

In the Heart of All That Is

The “Heart” in Bahá’í Writings and Science

Wolfgang A. Klebel

Introduction

The title of this paper is taken from a prayer of ‘Abdu’l-Bahá, which emphasizes the role of the heart as the center of the universe when He talks about *the hidden truths that are written and embedded in the heart of all that is*.¹ (CC 1 251)² This statement about the *heart of all that is*, is an echo to the Words of Bahá’u’lláh about the heart of the world:

*The Word of God hath set the heart of the world afire;
how regrettable if ye fail to be enkindled with its flame!*
(GWB 316)

It needs to be asked what role the heart plays, not only in the individual human, but also in humanity as a whole and in the world as a whole.

The topic of this paper is ‘Abdu’l-Bahá’s answer to a question of a physician regarding the sympathetic nervous system (which today is generally called the Autonomic Nervous System, hereafter referred to as ANS) of the human organism. ‘Abdu’l-Bahá writes:

The powers of the sympathetic nerve are neither entirely physical nor spiritual, but are between the two (systems). The nerve is connected with both. Its phenomena shall be perfect when its spiritual and physical relations are normal.

When the material world and the divine world are well co-related, when the hearts become heavenly and the aspirations grow pure and divine, perfect connection shall take place. Then shall this power produce a perfect manifestation. Physical and spiritual diseases will then receive absolute healing.

The exposition is brief. Ponder and thou shalt understand the meaning. Although, on account of lack of time, the answer is short, by close reflection it shall be made long (TAB 308)³

The present paper attempts to “ponder” the question of the sympathetic nervous system as well as the subject matter of the heart. The heart’s nervous system will be presented, as it has been developed in the new science of neurocardiology.

In the above referenced text ‘Abdu’l-Bahá states that the “physical” and the “spiritual” are “connected by the sympathetic nervous system” and that this “co-relation” affects the heart, which becomes “heavenly” and its “aspiration grows pure and divine.” This “perfect connection” of the spiritual and the physical in the heart “produces a perfect manifestation” and will lead to “absolute healing.” ‘Abdu’l-Bahá promises that this short description will “be made long” by “close reflection.”

In this paper the understanding of the heart as a metaphor is look at and the difference and correspondence between the heart as a biological feature in the material sense and heart as a symbolic feature as is used in poesy, folklore and even theology will be explored. Furthermore, the close reflection will be based on another source of knowledge, which is the new findings of Quantum Mechanics and the philosophical and spiritual conclusions which have been drawn from this new branch of physics. The meaning attributed to the heart in the Bahá’í Writings will be explored to assure that the interpretation of this text is following the Revelation of Bahá’u’lláh.

In the following paper “In the Pure Soil of Thy Heart,” another, equally important question is discussed; the understanding of the physiology of the heart and of its nervous system, “the little brain of the heart.” Can the recent discoveries of neurocardiology help us to understand what the Bahá’í Writings say about the heart? What are the physical functions of the heart, which could be the corresponding natural elements for the spiritual aspect of the heart? It is the knowledge of God that is animating the human heart as Bahá’u’lláh said: *The spirit that animateth the human heart is the knowledge of God.* (GWB 290)

The findings of these papers will be tentative for not all aspects of this issue can be properly explored at this time. It is hoped that further studies of the function of the heart will shed

new light on this issue and will deepen the understanding, not only of the human heart, but also of what the Bahá’í Writings call “*the heart of all that is,*” and the “*heart of the world,*” which is the heart of the universe, also described as “*the city of the heart.*” This heart is the goal of human development and provides the mystical entry in to the attainment of the Manifestations of God. In the Bible this is the “*Word*” that was “*in the beginning*” with God⁴. It is furthermore the cosmic Christ or the point Omega⁵, towards which the whole evolution of humanity moves. The Manifestations, Who are described as the “*Alpha and Omega*” in the Bible are called the “*The First*” and “*The Last*”, the “*True One*” and the “*Beloved One*” of the worlds in Bahá’í Scripture.

Anticipating later explanations, it could be stated here that the heart functions as the physical center of unity of the spiritual and physical aspect of humans and humanity, i.e., the physical and spiritual center of the individual human being, as well as the center of humanity and the world as a whole. An excursion into some philosophical conclusion drawn from findings of quantum mechanics will round the picture and add heuristic features to this elaboration, which hopefully will entice future studies in this area in the field of theology, philosophy and biophysical sciences.

When God’s “beloved ones” acquire the “knowledge and the sciences and the arts”, for which ‘Abdu’l-Bahá encourages us to pray⁶ God will “make them to hear the hidden truths that are written and embedded in the heart of all that is.” This will introduce them into the “city of the heart,” or as Bahá’u’lláh writes at the closure of the Seven Valleys: “this station is the first gate of the heart’s citadel, that is, man’s first entrance to the city of the heart.” (SVFV 41)

The Heart in the Writings of Bahá’u’lláh

To study the concept “heart” in the Writings of Bahá’u’lláh is not an easy task. It is made difficult mostly because it is not easy to describe what heart means in the languages of different cultures and how this concept is used in the Writings.

The Bahá’í Writings are understood in this paper according to the Báb’s explanation about the “Four Modes of Revelation.” These modes are described at length in a book written by Nader Saiedi,⁷ and will be here summarized:

1. *VERSES* (áyát): “The mode of divine verses is the direct revelation of God, uttered in the voice of God as the speaker addressing His creation (an affirmation of ‘I am God’). This mode employs the language of divinity, ascendance and lordship ...” (Saiedi p. 42)
2. *PRAYERS AND SUPPLICATIONS* (*munáját, ad’íyih*); “The mode of prayers and supplications is the reverse of the mode of divine verses. Here the language of revelation is uttered in the voice of the Prophet, but now speaking in the station of the creation, addressing the Creator with an attitude of servitude and effacement (an affirmation of ‘Thou art God’). This mode emphasizes the poverty and powerlessness of the creatures before their Creator... The discourse of prayer is fundamentally an expression of servitude and love – the love of the created being for God...” (Saiedi p. 42)
3. *COMMENTARIES AND SERMONS* (*tafásír, khutáb*); “Commentaries and sermons are uttered in the voice of the Revelator speaking to human beings about God and His words (an affirmation of ‘He is God’). The commentaries are interpretative works that aim to explain, in expository form, the true meanings of the divine verses... The sermons praise and describe transcendental spiritual realities that are the cosmic manifestations of the Word. Often the Báb begins a work with a brief or lengthy sermon that endeavors to connect the reader’s heart and consciousness to the divine verities....” (Saiedi, p.43)
4. *RATIONAL, EDUCATIONAL, AND PHILOSOPHICAL DISCOURSE* (*shu’ún-i-ilníyyig va hikamíyyih*) “...rational, educational, and philosophical discourse – is again spoken in the voice of the Redeemer addressing human beings, but this time using rational arguments to demonstrate the truth of the Word of God and explain the message expressed in the prayers (an affirmation of ‘He is God Who is’). The fundamental function of this mode is to analyze the phenomenal world and to link it to the transcendental realm... The purpose of this mode is to show the signs of the unseen within the visible realm, and to prove the world of divinity and dominion through its manifestations in the earthly world... This mode frequently employs logical argumentation and analysis...” (Saiedi p.43-44)

It obvious that the majority of the quotes from the Bahá’í Writings used in this paper are related to the fourth mode, the rational, educational and philosophical discourse, especially as this discourse relates to the heart. Certain passages from the Verses and from Prayers and Supplications will be used also, especially if they shed light on the issues at hand.

There is one contention – that the concept of Heart is an analogy, taken from the fact that somehow the heart, described here as a muscle, seems to be central to the human body, so everything that is central to a human person is called heart.⁸

As the muscle which is the original source of these metaphorical applications brings life to the whole body, so heart refers to the core-force of personality at the center of its life. Because we do not want to limit the self with the name of intellect alone, or will alone, or feeling alone, nor to see these as separate, we have invented the sensibly opaque name of heart for the identifying core of our agency.

In this monograph the centrality of the heart is used as a metaphor, a figure of speech related to the area of the physical body as explained in medical science, which concept then is extended, or transferred into other areas of understanding. All of this is done with the assumed understanding that the heart is nothing else than a muscle, a medical machine, pumping blood throughout the body and that this function of the heart is regulated by the external nervous system, the autonomous and the central nervous system.

With this metaphorical understanding the attempt is made to explain all that is said in poetry, tradition and folklore about the heart. The religious statements about the heart are placed into a similar category. When we read the many statements of the Bible and in the Bahá’í Scripture, which include the heart, we can do the same, and read them as simple metaphors. This approach allows us to disregard the physical heart and its meaning, and develop an idea about the heart as a metaphorical and spiritual concept, which is not really related very much to anything in the body.

While this is possible, it appears not to be congruous with what Bahá’u’lláh means when He speaks in many ways about the heart, when He speaks about the City or Citadel of the heart and gives the heart functions that certainly not only surpass widely any possible relation to the medical blood pump, but

also goes far and beyond anything that is said in the tradition about the heart as a metaphorical concept.

Bahá'u'lláh for example speaks of the “*eye of thine heart*” (KI 90), or He mentions a person who has “*unstopped the ear of his inmost heart*” (SLH 86), implying that the heart has an ability that can somehow be compared to the senses of hearing and seeing. He states that hearts can be affected by touch telling us that “*hearts have been sorely shaken*” (PM 12). Bahá'u'lláh speaks of a “*wise and understanding heart*” (ESW 65). Bahá'u'lláh places the function of memory into the heart as well, when He lets us pray: “*to make my heart to be a receptacle of Thy love and of remembrance*” (PM 56). He further instructs us to think, meditate or ponder in our heart, saying “*Ponder this in thine heart*” (ESW 74).

The importance of the “Heart” in the Báb's Writings cannot be overlooked either, as He stated:

*Verily, all the letters of this súrih are but one single letter. All variations in the words and meanings therein revert to a single point. That point is, verily, the station of the heart and the sanctuary of unity.*⁹

To quote Saiedi:

To interpret something is to uncover its true meaning. The text that is to be interpreted consists of signs, specifically words, appearing as combinations of letters of the alphabet. The supreme task of interpretation, the Báb explains in this passage, is to elevate these alphabetical signs (which constitute the text) to the highest level of their own reality, the station at which they reveal their true essential nature, or “heart.” The concept of “heart” (fu'ad) is one of the most important principles in the writings of the Báb. The station of the heart is the highest stage of a created being's existential reality. It is the reflection of divine revelation itself within the inmost reality of things. (Saiedi, p. 50)

The task of true hermeneutics is to cause a fundamental transformation in the phenomenal realm: to elevate the phenomena to the station of the heart is to uncover the signs of divine revelation that are enshrined within the reality of those phenomena, and to connect that which is motionless to its true inner

reality of vibrant spiritual motion. This transformation is accomplished within the consciousness of the interpreter. (Saiedi, p. 51)

For the Báb the heart is the central place where the belief in God is centered and the heart encompassed the “expanse of heaven and earth.” When God cheers the heart of the believer this cheerfulness will overflow into the spirit, the soul and the body of the faithful.

Indeed the hearts of them that truly believe in Him Whom God shall make manifest are vaster than the expanse of heaven and earth and whatever is between them. God hath left no hindrance in their hearts, were it but the size of a mustard seed. He will cheer their hearts, their spirits, their souls and their bodies and their days of prosperity or adversity, through the exaltation of the name of Him Who is the supreme Testimony of God and the promotion of the Word of Him Who is the Dayspring of the glory of their Creator. (SWB 145)

In contrast to these rather specific references to the heart, the Bible and the Qur’an talk frequently about the heart, but mainly in the sense of the seat of feelings, or as the place of contact with God, like in Galatians 4:6 “*And because ye are sons, God hath sent forth the Spirit of his Son into your hearts, crying, Abba, Father.*”

Similar to that Pauline statement, Bahá’u’lláh attributes to the heart an exceedingly important capacity; it is the Seat of God’s Revelation in man as He said in many places:

He hath chosen out of the whole world the hearts of His servants, and made them each a seat for the revelation of His glory. (GWB 296)

The one true God, exalted be His glory, hath ever regarded, and will continue to regard, the hearts of men as His own, His exclusive possession. (GWB 206)

27. O SON OF DUST!

All that is in heaven and earth I have ordained for thee, except the human heart, which I have made the habitation of My beauty and glory. (PHW 27)

The human heart is therefore the special and exceptional place for the Revelation of God, it is the exclusive possession of the one true God and it is the habitation of God's beauty and glory. One can only wonder what it is about the human heart that it can function in these exalted ways and become such an exceptional and unique place for the Revelation of the Glory of God and the Mystery of God's approach to man. We will in the course of this paper find some answers to this question, which answers need to be developed to a deeper and improved understanding in the future.

Again, all of this can be understood simply as a metaphor, but it raises the question if there is more to say about the heart than it being a medical and mechanical blood pump. The metaphorical understanding has consequences, especially if the figure of speech is not related to any real property of the heart, but only to a tradition and an unscientific concept, from a time when the body was just not understood in its medical functioning. Or we could say the human body at previous times was not seen as a biological machine, which is its only function, according to the prevalent medical understanding.

This is a question which needs to be raised for any metaphor. Is there something that allows us to make this comparison and create a metaphor; is there an intrinsic reason for this figure of speech or is it purely a convention? Or is it just an accepted allegory, which has no reality except in the mind and culture of people using it? We must ask if the material world from which the metaphor is taken has any real connection to the spiritual world, which is described in these metaphors. The answer given in this paper is positive; there is an internal connection between spirit and matter, between soul and body, between mind and brain and between the heart as a physical organ and the heart as the seat of God's Revelation.

There is one issue that makes us wonder if that is all that can be said about the heart and how this word is used in different cultures, in poetry in folklore and even in common understanding. Since almost all languages use this figure of speech in a similar way, we have to assume that there is in most cultures a general human tradition that points to the heart in explaining all these properties of man. From there the question arises, is there more to it, than an external and cultural tradition? In other words, is there a reality underneath and embedded in the human organism that makes us think so? Medical science and biology certainly have not given an answer

to this question so far. It describes the heart simply as “a muscular organ responsible for pumping blood through the blood vessels by repeated, rhythmic contractions.”¹⁰

Another question needs to be considered here, and it is probably an even more difficult question, because there is not much in that tradition about the heart, which will help us in this case. I will make a comparison that could help. We have the same problem with the heart as we have with the brain. We used many different words which are related to the brain. For example we use mind, reason, intellect, we use consciousness, understanding, knowledge and even words like thinking, judging, willing and many other things that supposedly happen in the brain. And there are even people, especially scientists, who would say that all of those words and concepts mean nothing else than the electromagnetic and chemical processes that happen in the brain, or, more specifically in the synapses of the brain.

Nevertheless, the assumption is generally made that there is a difference between the brain and the mind. Then one might identify the physiology of the brain and claim that the mind is using the brain in order to function. If we assume that this distinction is correct then we have to follow with the assumption that what is happening in the mind has a reflection in the brain. In other words, when the mind is functioning something does happen in the brain, but what’s happening in the brain does not fully explain what’s happening in the mind.

It seems one can say that the brain is used by the mind as an instrument, which allows it to become materialized and be expressed in physical words or actions. That naturally assumes that the spiritual reality of the mind and the material realities of the physical world are connected somehow in the brain. And that is very similar to what Bahá’u’lláh has said, not only about the mind, but also about the spirit, the soul, and the powers of the senses:

Say: Spirit, mind, soul, and the powers of sight and hearing are but one single reality which hath manifold expressions owing to the diversity of its instruments. As thou dost observe, man’s power to comprehend, move, speak, hear, and see all derive from this sign of his Lord within him. It is single in its essence, yet manifold through the diversity of its instruments. This, verily, is a certain truth. (SLH 154)

Following this word we can say that spirit, mind, soul, and even the power of the senses must be differentiated from the physical and organic instruments they use. This is an interesting and rather new idea and it brings us right into the area of science, especially physical science, where many instruments are used to improve the understanding of reality. For example, physics uses the Geiger counter as an instrument to learn about subatomic particles and making conclusions about the reality of physical nature that were unexpected and revolutionary and even developing a new science called quantum mechanics.

In a letter to a person deprived of physical sight 'Abdu'l-Bahá has applied the meaning of the statement of Bahá'u'lláh that the sense organs are only the instruments of the spirit:

O thou possessor of a seeing heart! Although, materially speaking, thou art deprived of physical sight, yet, praise be to God, spiritual insight is thine. Thy heart seeth and thy spirit heareth. Bodily sight is subject to a thousand maladies and assuredly will ultimately be lost. Thus no importance should be attached to it. But the sight of the heart is illumined. It discerneth and discovereth the divine Kingdom. It is everlasting and eternal. Praise God, therefore, that the sight of thy heart is illumined, and the hearing of thy mind responsive. (SWA 37)

The blind man's heart sees, 'Abdu'l-Bahá states, and his spirit hears, it sees and hears, it discovers and discerns the *divine Kingdom*. Here the instrument of the spirit, the sight, is lost, nevertheless the person's mind, the man's spirit can see and hear what is most important, because the sight of *the heart is illumined*. The thought that the human spirit can be in contact with the divine Kingdom, even if the senses are lost, is certainly a comforting thought, when considering the fate of children, dying early in life and the fate of all human beings with limited perceptual and even intellectual capacity.

When considering the concept "heart" in all its different uses, especially in its metaphorical uses, we have to be aware of another fallacy of understanding. Ken Wilber¹¹ has described this Pre/trans fallacy applying it to the development of reason, by saying: "since both, pre-rational states and trans-rational states are, in their own ways, non-rational, they appear similar or even identical to the untutored eye. And once 'pre' and

‘trans’ are confused, then one of two fallacies occurs.” Before describing these fallacies, it needs to be noted that this is a general principle of understanding evolution and it applies, even if the specific development of the mind, as Wilber describes it, is modified.

We all can agree with him about pre-rational states of evolution, such as the magic and mythic stages in the development of the thinking process of mankind. At the present time, we can be described as mainly living in the rational state, when reason and logic is prevalent in the thinking world. Wilber calls these stages the formal operational stage in the development of reason. He projects future stages such as vision logic as the first of several trans-rational stages. In the Viennese tradition¹² of Integral Logic, what Wilber calls vision logic could as well, and possibly better be described as integral logic.

This way of thinking will be described below; here the two possible consequences of the pre/trans fallacy will be described. One or the other of them follows consistently when the differentiation between pre-rational and trans-rational is not seen.

1. “Higher trans-rational states are reduced to lower pre-rational states. Genuine mystical or contemplative experiences, for example, a-dualism are seen as a regression or throwback to infantile states of narcissism, oceanic, in-dissociation and even primitive autism. This is, for example, precisely the route taken by Freud in *The Future of an Illusion*.”
2. “On the other hand, if one is sympathetic with higher or mystical states, but one still confuses pre and trans, then one will elevate all pre-rational states to some sort of trans-rational glory. ... Jung and his followers, of course, often take this route, and are forced to read a deeply transpersonal and spiritual status into states that are merely in-dissociated and undifferentiated and actually lacking any sort of integration at all.”¹³

It is important to apply this distinction to all writings, especially the Writings of the Bahá’í Faith. The expressions about the heart are not to be fallaciously mistaken for mystic or magic understanding; they are beyond these more primitive understanding and are only explicable after the modern distinction and separation of the human abilities have been

taken into account. Then, and only then, will the new insight presented by Bahá'u'lláh really be understood and its far-reaching meaning be appreciated.

Many people have mentioned that when they first became a Bahá'í they understood the Writings in a poetic sense and admired them on a symbolic level. Later, after thorough reading and meditating on what they had read, they found deeper meaning and developed a better sense of what the Writings convey.

It is this writer's opinion that we have to develop this integral thinking in order to understand the Bahá'í Writings. For example, Shoghi Effendi calls the Watchword of the Faith, "Unity in Diversity." This principle is a good an example of an integral concept that should never be confused with a primitive pre-logical way of fuzzy thinking, nor should it be assumed that prior mythical or magic thinking could have had a similar differentiated understanding of reality. On the other hand, the magic understanding can function as an introduction and preparation towards the higher and more differentiated understanding we have now.

This is, one needs to say, a totally new way of thinking about reality. Leo Gabriel has expressed this concept of the Integral Whole (Integrale Ganzheit), when he wrote (translated by this writer):

Talking about the Whole (Ganzheit) and Gestalt, as I emphasized before, is a methodological concept, a new way of thinking, a new way of perceiving reality, which breaks with a long tradition. It is therefore, an essential change in thinking and a true revolution, which started with this century and which anticipates a new epoch of the spirit. It is a "metanoia," a change for a new world vision and a new way of thinking.¹⁴

It is noteworthy to remember in this context of the "Integrale Ganzheit" the statement of the Báb about the difference between reason and the heart. Only the heart can understand the Divine Unity and Transcendence, a view that was not available to Leo Gabriel, who spoke about the new epoch of the spirit and a new way of thinking, about 100 years after the death of the Báb. The role of the heart in understanding Unity and Transcendence of God was described by Nader Saiedi in his book "Gate of the Heart" when he translates the Báb's statements (pp. 211-212):

For, verily, reason, even in its utmost level of abstraction, is confined to understanding mere limited phenomena, which fail to guide humans unto the summit of the delight of their heart.

That which is beyond these two extremes, which is the Middle Path ... can be comprehended by naught save the heart. God hath created the heart to understand His unity and transcendence and it is through the heart that Divine Unity can be witnessed at the level of action.

It appears to this writer that this new way of thinking, which the thinking world is slowly recognizing, was expressed in the Bahá’í Writings a century ago and is only now being identified by philosophy and psychology. To follow this process is the topic of these considerations. In order to summarize what has been said before, it must be stated that the Bahá’í Writings seem to provide the following understanding of the function of the heart.

The human spirit is a single reality that expresses itself in the different perceptual and executive organs of the human body, such as eye, ear, touch, smell, and movement, speech and touch. Furthermore, the same applies to the heart; it is as a human organ the instrument of the spirit, and it has the functions of the senses as well as of the brain. In other words, while life of the mind expresses itself through brain and the senses, the heart has the same function, except that we do not usually consider this fact and use these function in a metaphorical sense only. Yet, according to the Báb, mind or reason is confined to mere limited phenomena, while the heart is created by God to understand unity and transcendence which explains the new understanding of reality as Leo Gabriel has pointed out above.

There are some statements of Bahá’u’lláh that can be interpreted by assuming that there are two realities to the human existence, the *outward* and the *inmost* aspect. When Bahá’u’lláh talks about the *heart of my heart*, the *spirit of my spirit* and even the *tongue of my tongue*, should we not assume that He talks about different and yet connected realities, as above about the unity of the spiritual aspect of man and the variety of the instruments that express the human spirit in the physical reality? The statement below certainly has many meanings, but this interpretation might be one of them.

O Lord! The tongue of my tongue and the heart of my heart and the spirit of my spirit and my outward and inmost beings bear witness to Thy unity and Thy oneness, Thy power and Thine omnipotence, Thy grandeur and Thy sovereignty, and attest Thy glory, loftiness and authority. I testify that Thou art God and that there is none other God besides Thee. (TB 114)

The Physical Heart as a Metaphor for the “Spiritual Heart”

	<h1>The Heart</h1> <p>Physical Medical</p> <p>Spiritual Religious</p> <h2>In Thine Hearts of Hearts</h2>	
<p>Traditional View: Medical-Biological Pump Physical Center of Body</p>	<p>Poetic, Ethical, Philosophical, Religious Idea Center of Life and Meaning</p>	
<p>Neurocardiology Able to Learn, Remember, and make Functional Decisions In- dependent of the Cranial Brain</p> <p>Quantum Mechanics Connection to the Universe?</p>	<p>Bahá’í Writings It t is Good, Pure, Cold, Hard, can: Understand, Ponder, Learn, See, Hear etc. Heart of All that Is Seat of Revelation from God</p>	

Later, when considering the new science of neurocardiology we will bring more light into this relationship. Additionally, we will apply Quantum Mechanics to this relationship between the spiritual and unified aspect of man and its instrumental and physical aspect.

Following this idea throughout this paper, it will carry us into different areas of understanding, such as the unity of the world, the relation between matter and spirit, and into some of the conclusions of quantum mechanics and neurocardiology.

A caveat has to be expressed here. All the findings of this paper are speculative and provisional, in other words, they are not expressed here with the certainty of science but, while based on scientific findings, they are extrapolations of these

findings. Since they are perceived as being in harmony with statements of the Revelation of Bahá’u’lláh, it is assumed that they carry a certain validity, which needs to be further developed. Religious truth is relative as the Guardian of the Bahá’í Faith claimed, meaning that it is progressively coming into the light of investigation, which process has been previously described by this writer as progressive theology.

The Unity of matter and spirit in philosophical and quantum mechanical considerations

The question of unity of spirit and matter can be solved in different ways. The simplest solution is to deny that there is a question and to eliminate one or the other side of it. While today the elimination of matter as a reality is rather difficult to claim, to eliminate spirit is easy and has been done in the name of science quite generously.

In last year’s paper¹⁵ the connection of consciousness with physical action as developed by Walker¹⁶ was described at length. Here only a brief recapitulation will be given.

The astounding fact in this comparison is the new science of quantum mechanics, which according to Walker gives an explanation of the possibility of the spiritual affecting the material in quantum events in the synapses of the nervous system in the brain. These quantum effects, which are not deterministically defined by cause and effect, can be influenced by the observer, i.e., by the consciousness of the human mind.

Therefore, according to Walker, the spiritual mind can influence matter at the level of the undetermined quantum processes in the brain’s synapses that are small enough to allow quantum effects to happen. Walker describes this process in detail with the physics of quantum mechanics. In the context of this description he explains a number of functions of the mind, like sleep, ability to influence matter in rare cases, and why the power of the mind is usually restricted, as common sense experience tells us.

Another not yet considered question is the effect of the little brain of the heart (as described below), which does not have consciousness. Walker does not consider this, but it needs to be included in this equation, a rather new and difficult task. The difficulty is based on the fact that we do not know enough about this “little brain of the heart,” to make cogent

conclusions. In the following we will make some conclusions from known facts Quantum Mechanics and of Neurocardiology.

The concepts of Emergence, Enchantment, Entanglement, and Excellence of the Cosmos are used in explaining and interpreting the conclusions from quantum mechanics for the heart. What was said in the previous paper will here be applied to the heart.

Emergence

The Nobel Prize laureate in physics, Robert B. Laughlin, developed the concept of emergence in his book: *A different Universe, Reinventing physics from the bottom down*.¹⁷ In other words, reality is defined by a view that takes the whole into consideration, and this whole is a whole that integrates its parts; it is an integrated whole. If this concept is applied to the human heart, we can see that the heart is the unifying principle of the body as well as the spiritual principle that unifies reality and makes unity understood, while reason is concerned about particulars and parts. This was stated by the Báb in the following words:

*For, verily, reason, even in its utmost level of abstraction, is confined to understanding mere limited phenomena, which fail to guide humans unto the summit of the delight of their heart.*¹⁸

*That which is beyond these two extremes, which is the Middle Path ... can be comprehended by naught save the heart. God has created the heart to understand His unity and transcendence, and it is through the heart that Divine Unity can be witnessed at the level of action.*¹⁹

Modern neurocardiology does recognize the intellectual capacity of the “little brain of the heart” as will be shown below, but the contribution of the heart to human understanding and consciousness needs to be explored in the future and is a matter of psychology, rather than neurocardiology alone. According to the Bahá'í Scriptures, we can say that God has created the heart to understand His unity and transcendence and it is through the heart that Divine Unity can be witnessed at the level of action, i.e., in reality.

Enchantment through Spirituality

Ervin Laszlo in his book *Science and the Reenchantment of the Cosmos, the Rise of the Integral Vision of Reality*²⁰ describes the changes quantum mechanics has made to the understanding of the cosmos:

The current finding of the universe’s wholeness is the fruit of sustained investigation, based on observation and tested by experiment. It provides an entirely different image of the world than the mechanistic, materialistic and fragmented image we were taught in school. A cosmos that is connected, coherent, and whole recalls an ancient notion that was present in the tradition of every civilization; it is an enchanted cosmos. (p. 2)

This view of the cosmos brings spirituality and enchantment into the understanding of reality and it can be directly applied in the description of the Báb as the summit of the delight of their heart.

Verily, these are souls who take delight in the remembrance of God, Who dilates their hearts through the effulgence of the light of knowledge and wisdom.
(SWB 145)

Or as Bahá’u’lláh has described this enchantment in a Hidden Word:

O FRIEND!

In the garden of thy heart plant naught but the rose of love, and from the nightingale of affection and desire loosen not thy hold. Treasure the companionship of the righteous and eschew all fellowship with the ungodly.
(PHW 3)

Entanglement in Unity

Erwin Schrödinger, born near Vienna, Austria, (1887-1961) formulated the importance of this concept:

I consider [Entanglement or “Verschränkung”] not as one, but as the characteristic trait of Quantum Mechanics, the one that enforces its entire departure from classical lines of thought.²¹

In other words all parts of the universe are entangled, interwoven or intertwined with each other; the universe is a whole and is organized as mentioned above in emerging units on all levels of existence.

Consider this: In an experiment contrasting stimuli were randomly presented on a computer screen to the observer, one was presented to elicit feelings of love and acceptance, the other fear and anxiety. The hearts of the candidates responded accordingly as measured by the heart rate variability. The surprising fact was that they responded about 7 seconds before the computer started the random selection process.

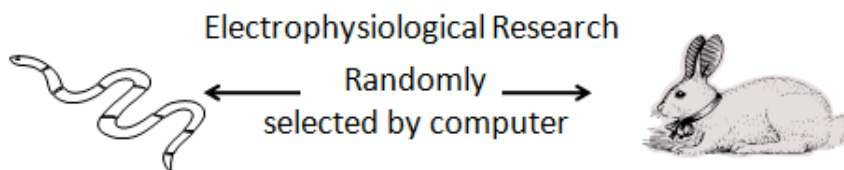
In other words, even before the computer started to select the respective picture, the heart already responded to what the senses would perceive only seconds later. This reversal of cause and effect cannot be explained in classical physics. Another fact of entanglement is the widely observed fact that people are aware of events that happen in distant areas, sometimes so far away that any physical connection must be excluded.

Consequently, it has been established scientifically that the heart is the first to perceive input from the perception through the senses. As a matter of fact, it could be proven experimentally that changes in sensual input are detected by the heart seconds before the random computer program is started that will select the presentation to the senses.

Of greatest significance here is our major finding, namely, the electrophysiological evidence that the heart is directly involved in the processing of information about a future emotional stimulus seconds before the body actually experiences the stimulus.” ... “The heart appears to play a direct role in the perception of future events.”²²

Only quantum mechanics can explain the findings of neurocardiology that the heart has intuition, i.e. that it can perceive physical events before they are presented to the senses, and the other widely known fact that the heart can know of events that happen far away.²³

Intuition of the Heart



Our major finding:

The heart processes information of a future emotional stimulus seconds before the body actually experiences the stimulus.”

“The heart appears to play a direct role in the perception of future events.” Rollin McCraty, 2004

Intuition of the heart transcends time and space

In the Seven Valleys Bahá’u’lláh describes this shining quality of the heart manifesting the oneness of the world.

Whensoever the light of Manifestation of the King of Oneness settleth upon the throne of the heart and soul, His shining becometh visible in every limb and member.
(SVFV 22)

Excellence of the Cosmos

Evan Harris Walker in his book “The Physics of Consciousness, The Quantum Mind and the Meaning of Life”²⁴ describes consciousness and its interaction with the brain:

Consciousness is the collection of potentialities that developed as these electrons and these structures of the brain interact (as quantum elements). (Walker 237)

By creating the possibilities that we experience as consciousness and by selecting – by willing – which synapse will fire, mind brings into reality each moment’s thoughts, experiences and actions (Walker 237)

Walker at a conference at Berkeley “New visions of reality” said “What we have been doing here is laying the foundations for a religion of the twenty-first century.” (Walker 328) He concludes his book:

Some have failed to see any place — any space — where God could reside, and others have failed to see where any consciousness could hide within the atoms of matter. But we have found that reality. We have found that hidden place. We have seen that the universe springs from every thought of God and matter from the very existence of mind. (Walker 337)

What needs to be emphasized is the fact that Walker does not talk about the nervous system of the heart, yet his thinking about the central nervous system must be applied, *mutatis mutandum*, to the heart as well. The most important change from the central nervous system to the so called “little brain of the heart” is the fact that the latter does not have consciousness, a fact we all know. Decisions of the heart become conscious only in the mind, and cannot be directly understood in our consciousness; therefore they often remain unchecked and not clarified by reason. Nevertheless, they are frequently followed and executed by the conscious mind in the life of people, sometimes with questionable results. This issue will be further pursued below.

The heart as the seat of the Revelation of God has been described above and needs to be incorporated here, consequently the place “where God resides” as Walker describes it, is not consciousness, but the heart, where consciousness is absent. The physical heart and its “little brain” is the center, where the spiritual and the material meets and it is in contact and constant communication with the brain and the mind, where consciousness is present. All of this is understandable only when we take the statement of Bahá'u'lláh serious — that the spiritual in man is one single reality, yet it is differentiated by its bodily instruments.

Spirit, mind, soul, and the powers of sight and hearing are but one single reality which hath manifold expressions owing to the diversity of its instruments.
(SLH 154)

NOTES

¹ This text is based on a compilation entitled “Education”, which is included in a two-volume set entitled *The Compilation of Compilations*, Volume I, p. 251, Copyright 1991 Bahá’í Publications Australia, Maryborough, Victoria, Australia: “O Lord, help Thou Thy loved ones to acquire knowledge and the sciences and arts, and to unravel the secrets that are treasured up in the inmost reality of all created beings. Make them to hear the hidden truths that are written and embedded in the heart of all that is.”

² In this paper the two or three letter abbreviations of the Bahá’í Writings are used compiled by Jonah Winters and Brett Zamir: bahai-library.com. All texts from *Scared Scriptures* are in italics.

³ This e-text is based on “Tablets of Abdul-Baha Abbas” Bahá’í Publishing Committee, New York, Copyright (c) 1930 by the National Spiritual Assembly of the Bahá’ís of the United States, All Rights Reserved, p. 308, a provisional translation. As to the authenticity of this tablet the following information from Roger Dahl, Archivist of the National Bahá’í Archives was provided:

That Tablet, which is on page 309, was to a Dr. E.H. Pratt of Chicago. The Archives does not have the original Tablet but we do have the translation that Dr. Pratt sent to Albert Windust which was used in publishing the book. From a note by Albert Windust apparently ‘Abdu’l-Bahá gave permission for the Tablet’s publication, which Dr. Pratt had requested.

There is always the possibility that the World Center Archives has the original Tablet. The translation was done by Ameen Farid on October 4, 1905 in Chicago.

⁴ The Gospel of John could be called the Gospel of the Manifestation in the sense of the Bahá’í Writings. This becomes apparent when we consider the eternal “Word” in the beginning (John 1:1) and the long discussion throughout the Gospel with the Pharisees and Jewish officials about the station of Jesus and the law of the Sabbath. Jesus claimed to follow Moses (see John 5:46): “For had ye believed Moses, ye would have believed me; for he wrote of me,” which was referring to Deuteronomy 18:15 “The LORD thy God will raise up unto thee a prophet from the midst of thee, of thy brethren, like unto me; unto him ye shall hearken,” and later in Deuteronomy 18: 20, “But the prophet, which shall presume to speak a word in my name, which I have not commanded him to speak, or that shall speak in the name of other gods, even that prophet shall die.” Jesus was crucified when the high priest claimed the same passages to Pontius Pilate (see John 19:7): “When the chief priests therefore and officers saw him, they cried out, saying, crucify him, crucify him. Pilate saith unto them, Take ye

him, and crucify him: for I find no fault in him. The Jews answered him, we have a law, and by our law he ought to die, because he made himself the Son of God.” The law they quote must have been this law of Deuteronomy quoted above. This connection is typically not followed up in the Christian literature, and the specific reference is not provided in the translations of the Bible. The Jerusalem Bible (Doubleday and Co., New York 1966) for example, a completely reference edition, only refers to Leviticus 24:16 (where it is stated that the community has to stone such a man, which they had tried in the past to do to Jesus) and not to the passage of Deuteronomy. This connection and understanding of the station of Jesus becomes only apparent when we consider the Gospels in the light of the Bahá’í Revelation and the concept of Manifestation.

⁵ Book of Revelation 1:8, I am Alpha and Omega, the beginning and the ending, saith the Lord, which is, and which was, and which is to come, the Almighty. but Christ is all, and in all.

⁶ See footnote 1

⁷ Nader Saiedi, *Gate of the Heart, Understanding the Writings of the Báb*, Wilfried Laurier University Press, (Bahá’í Study Series), Canada 2008, ISBN 978-1-55458-035-4 in the Chapter “The Modes of Interpretation, pp. 39-66, especially pp. 42-45

⁸ Thomas Taaffe, in *Cross Currents*, Fall 95, Vo. 45, Issue 3, “Education of the Heart” p. 380-392, It needs to be stressed that Taaffe in his article contributes very important aspects to the “Heart”, even if this definition seems to limit him.

⁹ Saiedi, *ibid.* p. 113

¹⁰ Wikipedia see under “heart”

¹¹ Ken Wilber, *Sex, Ecology and Spirituality, The Spirit of Evolution*, Shambhala, Boston & London, 2000, ps. 210-230

¹² Leo Gabriel, *Logic der Weltanschauung (Logic of the world view)*. Verlag Pustet, Graz-Salzburg, Wien (Vienna Austria), 1949,

¹³ Wilber, *ibid* p. 211

¹⁴ Gabriel *ibid.* p. 16

¹⁵ The Paper was presented at the Irfán Colloquia in Bosch 2007 under the Title “The emerging Universe, Emergence, Enchantment, Entanglement, and Excellence of the Cosmos.”

¹⁶ Walker, Evan Harris, *The Physics of Consciousness, The Quantum Mind and the Meaning of Life*, Basic Books, A Member of the Perseus Books Group, New York, 2000, pp. 165-214

¹⁷ Laughlin, Robert B., *A Different Universe, Reinventing Physics from the Bottom Down*, Basic Books, A Member of the Perseus Books Group, New York 2005

¹⁸ Saiedi, *ibid.* p. 211

¹⁹ Saiedi, *ibid.*, p. 212

²⁰ Laszlo, Ervin, *Science and the Reenchantment of the Cosmos, The Rise of the Integral Vision of Reality, Inner Traditions, Rochester, Vermont, 2006*

²¹ Quoted in Ghirardi’s, *ibid.* p. 165

²² Rollin McCraty, Mike Atkinson and Raymond Trevor Bradley: “Electrophysiological Evidence of Intuition: Part 1. The Surprising Role of the heart” in *The Journal of Alternative and complementary Medicine*, Volume 10, Number 1, 2004, p. 140

²³ This writer “knew” of his father’s death while listening to an opera many miles away from the hospital where he died. It was not a thought; it was nothing unusual, it was just a sure knowledge, simple and clear that stood up in the mind and it was verified minutes later when I called my brother. This is explained as the knowledge of the heart communicated to the mind. Events like this are reported by many people and can only be explained by the quantum concept of Entanglement.

²⁴ *Basic Books*, New York 2000, henceforth pages are indicated as W p.#