individual. Two things are required; One is *father/mother's chastity* and

the other is *father/mother's lawful earning*. Both of the things ensure righteous training of the children. As it is said, "People, eat what is good and lawful from the earth, and do not follow Satan's footsteps, for he is your sworn enemy"[22]. The system should have the following competencies.

1. The system values social aspect of human personality.
2. The system competes for good actions.
3. The system appreciates good actions and condemns the bad actions.
4. The system urges to care the creations.
5. The system mandates to generate profit for the community, nation and humanity.
6. The system extends Charity of thought & knowledge.
7. The system extends thoughtful word and action. The ultimate sense of giving is charity here I highlight free of money charity; it does not require money. Relish Table 2. 1.

VI. Automation of thoughtful change

With continuous practice you get automated. You need to deliberate RCC (Responsibility, Courage and Compassion) in all circumstances.

Responsibility: To strive to know and do what is best, not what is most popular. To be trustworthy for making decisions in the best long-term interests of the people and tasks of which they are in charge.

Courage: To stand firm in being a person of character and doing what is right, especially when it is unpopular or puts you at risk.

Compassion: To give and to forgive.

Moral: Change is the real deal!

Exercise

Think about how much cost free charity you are performing; start to perform all of them as per your status relevant to your family, community, and nation.

Table Free of Money Charity	
1. Dua	Pray for people you care about and who asked you for prayer.

2. Knowledge	Spread knowledge among those who cannot afford it.
3. Advice	Give advice to your younger siblings or any who is younger than you.
4. Smile	Meet people with a smiling face.
5. Help	Help others to solve their problems.
6. Time	Take time out for your parents and spouse.
7. Nurturing	Nurture your children to be well mannered.
8. Patience	Be always patient and rely on Allah.
9. Remind	Remind your friends to stay on the righteous path.
10. Forbid evil	Stop others from being harmful.
11. Talk Softly	Do not be harsh and rude to your fellow humans.
12. Forgive	Forgive the people who ask your forgiveness.
13. Give respect	Give respect to elders as well as to youngsters.
14. Be happy	Be happy and be happy for others and do not be jealous.
15. Visiting the sick	Visit the sick; it is also the Sunnah of our beloved Prophet (PBUH).
16. Clear the path	Remove harmful things such as a stone in the way.
17. Feed your spouse	To put a piece of food into your wife's mouth[23].

Please rise to say:

Allah increase me in righteous actions, Allah grow me among righteous Caravans.

Notes and Reference

[1] Al-Quran, Bani Israel, Ayat: 70 'And We have certainly honored the children of Adam.'

[2] The inner paradigm is a framework containing all the accepted views of an individual about human life (past, present, and future); inclusive social, economic, political, and security dimensions.

[3] Courage is the ability to do something that frightens one: bravery.

[4] Compassion is the ability to give and to forgive.

[5] Ali A. Najam, *Listen:Brief Introduction to Rumi's Manavi Masnavi* (Islamabad: Agha Jee Printers, 2017)

[6] One may say, "I feel a wonderful sense of gain" or "I feel a terrible sense of loss."
[7] Al-Quran, Al-Ala, Ayat:14-15
[8] **"**Medical Benefits of Salat," accessed March 18, 2018, http://www.islamicity.com
[9] Muhammad. Iqbal, accessed March 18, 2018, https://www.iap.gov.pk/
[10] Muhammad. Iqbal, accessed March 18, 2018, https://www.iap.gov.pk/
[11] Al-Quran Al-Ahzab, Ayat: 21
[12] Ibid
[13] Ali A. Najam, *Listen:Brief Introduction to Rumi's Manavi Masnavi* (Islamabad: Agha Jee Printers, 2017), p. 193
[14] Al-Quran, Al-Luqman, Ayat: 29.
[15] Al-Quran, Al-Qiama, Ayat: 14.
[16] Muhammad. Iqbal, accessed on 31 March 2018, https://www.iap.gov.pk/
[17] "Islamic center for research and academics," accessed March 5, 2018 http://icraa.org/hadith-whose-two-days-equal-loser.
[18]"Hadith explaination," accessed on March 5, 2018 http://dailyhadith.adaptivesolutionsinc.com/hadith/Are-Your-Two-Days-Equal.
[19] Al-Quran Al-Khaf, Ayat: 23.
[20] "30 awesome Japanese idioms we should start using in English," accessed March 18, 2018, https://matadornetwork.com/abroad/30-awesome-japanese-idioms-start-using-english**.**
[21] "Defining Civic Virtue:Launching Heroes & Villains with your Students," accessed Dec 16, 2016*,* http://billofrightsinstitute.org/wp-content/uploads/2014/10/What-is-Virtue-and-Franklin.
[22] Al-Quran, Al-Baqara, Ayat:168.
[23] "17 Types of Sadaqah That Don't Cost A Penny," accessed on March 10, 2018 http://www.muslimmastery.com.

Semantic Exploration of Death: A Critical Analysis of Kamal's 'Ode to Death' through Leech's Seven Types of Meaning

Wahid Pervez

ABSTRACT

This research presents a semantic analysis of the poem "An Ode to Death" by Pakistani writer Kamal. By employing Leech's framework of seven types of meaning—denotative, connotative, collocative, affective, stylistic, thematic, and reflective—the study examines the linguistic, cultural, historical, and religious layers of the poem. Kamal's poem reflects a unique perspective on death, influenced by his identity as a Muslim and Pakistani. The poem explores the inevitability of death, human helplessness before it, and the equality it enforces across social divides. Through detailed semantic exploration, the paper reveals the poet's reflections on life, death, the grave, and the Day of Judgment, capturing the transient nature of human existence and the eternal peace of the afterlife. The study provides an in-depth interpretation of Kamal's poetic message, connecting his religious beliefs to universal themes of mortality, offering a comprehensive understanding of the poet's attitude towards life and death. This research is an analytical contribution to the study of poetry through the lens of semantics, with a particular emphasis on the Islamic perspective on death.

Semantic Analysis is the best way to understand any poetic work. Therefore, the present research has as well been analyzed the poem semantically. Semantics does not only discuss meaning, but it also discusses the nature of poem and poet's attitude to it. Semantic analysis here presents the different meanings separately and highlights the points inside poem "An Ode to Death" written by Pakistani writer Kamal. The poem is a blend of cultural, historical and religious imagery. Being the Pakistani and Muslim writer Kamal's linguistics approach, religious bent of mind, outlook on personal life and attitude to death are different from the other regional poets to an eminent degree. This research discusses each point of the poem that reveals writer's attitude to life, death, grave and the Day of Judgment.

The poem "Ode to Death" is written on one page so that anyone can read it at a glance. Therefore, writer says that his ode to death is in the lifting of a single eyebrow. Nobody can deny the certainty of death. On regular basis many people we see leaving this world forever. Some die by natural death, some die by drowning, some die in accident, some die of heart attack, some die from incurable disease. Many people are swallowed by flood or earthquake. Many people die in bomb blast. Many people become the target of killers. But world does not learn any lesson from such casualties. If anyone from house or close relatives passes away, for time being people fear of their own turn of death; otherwise world's way of life and its too much absorption in worldly affairs show that they are immortal. They have been sent here forever. And they won't ever die. Poet turns our attention to the importance of creation. From mountain to pebble, ocean to drop, king to subject every creation of God has its function and importance. Apparently carbon has no value but its particles are useful in making diamond. Poet makes us clear that in world wealth, power, posts, and knowledge create difference but in the eyes of death king and subject, employer and employee, rich and poor, mayor and beggar everyone is equal. Man is helpless before death. We cannot prevent either death not take soul of beloved one's or dying person from leaving his family. After death with the passage of time every part of body will dissolve. Graveyard is a place where silence governs. This is one of the peaceful places in the world where no

grief of poverty and joblessness is heard. This is the only place in the world where peace and contentment govern. Poet, after death of his beloved, wanders in search of the reality of life. In absence of his beloved he is clutched by the memories of his past when he was in the arms of hers. Poet convinces himself by saying "let bygones be bygones" because he has realized that death is inevitable and everyone later or sooner has to say farewell to this world.

2. Theoretical framework

The present research has suggested seven types of meaning introduced by Leec (1967). Those seven sorts of meanings named as Denotative, Connotative, Collocative, Affective, Stylistic, Thematic and Reflective. Leech's seven types of meaning is the best tool to analyze any writer's mental and linguistics approach to his work. To study meaning of the poem separately in the light of Leech seven types of meaning help readers out to reach the maximum level of writers message.

1. Denotative Meaning	Conceptual or logical meaning Dictionary meaning Universal Meaning
2. Connotative Meaning	Contextual Meaning This meaning tells the things behind the curtain. This shows another side of mirror. This meaning reveals the purpose of writing, and conveys writer's message.
3. Collocative Meaning	A collocation is a familiar grouping of words, especially words that habitually appear together and thereby convey meaning by association. Collocational range refers to the set of items that typically accompany a word.
4. Affective Meaning	Affective meaning is more directly a reflection of the speaker's personal attitude or feelings towards the listener or the target of the utterance.
5. Stylistic Meaning	Social meaning refers to the use of language to establish and regulate social relations and to maintain social roles.

	Social relations
6. Thematic Meaning	The meaning arising out of the way in which the writer or speaker organizes his message is called thematic meaning.
7. Reflexive Meaning	Reflective meaning is the meaning which arises in cases of multiple conceptual meanings, when one sense of a word forms part of our response to another sense. It is the product of people's recognition and imagination.

3. Analysis of an ode to death

The poem "An ode to death" is about the poet's attitude to ultimate reality of death, uncertainty of life and eternal life after death. This paper semantically analyzes the poem with all seven meanings. Semantics involves several types of meaning; most importantly are Denotative, Connotative, Collocative, Affective, Stylistic, Thematic and Reflective. The poem discusses reality of life and death and men's attitude to it. The poem is basically an ode that draws writer's inner feeling attitude to death. Usages of the literary term and simplicity of language make the poem sublime.

3.1 Denotative meaning

First hand meaning of the poem tells that life in this world is temporary and everyone has to go from here. Every soul shall have a taste of death, but the way of lives of people show that they won't ever die. It seems as if they have been sent here forever. Everyone will soon be buried and the time will come when all parts of body will mix into dust. God has created everything purposefully and everything has its function, nothing should be avoided. In eyes of God everyone is equal; prince and the pauper, owner and worker or mayor and beggar are all alike in front of God. Death cannot be influenced by any means, because it only follows the order of God. Whose life over he has to go from this world. In grave every part of will dissolve with the passage of time. Graveyard is the most peaceful place in the world where only peace and contentment prevail. There is no tension of earning and no need to struggle fulfilling desires. Poet realizes indispensability of death and convinces himself that every one going to meet his maker in his turn. And death is the last source that can join him to his deceased beloved.

3.2 Connotative meaning

Contextual meaning of the poem opens many doors of religious as well as worldly knowledge. Microscopic study of the poem makes us aware of the encyclopedic knowledge of the writer's worldly objects. Poet's comparison of clocks ticking with monotonous life is marvelous. He says:

Death is more than certain
But the clocks go on ticking as before

God has created everything with some purpose. Even diamond is extracted from carbon. In poets view nothing should be avoided or looked down upon. Everything has its value. Everyman has some talent. No one should be neglected. We shouldn't laugh at poor, jobless and homeless people. Poet says, though we are living luxurious life, yet we are after more riches and blindly running after worldly success. We are giving more preference this world to the world after here. We have forgotten that one day we have to go from here leaving all belongings behind us. Only our actions that we have performed will go with us.

Poet says:
And in every particle of carbon dust
There lives a diamond dream
How many galaxies yet to be explored-
How many seeds in the pomegranate of time?

Above last two lines show that man can never be satisfied in this world. We are restlessly working leaps and bounds to become billionaire from millionaire. In poets' eyes, whether we live hundred years or thousand but one day we have to say farewell to this world. In the line of "many seeds of pomegranate of time" pomegranate is the world and seeds are its luxuries. If you become the richest man of the world and make the whole world your slave, yet you cannot cross the boundary of this world. Seeds are the wealth, land, bank-balance and positions and pomegranate is world which will itself finish.

At poet's glance people have become mentally blind, because they get no lesson from others' death. Life is too short to fulfill all desires. We have so many dreams in our eyes, we have long-term planning, and we after achieving one goal start to find another. We have forgotten death that can separate our soul from body in single jerk of its power. In the eyes of death rich and poor are alike. Death has no mercy for anyone, whether you are owner or worker. Death will come and must take your soul. He says:

The pine tree blasted by last year's Thunderbolt
And the burn out match sticks in my ashtray
Look so terribly alike

With the help of pen Kamal makes picture of grave. He says that nothing will remain safe in grave. Even our hair and bones will destroy with the passage of time. In grave our hands separate from wrists, knees from calves and calves from feet. When a person comes inside it, it tears his shroud, tears his body into pieces and eats his flesh. In grave the virtuous' face was turned towards the Qiblah whereas the sinner's face is turned in the opposite direction. It hugs pious man like a mother hugs her lost child with affection, holding him to her chest, whereas it violently squeezes sinners in such a way that their ribs smash and intertwine with each other. Poet says:

Are the hair and bones
really indestructible and how long
does it take for the eyes
to dissolve in the grave?

Moreover, he says that grave is the place where silence governs. In graveyard many people are asleep since long and waiting for the Day of Judgment. Now, there is no tension of worldly life, no need to earn or struggle to become rich and famous. After death all activities of life suddenly stop. All relations from world disconnect. Deceased is laid down in grave empty handed as he came into the world. Kamal says:

There is an archipelago of naked rocks
Only sleep and silence there,
No anchorage for grief

Now, Kamal compares graveyard with archipelago, means naked rocks. There is lesson in the above lines for misguided people. Duration of worldly life is too short as compare to the life after here. Whoever came in this world once must leave later or sooner. To forget the actual place after death that is grave is the foolishness of eminent degree. That is why kamal presents the condition of grave where there is a silence, and endless sleep in the group of islands, is the symbol of danger in literature point of view. Actually Kamal here presents the Islamic point of view about the eternal life after death. He says that this is a place of barrel naked rocks, and there is no space of grief, it is free from all trails, troubles and sorrows of life.

At the end of the ode poet shows his maturity that he has realized what life actually is. After death of his beloved he wanders in search of reality of death and purpose of life. He has understood that one by one all will have to go from here.

But let bygones be bygones
Who was the deceiver and who the deceived
Was I on a floating island?
And were you on the shore?
Which one of us moved away?

After death of his beloved the poet is broken-hearted. Death has separated them forever and taken his beloved where there poet cannot reach unless he tastes the taste of death. In her absence he looks for her arms as dying people asks for life or a traveler finds out water in burning desert. Poet is confused with whether he has deceived her or she has deceived him. Whether he should have died with her or she should have not left him alone. After death he is in much pain or she is in more trouble than him. Poet wants to forget all those things which hurt him and memorize him bygone days when they were together.

Poet did not find any substitute shelter of his beloved arms after her death. Her death was a blow from which he never recovered unless he realized reality of death. He was shocked and mentally upset because there was no ointment to heal his wound which her death carved in his heart. He, leaving all worldly affairs behind, looked for consolation in forest. He observed life in forest, stars in the sky in darkest night, silence in graveyard where thousands of people were sleeping in their graves. He, nowhere, found satisfaction what he used to feel in the arms of his beloved. He started observation of men journey from world to grave and grave to heaven. Soon he understands the purpose of life and reality of death.

3.3 Collocative meaning

Intelligent paring of words makes the poem outstanding and show poet's mastery on language and encyclopedic Knowledge of the world and world after here. Collocation of the poem is more convincing that arrests our thought and spell us bound. Collocation such as diamond-dream naked rocks match stick, carbon dust, and floating island furnish language and knowledge.

3.4 Affective Meaning

Poet's feelings reach peak when his beloved takes last breath and he feels pulse slowing down. Poet remembers the time he spent with his beloved. He feels absence of his beloved arms and becomes disconsolate and heartbroken. Kamal goes deep down and reveals condition of grave after death. He says to his beloved that he has heard hair and bones take time to dissolve, but will he be alive till that to see whether his beloved's bones are safe and sound?

Moreover, poet feels his life is moving away from him. For him death is a tyrant monster that is muffling him up. He is enchained by death. He feels clutches of death but finds himself helpless before mighty and shadowing hands of death. Poet is confused with either life is deceiver or death, or both of them have schemed to defeat him in the fight of life.

3.5 Stylistic Meaning

Poem's central role is to convey the writer's message to awake the society from deep sleep of unawareness of sudden death. Poet wants to beware the people of death's sudden arrival. Though the time of death is fixed, but no one knows his last day of life. Death is cruel creature that does not differentiate between rich and poor. Though if anyone is mayor of the city or street beggar it will treat him same in taking soul out of his body. Everyone has to say farewell to this world leaving his position, bungalow, bank-balance, vehicle, business, trade, near and dears, parents, wife, children and relatives. Beyond need absorption in making money is destructive. Whoever loves the world, it must deceive him. To love this world is foolishness of high degree. We have been sent here for a limited time period. So, for us this world is a stage and we are characters of it. We have to perform our characters as per given talent by our creator.

3.6 Thematic Meaning

The poem covers three major themes which are ultimate reality of death, uncertainty of life and eternal life after death. Death is that door through which everyone has to pass. Death is that drink which everyone has to take. Death is that flavor which everyone has to taste. Death is that cruel monster that puts you into the stomach of earth; there you live alone for an uncertain period of time. Death is that deceiver from whose deceive no one could escape.

3.7 Reflective Meaning

According to poet's religious bent of mind life is uncertain and grave is a place where soul and body will reunite once again after death. In poet's view there is complete peace and contentment in graveyard. After death there is no tension of worldly life. There is no grief of failure and poverty. There is an unending journey waiting after death, but our attitude to life shows that we are unaware of temporality of life. Being Muslim, Kamal has firm belief in the Day of Judgment. His attitude to life is like the traveler who has stays somewhere temporarily.

4. Conclusion

On the topic of death poem in its nature is unique. Semantic analysis of the poem presents a microscopic study to comprehend the poem up to the mark. The journey from the world to the grave and from grave to the world after here has critically been discussed. This paper has tried to clarify all difficult words, metaphors, images and imagery. Present research has covered all seven meanings come under semantics. This paper will help you out comprehend the poem analytically. Moreover, the paper has opened new door for understanding death from the hand of a poet. Ode is written by a Muslim writer that is why paper has more emphasized on discussion of death in the light of Islam.

Notes and Reference

Babatunde, S. T. (1995). *An Introduction to Meaning in English as a Second Language*. Unpublished Manuscript.

Crystal, D. (1991). *A Dictionary of Linguistics and Phonetics.* Oxford: Basi Blackwell.

Goddard, C. (1998). *A Semantic Analysis; A Practical Introduction*. New York: Oxford University Press.

Leech, G. (1974). *Semantic*. Harmon worth: Pengiums.

Kamal, D. (1988). *The unicorn and the dancing girl: Poems of Faiz Ahmed Faiz with original text*. London: Independent Pub. Com.

Rahman, T. (1988). Pakistani English Poetry. *Journal of Indian Writing in English, 16(2)*. Lahore.

ALLAMA IQBAL'S VISION: RECONCILING RELIGION, SCIENCE, AND MODERN THOUGHT

Dr Tahir Hameed Tanoli

ABSTRACT

In this comprehensive discussion, Allama Iqbal emphasizes the pivotal role of religion as a guiding force for both the inner and outer aspects of human life, distinguishing it from philosophy and science, which address only limited aspects of existence. He argues that while philosophy and science seek to understand religious truths, they cannot supersede religion's broader scope, which encompasses emotions, intellect, will, and more. As modern scientific knowledge advances, Iqbal calls for a fresh re-examination of religious truths to ensure harmony between religion and contemporary thought. He discusses the challenge posed by materialism and anti-religious trends, particularly the influence of Western ideologies and Communist Russia on Muslim thought. Iqbal urges a reformulation of Islamic theological ideas to meet the intellectual demands of modern times while warning against being overawed by Western progress. He stresses the need for Muslims to return to the Qur'an's comprehensive vision of the universe, which integrates both spiritual and material realities, to revive Islamic thought and present Islam as a universal message for humanity. Allama Iqbal's insights advocate for a deeper engagement with both religious and empirical knowledge to ensure that Islam remains a dynamic and guiding force in modern civilization.

Allama Iqbal envisioned a vibrant integration of religion, science, and modern thought, promoting a progressive spiritual perspective that aligned with contemporary intellectual developments. He championed a dynamic and evolving Islam that valued critical thinking and individual agency, encouraging Muslims to reconnect with their rich intellectual heritage while embracing scientific progress without compromising their faith. Through his concept of "*khudi*" (selfhood) and his call for an empowered spiritual identity, Iqbal sought to bridge the divide between traditional beliefs and modern knowledge. His philosophy proposed an Islamic society that could thrive in the modern world, grounded in ethical principles and rational inquiry, fostering a harmonious blend of spiritual depth and scientific understanding.

Allama Iqbal wrote *The Reconstruction of Religious Thought in Islam* to inspire a revitalized, progressive understanding of Islam that could harmonize with modern scientific and philosophical developments. His aim was to reinterpret Islamic principles in a way that empowered Muslims to engage with contemporary challenges, emphasizing rationality, dynamic faith, and individual self-realization. Through this work, Iqbal sought to encourage intellectual and spiritual growth, urging Muslims to reconnect with the progressive, adaptive spirit of early Islam to foster a balanced, forward-looking society. Following were the major objectives of these lectures:

(i) The Necessity of Understanding Religious Facts for a Higher Purpose

Iqbal states that, unlike poetry and philosophy, the purpose of religion is to transform and guide both the inner and outer life of human beings. Therefore, all facts essential for understanding religious teachings and concepts cannot be left incomplete.[1] We cannot base our lives, actions, and behaviors on vague notions or uncertain principles. Even science, which addresses only a few areas of life, is built on some rational foundation. Religion, which encompasses the entirety of life's issues, deserves even more attention in reconciling various, often opposing, experiences. However, in the search for the intellectual foundation of religion and faith, philosophy or science cannot be given precedence over religion. Philosophy and science can only attempt to understand

religious truths within their own boundaries because they address only one aspect of human existence, whereas religion encompasses the entire human personality, including emotions, feelings, will, and intellect.[2] Therefore, whenever we reflect on these matters, religion will always hold a more central and pivotal position compared to other fields or sources of knowledge due to its comprehensiveness and its all-encompassing role in human life.[3]

(ii) Understanding Religious Facts in Light of Modern Scientific Research

Iqbal says that as human knowledge advances, not only does the perspective change, but it also broadens. The way today's human being has gained control over the environment and the universe through scientific research and discoveries has given them a new confidence. As a result, new ideas, concepts, and perspectives are emerging, leading to a re-examination of old issues while also giving rise to new ones. Through scientific investigation, humans have gained so much control over nature that the human intellect now seems capable of transcending the limits of time, space, cause, and effect. The progress of scientific thought has also altered the concepts of knowledge and understanding. An example of this is Einstein's theory of relativity, which has completely changed our perspective on the universe.[4] In these changed circumstances and in the context of new intellectual, scientific, and research frameworks, religious truths cannot be confined to old understandings. Today, there is a need to consider religious truths from new angles so that modern scientific discoveries and religious understanding remain harmonious, ensuring that no aspect of human progress leads to religious stagnation or backwardness.[5]

(iii) The Challenge of Materialism and Anti-Religious Trends

Iqbal states that, in these changing times, the new generation of Muslims is demanding a re-interpretation of Islam. The new generation's trends in Asia and Africa cannot be ignored. However, we must also consider the factors that are giving rise to such tendencies among Muslims. For example, how different intellectual and ideological trends emerged in Europe and how they continue to evolve. What are the achievements of European intellectual and scientific research, and how might they affect Muslim theological thought? Can we use European knowledge, thought, and research to reformulate our own ideas, and can we benefit from them?

These are the aspects that cannot be ignored if we are to survive in the modern age. Alongside this, another major challenge during Allama's time was the propaganda arising from Central Asia, particularly Communist Russia, whose materialistic influence was also spreading to the Muslim world. Allama Iqbal viewed the materialistic impact of Communist Russia as a significant challenge to the reformation of Islamic theological thought.[6]

(iv) Materialistic and Anti-Quranic Trends Among Muslim Thinkers and the Necessity of Reforming Religious Thought

As an example of the impact of contemporary materialistic trends on Muslim society, Allama Iqbal refers to the Turkish poet Tevfik Fikret. Tevfik Fikret, also known as Tevfik Nazmi, is considered one of the founders of modern Turkish poetry. His poetry collection, "Rubab-e Shikasta," was published. Tevfik Fikret was among the prominent figures who promoted secular trends in Turkey. Not only did he write poetry influenced by contemporary materialism and secularism, but he also used the thoughts of the great Indian poet Mirza Abdul Qadir Bedil of Akbarabad to support his ideas. Iqbal says that in such circumstances, when the minds of the new generation of Muslims are being influenced by materialistic and non-Islamic ideas, and even prominent Muslim figures are being wrongly used to support these ideas, we need to re-examine the foundational concepts of Islam to provide a better understanding.[7]

(v) The Dangers of Being Overawed and Overwhelmed by the West

Today, the flow of knowledge is from the West to the East, whereas there was a time when knowledge flowed from the Islamic world to the West, and Western thought drew inspiration from Islamic civilization. As a result, there is a possibility that the Muslim world may be overawed by the West. Iqbal explains that this is because Islamic thought has been in a state of practical stagnation for the past five hundred years.[8] This is why, when Western knowledge advanced significantly, the Islamic world had no option but to follow the West intellectually. In this context, there is a positive aspect, as European culture, in many ways, is an advanced form of certain important aspects of Islamic culture. However, it is important to note that Iqbal is not claiming that modern Western intellectual advancement is an extension of Islamic thought. Rather,

he views the positive aspects of Western intellectual progress as a continuation of certain elements of Islamic culture and civilization. This is why Iqbal is also concerned that the outward allure of European civilization may captivate Muslims, leading them into misconceptions. Without recognizing the anti-Islamic essence of Western civilization, they might become its followers.[9] In Allama Iqbal's view, the freedom granted by modern civilization is essentially captivity of the soul, and the way to protect oneself from the blinding allure of Western knowledge is to make the light of one's own thought the guiding principle. Iqbal notes that over the past five centuries, while Muslims were intellectually stagnant, the same issues that once captured the attention of Muslim philosophers and scientists were taken seriously by the West, and they advanced their research. In other words, after the completion of Islamic theological thought, while Muslims fell into a state of negligence, the process of intellectual and experiential growth continued, and this growth and continuity occurred in the Western world, not in the East or the Muslim world. [10]

(vi) Islam as a Universal Message of Life for Humanity

While explaining the purposes of his lectures, Allama Iqbal states that his main objective is to clarify how Islam can be presented as a universal message of life for humanity.[11] Therefore, it is necessary to discuss those foundational concepts of Islam that fulfill this objective and make it clear that Islam is indeed a universal message of life for humanity. In setting the priorities of these discussions, Allama Iqbal chose to focus primarily on the concept of knowledge acquired through the senses and spiritual experience. That is, Iqbal seeks to establish the importance, effectiveness, and authenticity of knowledge obtained through spiritual experience or revelation as being even greater than the knowledge acquired through the senses. This is important because only in this way can Islam be presented to humanity as a universal message of life, with its foundation resting on revelation or prophetic spiritual experience.[12]

In *The Reconstruction of Religious Thought in Islam*, Allama Iqbal presents the Qur'an's perspective on the relationship between the universe and humanity as one of deep interconnectedness, where the universe is seen as a dynamic, evolving creation that reflects God's will and power. Iqbal emphasizes that the Qur'an invites humanity to actively engage with and explore the natural world, encouraging scientific inquiry and reflection as a means of

understanding divine laws. Humanity, endowed with reason and the capacity for self-awareness, is seen as God's vicegerent on Earth, entrusted with the responsibility to shape and improve the world through knowledge and ethical action. This perspective, as given in detail below, highlights the role of humans as co-creators in the ongoing process of creation, where understanding and harnessing the universe's mysteries is an act of spiritual and intellectual fulfillment:

(i) The Beginning of Rational Investigation of the Universe and Islam

Allama Iqbal asserts that Islam places such a strong emphasis on the importance of reason that, in human history, no other example matches how effectively Islam initiated the use of reason to understand the mysteries of the universe. It can be said that the advancement of rational thought was initiated by the Holy Prophet Muhammad (PBUH) himself.[13] The Prophet (PBUH) consistently offered prayers, asking Allah for knowledge of the reality of things, and this is supported by verses from the Qur'an that describe the Prophet's (PBUH) prophetic mission. These verses mention recitation of the Qur'anic verses, purification of the soul, and teaching of knowledge and wisdom, followed by the statement: "And [He] teaches you what you did not know" (Qur'an 2:151), indicating that the desire and inclination to discover and understand every unknown reality was directly instilled in Muslim consciousness by the Qur'an.

This trend laid the foundation for the research efforts by both Sufi and non-Sufi theologians and thinkers, efforts that not only became the foundation of Islamic civilization but also represented a bright chapter in human intellectual history. They developed systems of thought that expressed the Muslim mind's true commitment to knowledge, thought, research, and inquiry. Since no thought can exceed the natural limitations of its time, the fact that Islamic theological thought did not advance beyond a certain point was due to the temporal limitations faced by Muslim thinkers.[14]

A major example of this influence is the impact of Greek philosophy on Muslim thought. Although Greek philosophy broadened Muslim intellectual horizons and provided new perspectives, it also caused a significant drawback: Muslim thinkers' understanding of the Qur'an became clouded. Many Muslim thinkers, in their efforts to understand the Qur'an through the lens

of Greek philosophy, were more influenced by Greek thought than by the guidance of the Qur'an itself. Socrates believed that the only subject worthy of study was humanity, and thus focused all his attention on man, deeming the universe unworthy of being studied. This concept is contrary to the teachings of the Qur'an. The Qur'an, on the other hand, speaks of divine revelation to bees, mentions the example of a mosquito's wing, and encourages reflection on natural phenomena like the changing of winds, the alternation of night and day, the movement of clouds, and the stars in the sky. The Qur'an urges its reader to contemplate these phenomena to reveal the truth that this universe, created by Allah, is not in vain but is a manifestation of divine purpose and reality.

Plato, a devoted disciple of Socrates, also rejected the reliability of sense perception and argued that sense-based knowledge can only form opinions, not provide true knowledge. Plato's perspective is in direct opposition to the teachings of the Qur'an, which declares hearing and sight to be two great gifts from Allah and holds man accountable before Allah for how these senses are used (Qur'an 67:23). Early Muslim scholars, entangled in classical Greek thought, overlooked the Qur'an's perspective on knowledge, its methodology, and its teaching of mastering the universe.[15] They studied the Qur'an through the lens of Greek philosophy. It was only after nearly 200 years that Muslims began to realize that the spirit of the Qur'an is non-classical, fundamentally different from Greek thought. As this realization grew among Muslim scholars, a significant intellectual rebellion emerged. Although the full importance of this intellectual revolution has yet to be fully understood, we see its effects in thinkers like Imam Ghazali. Imam Ghazali, based on his personal experiences and intellectual revolt, declared all sciences to be subject to skepticism. He presented his philosophical skepticism, outlined in Tahafut al-Falasifah, as the foundation for religious truth. Allama Iqbal regards this as an unsafe foundation for religion, one that is not in alignment with the spirit of the Qur'an.[16]

However, upon closer study of Imam Ghazali's works, it becomes clear that he, using philosophical skepticism as a basis, deemed all sciences other than revelation to be insufficient for knowing reality and declared revelation as the only true source of knowledge, which he based on mystical experience and intuition. His detailed account of this can be found in his book Al-Munqidh

min al-Dalal (Deliverance from Error), where he explains this perspective through his own experiences.

(ii) The Qur'an – The Universal Spiritual Foundation of Humanity's Relationship with the Universe and God

Allama Iqbal states that the Qur'an differs from Greek thought in that it brings awareness to humanity's multi-dimensional relationship with God and the universe, and provides the method and path to transform this awareness into reality. Unlike previous intellectual systems, the Qur'an's comprehensive teachings led Goethe to remark to Eckermann that Islam, as an educational force, can never fail—no system can surpass it. The reason is that the comprehensiveness offered by the Qur'an is unmatched by any other educational system in the world.

Islam's understanding and resolution of the issues arising from the conflict and harmony between religion and civilization is unparalleled for humanity. In the past, Christianity faced this dilemma as well, but its central concern was to establish a permanent foundation for spiritual life that, according to the teachings of Jesus (peace be upon him), emerges from the inner revelations of a person's soul, independent of the external world's forces. Allama Iqbal explains that Islam acknowledges this perspective but considers it incomplete and partial.

According to Islam, the permanent spiritual foundation of human life is indeed based on the inner revelations of the soul, but its discovery and development are not separate, alien, or in conflict with the material world. Rather, this spiritual foundation is present and active in every aspect of the material world.[17]

(iii) The Qur'an and the Denial of Conflict Between the Spiritual and Material

Allama Iqbal explains that in the present era, where human thought is advancing under material influences, both major religions—Islam and Christianity—agree on affirming the spiritual self or identity of human beings. However, while Christianity sees a conflict between the spiritual and material aspects of life, Islam denies such a contradiction. When Islam affirms humanity's connection with the material world, it does not base it on a denial of the spiritual and material dimensions. According to Islam, the external (material) and internal (spiritual) are interconnected, and this is the realistic foundation for organizing life.[18]

Allama Iqbal uses verses from the Qur'an to support his viewpoint, which highlight the following concepts: that the universe is created based on truth and not merely a game or spectacle; the importance of reflecting on the creation of the universe; that the process of creation is not static but ever-expanding; and that every part of the universe, including the alternation of day and night, is a source of insight for those who possess knowledge. Furthermore, the universe has been made subservient to humans. By referring to these verses, Iqbal aims to demonstrate that the Qur'an views the spiritual and material dimensions as intertwined, not separate or contradictory. In other words, the validity and authenticity of spiritual experience depend on it being reflected in the external reality. As Allama Iqbal stated in his first lecture, the true spiritual experience is exemplified by the Qur'an itself.

Thus, the Qur'an's principle that there is no disparity between the spiritual and material aspects leads to the conclusion that the claims and truths presented in the Qur'an must be observable in the external world. The practicality and effectiveness of the Qur'an's teachings on individual, social, economic, societal, and civilizational life, according to Allama Iqbal, are based on this very principle. This is why the promise of "Fear not" (La Takhaf) in Surah Ta-Ha is frequently applied and results in various dimensions in Allama's Urdu and Persian poetry. In fact, it can be said that Iqbal has encapsulated all the dimensions of La Takhaf in his poetry, as described in the Qur'an. For example, in "Javid Nama," Iqbal writes:

سینہ دریا چو موسیٰ بر درم
من ترا اندر ضمیر او برم
پیر رومی سورہ طٰہٰ سرود
زیر دریا ماہتاب آمد فرود
گفت فرعون ایں سحر ایں جوے نور
از کجا ایں صبح وایں نور و ظہور
ہر چہ پنہاں است ازو پیداستے
اصل ایں نور از ید بیضاستے[19]

_"*I will tear open the breast of the sea like Moses*
And take you into its depths.

The elder Rumi recited Surah Ta-Ha,
And the moonlight descended into the sea.
Pharaoh said: What is this magic, this stream of light,
Where has this dawn and illumination come from?"
(Rumi replied:)
"Whatever is hidden becomes manifest through this light,
And the source of this light is the White Hand (Yad-e-Bayda)."

This passage reflects the Qur'an's teaching that spiritual enlightenment can illuminate all that is hidden, with its source being divine truth, symbolized by the White Hand of Moses (Yad-e-Bayda).

To clarify the key points, here is a summary of the Qur'anic verses provided by Allama Iqbal:

1. According to the Qur'an, the essence of the universe is based on creation in truth (حق). It is not a mere spectacle or purposeless act. (Sad, 38: 44-39)

2. In every part of the universe—earth, heavens, and the alternation of day and night—there are signs for people of intellect. Their reflection on the universe is not only akin to remembering Allah, but this contemplation leads them to the conclusion that the universe is not false in any way. (Al-Imran, 3: 190-191)

3. The universe is not static; rather, it is a creative act of Allah, which is constantly evolving and expanding. (Fatir, 35: 1)

4. The Qur'an invites people of knowledge to reflect on the universe, travel through the earth, and contemplate Allah's creative process. By contemplating the various parts of the earth and the world, they should try to understand how Allah created the universe, and this process of creation serves as a proof for the resurrection in the hereafter. (Al-Ankabut, 29: 20)

5. The alternation of day and night is a manifestation of Allah's grandeur. Reflecting on it is a source of insight through which people of knowledge reach new interpretations of reality. (An-Nur, 24: 44) This is why the Prophet (PBUH) forbade cursing time.

6. Allah has subjected everything in the universe—whether in the heavens or the earth—for the service of mankind. Allah has made the high and low, the visible and the hidden, all subservient to humans. It is now their duty to understand the signs of Allah and to reach the means through which they can complete the process of conquering the universe. (Taha, 20: 31)

7. Allah has subjected the day and night, the sun, the moon, and the stars, all for the benefit of mankind. In this subjugation and creation, there are countless signs for those who use reason. This means that there is no barrier for humans to understand any part of the universe or to access the principles of its conquest because this process is itself in accordance with the divine will. (An-Nahl, 16: 12)

8. The universe may seem foreign to humans at first glance, and its vastness might make humans feel inferior, as if the universe hinders their progress toward their goals. Allama Iqbal refutes this notion in light of the Qur'anic verse in which Allah states that mankind was created in the best form (Ahsen-e-Taqweem). Humans are then placed in the trials and struggles of life to enhance their abilities, and through faith and righteous deeds, they can overcome their environment. (At-Tin, 95: 4) [20]

(iv) Man as a Creative Agent and Fulfiller of God's Objectives

In describing the status and role of man in the universe, Allama Iqbal, in light of the Qur'an, considers man a creative agent and a fulfiller of God's divine purposes. According to him, man holds the greatest strength, creativity, and capacity to bring harmony and balance to the purposes of the universe. Iqbal clarifies this quality of man through the following Qur'anic verses:

a. According to the Qur'an, man, in essence, is part of an ongoing creative process. He carries within him the drive to continuously evolve and move from a lower to a higher state. He is a spirit that progressively journeys from one stage to another.[21] The Qur'an says, "I swear by the twilight, and the night and what it enshrouds, and the moon when it becomes full, that you shall certainly move from stage to stage." (Al-Inshiqaq, 83:16-19)

b. Divine will desires that man should not remain an indifferent existence in the vast universe around him but should strive to harness the forces of this universe according to his goals. If he does so, Allah's will shall accompany him in this process of positive change and evolution within himself and the universe. Allah says:

"Indeed, Allah does not change the condition of a people until they change what is within themselves." (Ar-Ra'd, 13:11)

c. Iqbal highlights the distinction between man and the rest of creation, such as lifeless stones. The difference is that man brings out the hidden potential within himself, thereby nurturing life and creating progress. If man fails to do so, he falls to the level of inanimate matter. Man's life, the development of his soul, and the height and achievement of his goals depend on his relationship with the environment around him. The reality that encompasses man is connected to him through knowledge—knowledge gained through sensory perception, which is expanded by further understanding and investigation. Allah says:

"And when your Lord said to the angels, 'Indeed, I will make upon the earth a successor.' They said, 'Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?' Allah said, 'Indeed, I know that which you do not know.' And He taught Adam the names—all of them. Then He showed them to the angels and said, 'Inform Me of the names of these, if you are truthful.' They said, 'Exalted are You; we have no knowledge except what You have taught us. Indeed, it is You who is the Knowing, the Wise.' Allah said, 'O Adam, inform them of their names.' And when he had informed them of their names, He said, 'Did I not tell you that I know the unseen of the heavens and the earth? And I know what you reveal and what you have concealed.'" (Al-Baqarah, 2:30-33)

d. When a person establishes a connection with their environment through knowledge, this connection is expressed in the formation of their concepts about the universe and the articulation of these concepts. It is through the formation of concepts that a person gains mastery over things. [22] In this way, a person's conceptual knowledge is a significant reality of the universe. Through this knowledge, a person not only becomes aware of observable reality but also influences and changes it in accordance with their inner transformation. This is why the Qur'an repeatedly emphasizes this observable aspect of reality.

e. After explaining the above foundational concepts from the Qur'an, Allama Iqbal takes a step further. He builds on the Qur'anic principle that the observable aspect of reality should not be ignored, clarifying that nature or the observable aspect of reality has been described in the Qur'an as a sign (ayah) of the Divine. This invites human consciousness to not merely stop at the observation of nature but to use these signs as a means to reach the deeper reality that they signify. Here, Iqbal does not overlook the

point that this teaching of the Qur'an is not purely spiritual or introspective; rather, it instilled in Muslims an empirical attitude and awakened a respect and awareness of observable realities, which ultimately led Muslims to become pioneers of modern science.[23]

Islam's extraordinary achievement is that it instilled the spirit of empirical investigation in Muslims during a time when, in the pursuit of the Divine, observable reality was often considered insignificant and neglected. According to the Qur'an, the universe itself has an important purpose.[24] Reality manifests itself through material phenomena, and the ever-changing forms of these phenomena prepare us to accept new truths. Our intellectual endeavors equip us with the ability to overcome the challenges of this path and understand the multiple dimensions of human observation. Therefore, humanity cannot afford to disregard the observable world.

The Qur'an has enlightened us about the reality of change, and it is only by understanding this reality and mastering it—or in other words, by incorporating it into our mental and practical attitudes—that we can lay the foundation for a lasting civilization. Here, Allama Iqbal refers to the historical fact that every civilization that viewed reality solely as internal, subjective, or spiritual, and detached it from external occurrences, failed. The result was that their collective consciousness gravitated toward a concept of life that was devoid of power. A lasting and stable civilization cannot be built on a concept that lacks power. Allama Iqbal, while discussing the religious revelation of the Qur'an as a source of divine knowledge, states that historically, revelation holds supremacy over all human sciences and intellectual experiences. This is because the Qur'an does not consider spiritual life or a person's spiritual experience to be devoid of knowledge and awareness.[25]

For this reason, the Qur'an gives equal importance to every aspect of human experience when it comes to the acquisition of knowledge of the Absolute Reality or the recognition of the Divine Being. Therefore, the various truths revealed in both the external world and within a person's inner being hold equal importance in attaining the knowledge of the Divine. The truths that are revealed to us through our senses and perception lead us indirectly to reality, while the revelations that occur in the depths of our inner self connect us directly to reality. When the Qur'an emphasizes the

study of nature, it seeks to maintain a deep and living connection between humanity and nature. Thus, when a person harnesses the forces of nature, the goal is not merely to dominate but to move freely towards the higher stages of spiritual life. Complete knowledge of reality can only be achieved when a person grounds their knowledge in observations derived from both the senses and the heart.

As the Qur'an states:

"He who perfected everything He created, and began the creation of man from clay. Then He made his progeny from an extract of a humble fluid. Then He proportioned him and breathed into him of His Spirit and made for you hearing, sight, and hearts. Little thanks do you give." (Al-Sajda, 32:8-9) [26]

Here, by mentioning the senses along with the heart—which the Qur'an refers to as *qalb* or *fu'ad*—the Qur'an underscores the necessity of the heart's observations for attaining complete knowledge and understanding of reality.

(v) The Departure of Muslim Thought from the Qur'anic Concept of the Universe

The intellectual rebellion against Greek thought, which opposed the spirit of the Qur'an and emerged in the Muslim world with Imam Ghazali, did not advance with its full effectiveness. Allama Iqbal states that instead of advancing Imam Ghazali's intellectual rebellion and the movement for the revival of the Qur'anic spirit, efforts were made to stop it. His major opponent was Ibn Rushd, who, being a follower of Aristotle, defended Greek philosophy. In opposition to Imam Ghazali's thought, Ibn Rushd introduced the theory of the eternal survival of the active intellect, which later had a profound influence on the intellectual life of France and Italy. However, this theory was completely contrary to the Qur'an's views on the destination of the human self and the creation of true value.

Ibn Rushd, driven by his bias to defend Greek philosophy, could not grasp the insight and significance of the concepts presented by Imam Ghazali. He devoted all his intellectual efforts to developing a philosophy of life that was not only against the concepts of the Qur'an but also devoid of strength. The outcome

of this thought was to obscure the true concept of God and the universe from human insight. [27]

Allama Iqbal further states that although some thinkers did emerge among the Ash'arites who aligned with Qur'anic thought and paved some positive paths by following the correct approach, overall, their movement, influenced by Greek philosophy, remained focused on defending their beliefs using the tools of Greek dialectics.[28]

In conclusion, Allama Iqbal's *The Reconstruction of Religious Thought in Islam* stands as a visionary call to harmonize the timeless wisdom of Islam with the advancements of modern science and philosophy. Iqbal's philosophical framework emphasizes the holistic integration of the spiritual and material dimensions of human existence, highlighting Islam's unique approach of fostering intellectual inquiry while nurturing a deep, spiritual consciousness. He challenges Muslims to reclaim their intellectual heritage and adopt a proactive, empirical approach to understanding the universe, rooted in the Qur'anic teachings that promote reflection, knowledge, and dynamic self-realization. By advocating for the reinterpretation of Islamic thought in light of contemporary realities, Iqbal envisions a society where faith and reason coexist, empowering Muslims to actively contribute to a progressive, balanced civilization that embraces both scientific inquiry and spiritual depth.

Notes and References

1 Now, since the transformation and guidance of man's inner and outer life is the essential aim of religion, it is obvious that the general truths which it embodies must not remain unsettled. *Reconstruction,* pp.1-2

2 Religion is not a departmental affair; it is neither mere thought, nor mere feeling, nor mere action; it is an expression of the whole man. Thus, in the evaluation of religion, philosophy must recognize the central position of religion and has no other alternative but to admit it as something focal in the process of reflective synthesis. *Reconstruction*, p.2

3 Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, Iqbal Academy Pakisan, Lahore, pp.1-2.

4 It seems as if the intellect of man is outgrowing its own most fundamental categories - time, space, and causality. With the advance of scientific thought even our concept of intelligibility is undergoing a change. *Reconstruction,* p.6

5 Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam,* p.6.

6 Ibid*,* p.6.

[7] Ibid, p.6.

[8] Ibid, p.6.

[9] There is nothing wrong in this movement, for European culture, on its intellectual side, is only a further development of some of the most important phases of the culture of Islam. Our only fear is that the dazzling exterior of European culture may arrest our movement and we may fail to reach the true inwardness of that culture. *Reconstruction,* p.6

[10] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam,* p.6.

[11] I propose to undertake a philosophical discussion of some of the basic of ideas of Islam, in the hope that this may, at least, be helpful towards a proper understanding of the meaning of Islam as a message to humanity. *Reconstruction,* p.7

[12] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam,* p.7.

[13] The search for rational foundations in Islam may be regarded to have begun with the Prophet himself. *Reconstruction,* p.2.

[14] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, p.3.

[15] This is what the earlier Muslim students of the Qur'an completely missed under the spell of classical speculation. They read the Qur'an in the light of Greek thought. It took them over two hundred years to perceive - though not quite clearly - that the spirit of the Qur'an was essentially anti-classical. *Reconstruction,* pp.2,3

[16] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, pp.2,3.

[17] Islam fully agrees with this insight and supplements it by the further insight that the illumination of the new world thus revealed is not something foreign to the world of matter but permeates it through and through. *Reconstruction*, p.7

[18] Islam fully agrees with this insight and supplements it by the further insight that the illumination of the new world thus revealed is not something foreign to the world of matter but permeates it through and through. *Reconstruction,* p.7 Islam, recognizing the contact of the ideal with the real, says 'yes' to the world of matter[21] and points the way to master it with a view to discover a basis for a realistic regulation of life. *Reconstruction,* p.8

[19] علامہ اقبال، کلیات اقبال فارسی، (جاوید نامہ)، ص ۶۸۲۔

[20] Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, pp.8-9.

[21] …. no form of reality is so powerful, so inspiring, and so beautiful as the spirit of man! Thus in his inmost being man, as conceived by the Qur'an, is a creative activity, an ascending spirit who, in his onward march, rises from one state of being to another. *Reconstruction,* p.10

[22] .. man is endowed with the faculty of naming things, that is to say, forming concepts of them, and forming concepts of them is capturing them. *Reconstruction,* p.10

[23] .. the general empirical attitude of the Qur'an which engendered in its followers a feeling of reverence for the actual and ultimately made them the founders of

modern science. It was a great point to awaken the empirical spirit in an age which renounced the visible as of no value in men's search after God. *Reconstruction,* p.11

24 Allama Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, p.12

25 Ibid, pp.10-12

26 Ibid pp.10-12.

27 Ibid, p.4.

28 Ibid pp.3-4.