



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Reverting Consciousness in Mind to Inner 'Self'

Nor Azmi Ramli, Ainul Mohsein Abdul Mohsin, Noor Shakirah Mat Akhir and Noor Aida Md Noor

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i1/10879> DOI:10.6007/IJARBSS/v12-i1/10879

**Received:** 03 November 2021, **Revised:** 05 December 2021, **Accepted:** 26 December 2021

**Published Online:** 14 January 2022

**In-Text Citation:** (Ramli et al., 2022)

**To Cite this Article:** Ramli, N. A., Mohsin, A. M. A., Akhir, N. S. M., & Noor, N. A. M. (2022). Reverting Consciousness in Mind to Inner 'Self.' *International Journal of Academic Research in Business and Social Sciences*, 12(1), 585 – 603.

**Copyright:** © 2022 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

**Vol. 12, No. 1, 2022, Pg. 585 – 603**

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



[www.hrmar.com](http://www.hrmar.com)

ISSN: 2222-6990

## Reverting Consciousness in Mind to Inner 'Self'

<sup>1</sup>Nor Azmi Ramli, <sup>2</sup>Ainul Mohsein Abdul Mohsin, <sup>3</sup>Noor Shakirah Mat Akhir and <sup>4</sup>Noor Aida Md Noor

<sup>1</sup>School of Management, Universiti Sains Malaysia (USM), Malaysia, <sup>2</sup>School of Management, Universiti Sains Malaysia (USM), Malaysia, <sup>3</sup>School of Humanities, Universiti Sains Malaysia (USM), Malaysia, <sup>4</sup>School of Management, Universiti Sains Malaysia (USM), Malaysia

Email: ainabulmohsin@usm.my

### Abstract

During the Era of Enlightenment in the 17<sup>th</sup> century, the unobservable subjects of the mind and spirit, termed as Super-Natural Philosophy, were left to the Church. What was observable, termed Natural Philosophy, came under the purview of scientists. This detachment bifurcated science from theology. In Natural Philosophy, physical matters of nature no more have a connection to the Transcendent, where they could be analysed via experiments and observations and explained by way of Reductionism. The 20<sup>th</sup> century witnessed the advent of Quantum Physics. A group of Quantum Physicists hold the ontological stance that humans are the existence of physical and non-physical at-once and believe in "non-physical as origin of consciousness". The novelty of this paper is its focus on the phenomenological aspect of consciousness. It postulates that the human spiritual anatomy, which interfaces with the human brain, explains human consciousness. This understanding is based on al-Ghazali's Theory of the Soul, dating back from the 12<sup>th</sup> century. The purpose of this paper is intended to enable reverting consciousness in mind to inner 'Self'.

**Keywords:** Consciousness, Human Governance, Human Model, Inner 'Self', Spiritual Anatomy

### Introduction

Before the recent substantive research done in neuroscience, psychology, and neuropsychology, consciousness was regarded with cynicism by many scientists. Consciousness means the "quality or state of awareness or, of being aware of an external object or something within oneself" (Gulick, 2004, as cited in Lou, 2012, p. 2). It has been defined as "sentience, awareness, subjectivity, the ability to experience or to feel, wakefulness, having a sense of selfhood, and the executive control system of the mind" (Farthing, 1992, as cited in Lou, 2012, p. 2). Most people know the feeling of having consciousness. This sense of personal awareness which is self-evident gives the "feeling of ownership and control over the thoughts, emotions, and experiences that we have every day" (Oakley & Halligan, 2017, para. 1). Consciousness has been classified into Definitional, Phenomenological, Epistemological, Ontological, and Axiological (Niikawa, 2020).

Dossey (2009) has stated that consciousness, as suggested by myriads of experiments and millions of testimonials, is the ability to function beyond the brain and body. When scientists

have enough boldness to confront the evidence that consciousness cannot be the same as brain, one of the greatest superstitions of our era, the opinion that the brain creates consciousness or is one and the same will collapse. In its place will appear “a nonlocal picture of mind” (Dossey, 2009, para. 20). By nonlocal it means infinite, i.e. not localised to any particular points in space, like bodies or brains (Dossey, 2009). This foresight becomes more conscious through Quantum Physics, whereby Valverde (2015, p. 504) suggested that it has uncovered “space and time are illusions of perception... what we are able to perceive with our five senses is not reality” and that the true consciousness is not located in the brain or body. An experiment conducted at the University of Manchester revealed that the internal form of an atom is nearly wholly empty. If our body does not fill the bulk of the space in which it appears to fill, then it cannot truly be a reality. Quantum Physics further claims; In its essential atomic state, the body is made of energy and information, not solid matter. There is a core of being, an energy field that creates immortality in nature, and manifests as the physical body. This core is the essential being or soul. (Valverde, 2015, p. 504) This paper focuses on the phenomenological aspect of consciousness which encompasses the questions on content, dimension and structure. The novelty of this paper is its postulation of the human spiritual anatomy which interfaces with the human brain. It attempts to explain the human consciousness using al-Ghazali's Theory of the Soul from the 12<sup>th</sup> century. The purpose of this paper is to enable reverting consciousness in mind to inner ‘Self’.

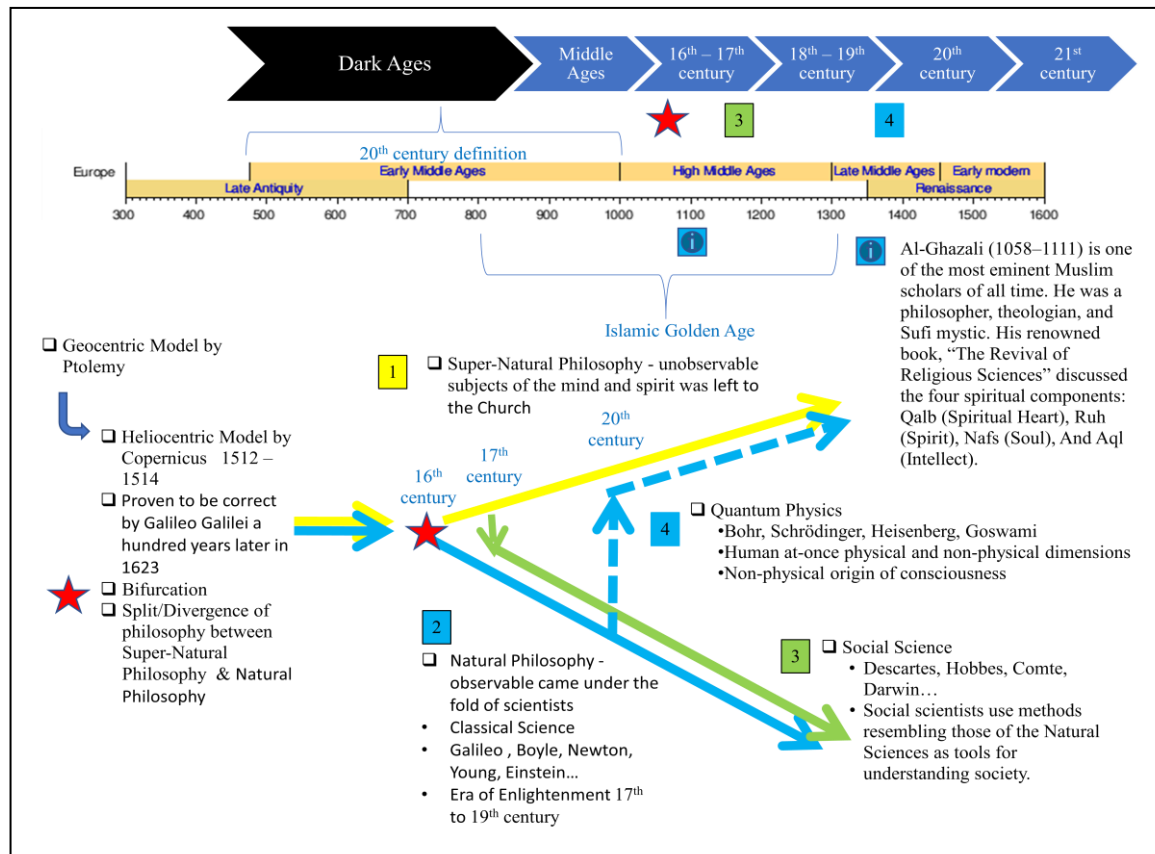
### **The Era of Enlightenment**

Prior to the Era of Enlightenment, the common worldview comprised of “an integral one where there was oneness and balance between reason and rationality with intuition, inspiration, insight, instinct and illumination as features for decision-making” (Salleh, 2015, as cited in Matsham, p. 15). In the 16<sup>th</sup> century, things started to change when a novel but radical idea came to light. Nicolas Copernicus proposed the heliocentric model whereby the Earth rotates around the sun, similar to other planets. This challenged the then dominant Ptolemaic worldview (Geocentric Model) that presumed the centre of the universe was the Earth. This radical idea was confirmed to be truthful by Galileo Galilei a hundred years later in 1623. He used the telescope that he invented in his study and published the findings (Hopper, 2009, as cited in Matsham, 2019, p. 15). It was considered to be blasphemous to question the authority of the Church regarding the truth of the doctrine that the centre of the cosmos was Earth. This revolutionary idea also challenged commonly acknowledged Aristotle's system of Scholasticism where truth was attained by quoting authority. Thus, it was also considered as scientifically controversial too (Gleiser, 2017 as cited in Matsham, 2019, p. 16).

During the Era of Enlightenment from the 17<sup>th</sup> to 19<sup>th</sup> century, Empiricism became the way to view the world. As stated by Willis Harman, “What is true is what is found by scientific inquiry to be true. Ultimate authority resides in observation and experiment rather than tradition”. Rene Descartes, a French philosopher, developed the philosophy of dualism to conclude that the two dimensions of matter (material) and spirit (non-material) were diverse and non-interacting (Hopper, 2009, as cited in Matsham, 2019, p. 16). The unobservable subjects of the mind and spirit termed as Super-Natural Philosophy were left to the Church. What was observable, termed as Natural Philosophy, came under the purview of scientists (Salleh, 2015, as cited in Matsham, 2019). This detachment bifurcated science from theology. In Natural Philosophy, nature comprising of physical matter now no more have any connection to the Transcendent, which could be analysed via experiments and observations

and explained by way of Reductionism. Thus, the complexity of nature can be understood by reducing it to the sum of its parts or individual constituents (Kallio-Tamminen, 2004, as cited in Matsham, 2019).

The chronology on the bifurcation of philosophies and positioning of Classical Science, Social Science Quantum Physics in relation to Super-Natural Philosophy up to the present day is depicted in Figure 1.



**Figure 1: Chronology on the Bifurcation of Philosophies**

From the 17<sup>th</sup> century, the Western worldview was influenced by Classical Science, believing in the physical aspect of humans. Non-physical (spiritual) was the matter of religion. However, the 20<sup>th</sup> century saw the advent of Quantum Physics, wherein the human non-physical dimension is reunited with the physical dimension.

### Quantum Physics

Quantum Physics (also called Quantum Science or Quantum Mechanics) began when an English scientist Thomas Young performed an experiment termed as the Double-Slit Experiment in 1803. It was done to test the then prevalent belief that light is in the state of a particle. According to the results, the state of light can be a particle or wave depending on the equipment used to observe it. As a result, matter is no longer behaving predictably at the very small subatomic level (quantum). The scientists were inspired by the result of Young’s experiment to explore further the two states of light. Scientists now found that light when observed acted like a particle (Hopper, 2009, as cited in Matsham, 2019). Light behaves like a wave if left on its own signifying the probability of all possible positions. This means the behaviour of the observed can be affected by the observer’s mind or consciousness (Stapp,

2007 and 2011, as cited in Matsham, 2019). This behaviour is now called the “Observer Effect.” Classical Science's core principle of objectivity was being challenged: the observer cannot bracket himself from the results of the experiment without interfering with them (Matsham, 2019, p. 18). Erwin Schrödinger and Werner Heisenberg discovered matter at the sub-atomic (quantum) level persists to be “in a state of indeterminacy until it is observed” (Hopper, 2009, as cited in Matsham, 2019, p. 18). Forwarding their “Uncertainty Principle”, Schrödinger and Heisenberg revealed an observer can be knowing either what an electron is doing or where it is, but not both simultaneously (Richardson, 2015, as cited in Matsham, 2019, p. 18). Thus, two bits of matter at quantum level, for example, photons, could act similarly even after separation (Kallio-Tamminen, 2004, as cited in Matsham, 2019). It means although separated, these subatomic particles remain connected regardless of distance in space or time. This behaviour is known as “Entanglement.” Instead of “either/or”, a new thought tradition of “both/and” probabilistic thinking perspective has been introduced as a result of the behaviour of light as “both” particle “and” wave (Matsham, 2019, p. 8). Quantum Physics is based on the duality nature of light, i.e., particles (analogous to physical; body) and waveform (analogous to non-physical; spiritual). Thus, this understanding suggests that humans are the existence of physical and non-physical at-once.

There are 3 groups of Quantum Physicists.

Group 1: Those who do not want to be bothered with consciousness. They rather hold on to the "calculation" or the empirical aspect of science (Matsham, 2019, p. 80).

Group 2: Those believing that consciousness exists but materialises from matter, namely the brain, a path which neuroscience have embraced (Matsham, 2019). Quantum Physics was first developed within the non-native English speaking physicists' community, most notably those who speak German. Schrödinger's original work, “Geist und Materie” was translated into English as “Mind and Matter.” The German noun Geist means spirit and not Materie which means matter/material subject. When Geist was translated as “Mind” in English instead of “Spirit”, the spiritual or the non-material aspect of Geist was lost in translation. Perhaps this explains why despite that science moving into Quantum Physics, the “concept of mind remains a physical and material conception” (Schrödinger, 1958, as cited in Matsham, 2019, p. 72).

Group 3: Those believing in the “non-physical origin of consciousness” (Matsham, 2019, p.22). Using the wave particle duality phenomenon, the metaphor is that in the particle state it is human physical dimension. In the state of wave function, it is a human non-physical (spiritual) dimension. Both states are in the same reality whereby the particle state is ultimately in the state of wave function. Through human consciousness, the wave function (non-physical or spiritual) collapses and the particle (physical) state becomes visible.

Schrödinger (2014), as cited in Matsham (2019) described this phenomenon using the metaphor of a tree. There are two states of trees, as he observed, the tree (Physical Tree) as well as an imagined one (Psychological Tree). Both originate from the same source. The Physical Tree is an epistemological, and the Psychological Tree is an ontological one. Thus, the question is, when there are two trees, how does one study the tree? If twenty other people are now touching the tree, does it mean that his Psychological Tree as “I” is identical to the others “Is”? To Schrödinger, the Physical Tree is identical, but the Psychological Tree is not. All things within the physical dimension, including humans, are eventually wave functions.



Thus, it is consciousness that eventually influences physical reality (Goswami, 1993, as cited in Matsham, 2019). O'Leary (2002, as cited in Matsham 2019, p. 24) concluded that Quantum Physics is "a science of consciousness, in line with major spiritual practices and religious beliefs of the world".

Russell (2004, as cited in Matsham 2019, p. 24) believes that, Despite Quantum Science having made its debut in the early 20th Century, modern social science has not embraced the shift in thought of the properties of the physical universe nor about the participatory role of humans as observers of phenomena of the universe. Humans are viewed as social atoms to depict its pattern of behaviour as material objects. This classical view of the human has resulted in the inability of the academic world to fully account for consciousness.

In 1927, Bennet Munro suggested the supposition that social life is controlled by Classical Science should be revisited and saw the Quantum Paradigm as the way forward (Wendt, 2015, as cited in Matsham, 2019). Whereas, Uttal, in 1978, argued that despite all the science and technology advancements, there is still no adequate explanation of how the nervous systems provide human beings with their consciousness and their sense of being (Badri, 2000).

### **Human Consciousness**

Dossey (2009, para. 1) explains, We don't know who first discovered water, but we can be sure that it wasn't a fish, the old saw reminds us. Continual exposure to something reduces our awareness of its presence. Over time, we become blind to the obvious. We swim in a sea of consciousness, like a fish swim in water. And like a fish that has become oblivious to his aqueous environment, we have become dulled to the ubiquity of consciousness.

Consciousness, as suggested by myriads of experiments and millions of testimonials, is the ability to function beyond the brain and body. Valverde (2015, p. 504) also opined that "our true consciousness does not exist in our brains or in our bodies". Some of the best evidence on the theory of consciousness comes from near-death experience (NDE), suggesting that consciousness can function independently from the brain. Several people have reported profound experiences when they were at the "threshold of death". One example is by Alexander (2012), an eminent neurosurgeon who fell into a coma after suffering a rare form of bacterial meningitis. His brain went from near total inactivity to awakening, and he became certain of the infinite reach of the soul after experiencing his personal NDE. He mentions, The ascendance of the scientific method based solely in the physical realm over the past four hundred years presents a major problem: we have lost touch with the deep mystery at the centre of existence - our consciousness. It is something known well and held close by pre-modern religions, but it was lost to our secular Western culture as we became increasingly enamoured with the power of modern science and technology. (p. 152)

Marsh (2016) echoes the remark concerning NDE,

There are those who earnestly believe that phenomenology points to a wider consciousness beyond individual minds. This seemingly involves some kind of cosmic or universal consciousness to which we are all inevitably bound and for which mysterious quantum forces have now been recruited in explanation. (p. 18)

To a large extent, others believe these phenomena can be explained by the neurological basis and functioning of the brain. They believe that NDE is a fundamentally "hallucinatory phenomenon" subsequent to disorder of neural function. Those holding this specific thought are called "Sceptics" (Marsh, 2016, p. 18). To understand what makes humans conscious, it is best to look at the human model.

### Human Model

Mohammed (2008, p. viii) is of the opinion that,

Human personality comprises a body and a soul. The body is made of earth, while the soul is a non-physical element assigned to the perfected physical human being and enters it in the formative period of the body. As a result of this combination, man has the capacity of exploring physical as well as non-physical. The process of indulging in activities associated with the soul is called spirituality.

There are several contemporary human models incorporating spirituality being postulated. Three of them are by Salleh and Ahmad (2008), Al-Ghazali's Spiritual Anatomy (Umaruddin, 2003) and Tiller (2009).

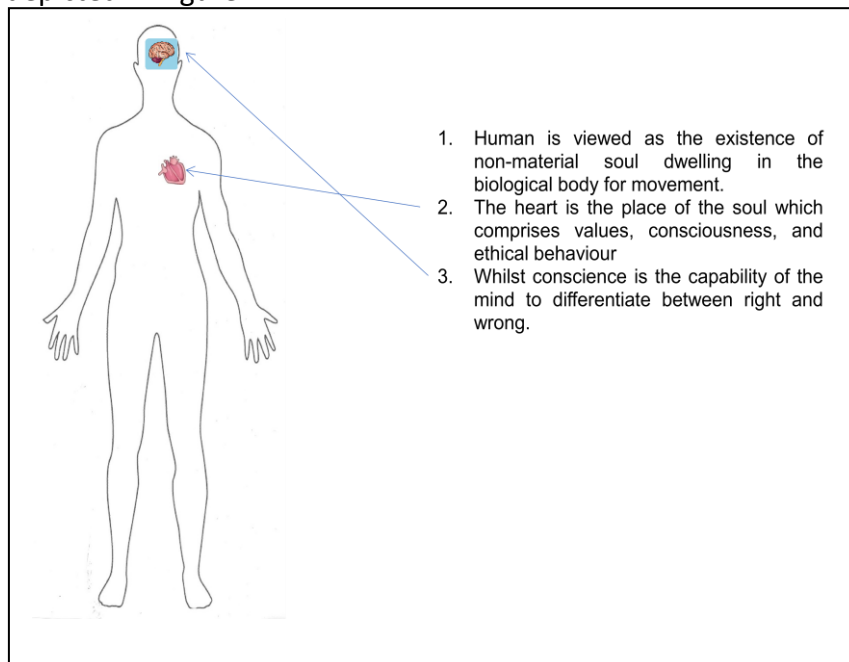
### Salleh and Ahmad Human Model

Human Governance philosophy, suggested by Salleh and Ahmad (2008), is based on the ontological stance that humans are the existence of physical and non-physical at-once, as what is believed by the third group of Quantum Physicists. It is defined as an internal mechanism that arises out of the view that human beings possess a soul at their core. Its main concern is related to the governing of the latent potential innate in humans.

The model of humans having physical and non-physical dimensions at-once is postulated as follows:

- 1) Humans are perceived as the existence of a non-material soul dwelling in the biological body for movement.
- 2) The heart is the place of the soul which comprises values, consciousness, and ethical behaviour. Whilst conscience is the capability of the mind to differentiate between right and wrong.

This human model consisting of body, mind and soul is the doorway to the non-physical dimension is depicted in Figure 2.



**Figure 2: Salleh and Ahmad Human Model**

### Al-Ghazali's Spiritual Anatomy

A more elaborate human model by al-Ghazali suggests that: 'Self' is a spiritual being that dwells within the physical body of man that controls his biological and spiritual functions (Umaruddin, 2003). Al-Ghazali had defined the terms, 'Aql (Intellect), Qalb (Spiritual Heart), Ruh (Spirit), and Nafs (Soul), and concluded that while the four terms have one mutual definition, each of them has its own explicit definition. The 'Aql is the knowledge of the true nature of things. It is the place where knowledge is developed and is located in the Spiritual Heart. The Qalb is connected to the human body by way of the physical heart. Al-Ghazali also connects the Qalb to the cognitive faculty of the human being. The Ruh is related to the body and the nerves. The Nafs is the place of desire and anger. The four terms are being unified by the fifth definition, "the essence of the human being by which he knows all things i.e., something subtle in man that knows and perceives" (Mat Akhir, 2008, p. 178), which is the inner 'Self'.

Intellect is suggested to have four meanings. The first meaning of Intellect is "the power to understand the secrets of different sciences." It is an attribute which is related to a subtle essence known as knowledge. This attribute differentiates man from other animals and shows the pathway to theoretical knowledge. The second meaning is the knowledge that exists even as a child. Thus, a child is able to perceive the rational impossibility and possibility. For example, two is more than one and a person cannot be at two different places at once. The third meaning is knowledge attained through experience. The fourth meaning of Intellect is the "force of knowledge of the true nature of things", which is seated in the Spiritual Heart. It is the power of instinct developed in a person such that the person can know the consequence of the action. This enables the person to control the appetite which is always yearning for pleasure. The first usage of Intellect is the basis for the other three. The fourth is the output and ultimate aim. The knowledge that appears in the Spiritual Heart is of two types: knowledge concerning religion and knowledge concerning Intellect. The latter is also of two types: acquired knowledge and natural knowledge. Acquired knowledge can further be divided into two: spiritual knowledge and worldly knowledge (Karim, 2015). Al-Ghazali, in his Mizan al-Amal (Balance of Action) divided knowledge into two, the theoretical and practical. Theoretical knowledge among others includes the "knowledge of God, His angels and apostles." Practical knowledge, on the other hand, includes the sciences of ethics in which comprises "knowledge of the soul, its properties and moral traits." To assist man in cleansing his soul and bringing him to God, ethical science must commence with "knowledge of the soul, its power and properties" (Mat Akhir, 2008, p. 248). Soul in this context is the inner 'Self'. The inner 'Self' controls and governs over sensory power, motor power (Impulse and propensities comprising Appetition and Self-assertion), Intellect, Will and ultimately the body. Figure 3 illustrates the Spiritual Anatomy as described by al-Ghazali. To satisfy one's bodily needs, the 'Self' has the following six powers (Umaruddin, 2003):

1. Motor power consists of Impulse and Propensities:
  - i. Impulse is the power that exists in "muscles, nerves and other tissues", the body's limbs will move under the influence of Intellect.
  - ii. Propensities could be further classified as the following:
    - a) Appetition or Desire (Shahwa); acquires what is good for the body in the forms of hunger, thirst, sexual craving, and so on.
    - b) Self-assertion or Anger (Ghadab); prevents what is bad for the body in the forms of rage, indignation, revenge, and so on.



2. Sensory power: the power to apprehend, identify, and grasp what is bad and good for the body, which consists of outer and inner senses.
  - i. Outer senses: Sight, hearing, taste, smell, and touch; through which the current situation is acted upon.
  - ii. Inner senses: Common-sense, imagination, reflection, recollection, and memory; through which past experiences are learned, and the future is anticipated.  
 Without sensory power, the propensities will struggle blindly.
3. Intellect ('Aql): The basis of knowledge.
4. Will (Irada): When a person realises the importance of an object and the appeal to seek for it, a craving is stirred within him to attain that object by motivating an action. Will denotes this craving.

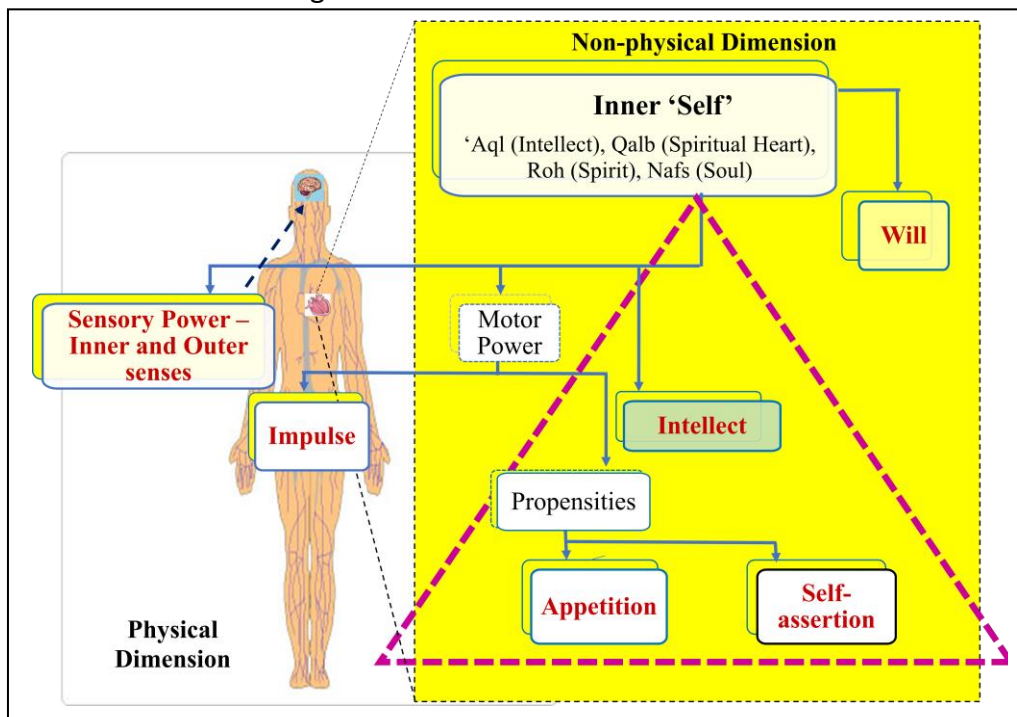
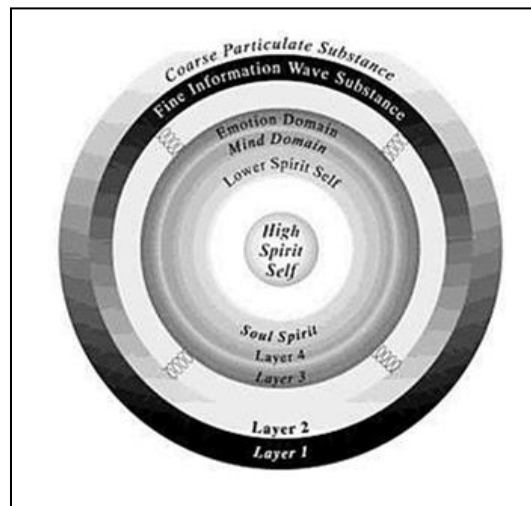


Figure 3: Al- Ghazali’s Spiritual Anatomy

### Tiller’s Model

One contemporary human model postulated by Tiller (2009) has some parallel to al-Ghazali Spiritual Anatomy. In this model, a human is visualised as a sphere comprising “three concentric zones” at the minimum that are feebly attached, as depicted in Figure 4. Two outermost layers are “personality self”. The three intermediate layers are “soul self.” The Centre region is “high spirit self (or God Self)”.



**Figure 4: Tiller's Model**

According to Tiller (2009, p. 15), the three concentric zones are specifically:

1. The outermost zone which constitutes “personality self”, comprises two layers i.e., “the electric particles and magnetic information waves”. The electric material links with the outer world through five physical senses of neural circuitry. In the magnetic information wave layer, the “personality self” links with the “soul self” through the existence of some type of sensory system. This zone relates to al-Ghazali’s discussion about sensory power and impulse power.
2. The middle zone is defined as “soul self”, comprising three concentric layers which are of much “higher dimensional domains of emotion, mind and an aspect of spirit”. The “soul self” is the storage place of all major happenings from the long series of “personality self” and is much more durable than the “personality self”. This zone relates to al-Ghazali’s discussion about components of man’s inner power of Intellect, Appetition, Self-assertion and Will.
3. The innermost zone, the third, is defined as “high spirit self” or “God self”. This zone relates to al-Ghazali’s discussion about the inner ‘Self’.

### ***The Interfacing between Human Spiritual Anatomy and Physical Anatomy***

Based upon al-Ghazali analytical insight, “the internal senses are centralised only in the region of the brain. Imagination is located in the frontal portion and memory in the back portion of the brain. All these powers are ruled by heart” (Bano, 2017, p. 176). Heart in this context is the inner “Self”. This view differs from Rene Descartes’s philosophy of dualism which concluded that the two dimensions of matter (material) and spirit (non-material) are different and non-interacting (Hopper, 2009, as cited in Matsham, 2019, p. 16).

Nonetheless, as explained earlier, imagination (retaining the image of the object after it has been experienced) and memory are two of the five components of inner sensory powers described by al-Ghazali. The other components being; commonsense, reflection (power to associate or dissociate thoughts) and recollection (recollects the meaning which is intangible). There are also five outer sensory powers of sight, hearing, smell, touch and taste. Sensory power (outer and inner) is one of the six powers of our inner ‘Self’ which governs human

actions. The other powers are Impulse, Intellect, Appetition, Self-assertion and Will (Umaruddin, 2003):

Earlier in the 12<sup>th</sup> century, al-Ghazali already described the interfacing of the spiritual elements with the human brain, depicted in Figure 5, Figure 6(a) and Figure 6(b).

'Aql, Qalb, Ruh, and Nafs are the different functions of the inner 'Self'. Mat Akhir (2008) stated that each of the terms is dual in nature: spiritual and physical. To describe the physical function (<sup>pf</sup>) of the four terms, the functions are labelled as 'Aql<sup>pf</sup>, Qalb<sup>pf</sup>, Ruh<sup>pf</sup> and Nafs<sup>pf</sup>. This is to differentiate between the physical and the spiritual nature of the four terms.

As explained earlier, the Qalb<sup>pf</sup> is connected to the human body through the physical heart. Al-Ghazali also connects the Qalb<sup>pf</sup> to the cognitive faculty of the human being via the outer and inner sensory powers (see Figure 5 and Figure 6(a)).

The Ruh<sup>pf</sup> is "related to the body and the nerves" which biologically interfaces with the Central Nervous System (CNS) via the Impulse power as depicted in Figure 5 and Figure 6(b).

The Nafs<sup>pf</sup> is the place of desire and anger which interface via Appetition power and the Self-assertion power with the Hypothalamus and the Amygdala functions of the brain respectively as shown in Figure 5.

The main functions of Hypothalamus are controlling appetite, regulating emotional responses, managing sexual behaviour, releasing hormones and regulating body temperature. The Amygdala coordinates responses to things in the environment to trigger emotional responses like fear and anger (Schulman, 2018)

'Aql<sup>pf</sup> via the Intellect power; "the basis of knowledge", is what motivates the Will power to act and eventually drives Impulse power into action via the Motor Cortex of the brain functions (see Figure 5). The Motor Cortex is the prime section of the brain that has to do with planning and performing voluntary actions (Know your brain, 2015).

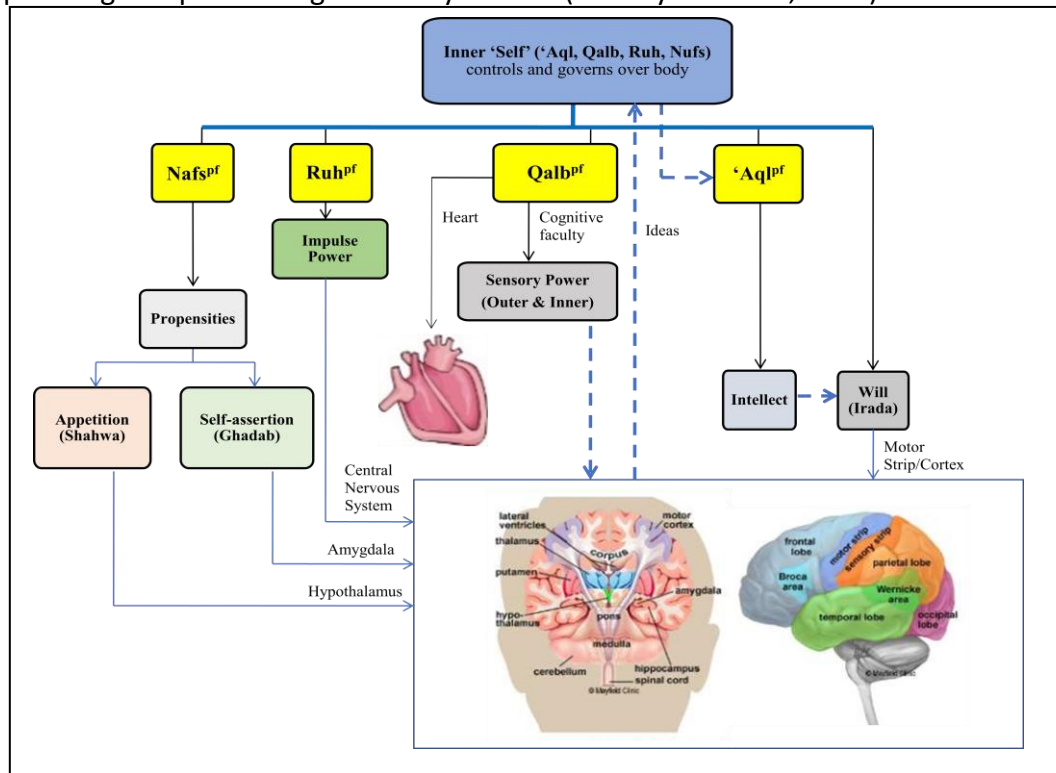


Figure 5: Interfacing of Spiritual Elements to the Human Brain

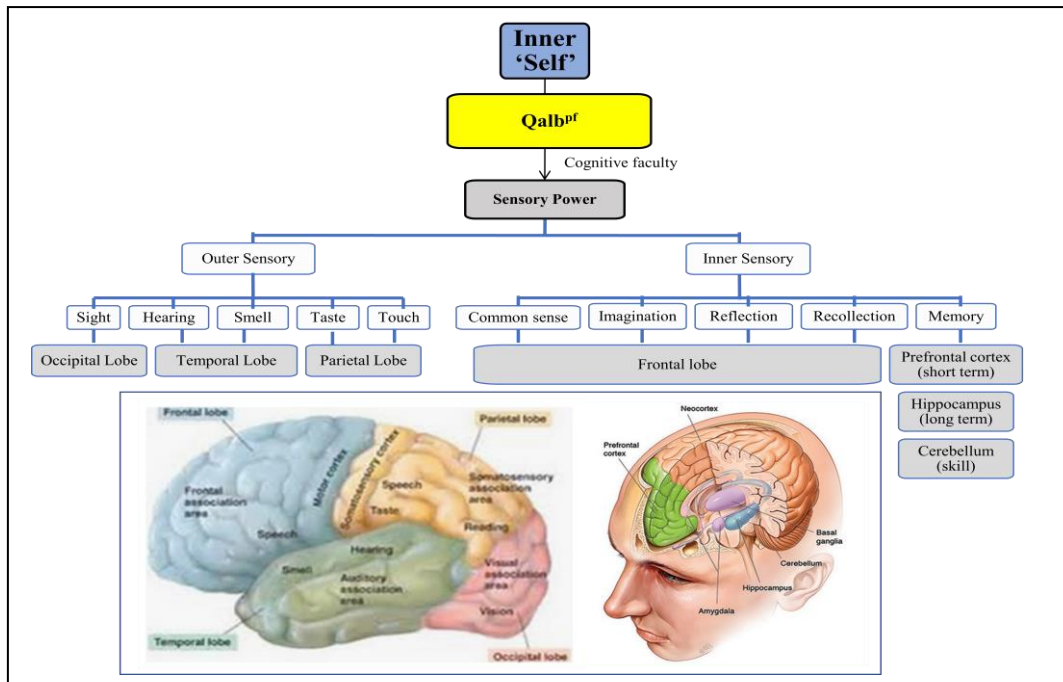


Figure 6(a): Interfacing of Sensory Power (Outer and Inner) to the Human Brain

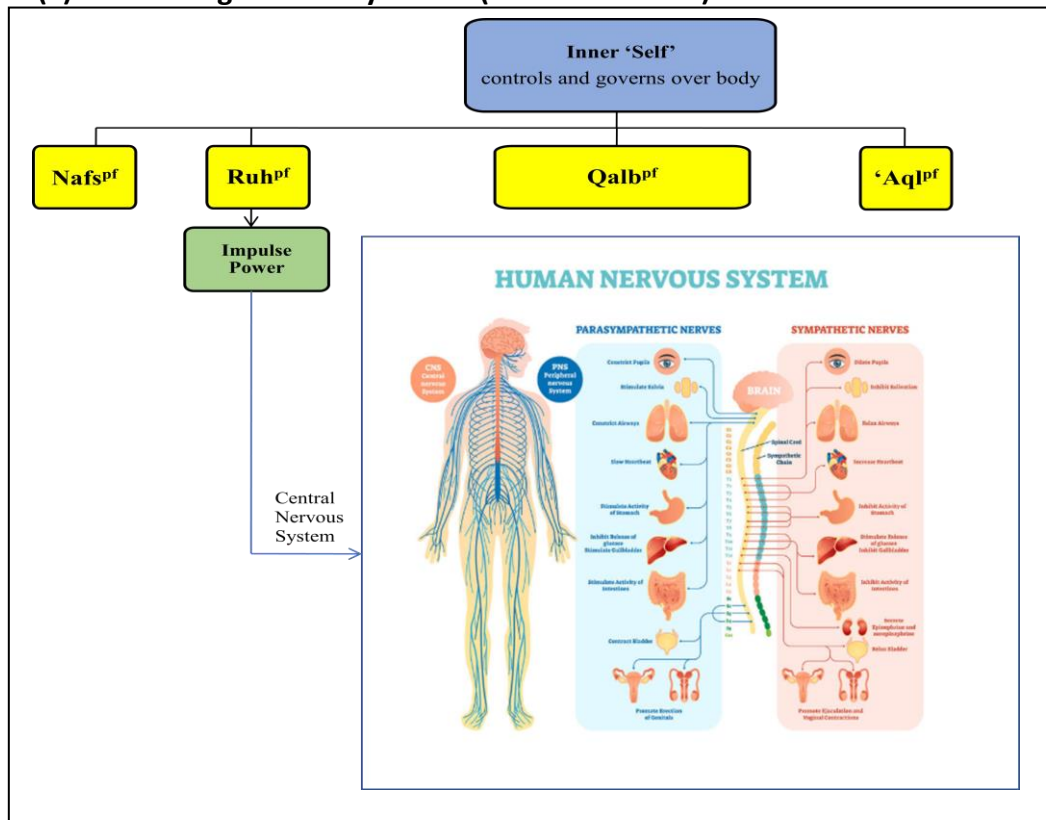
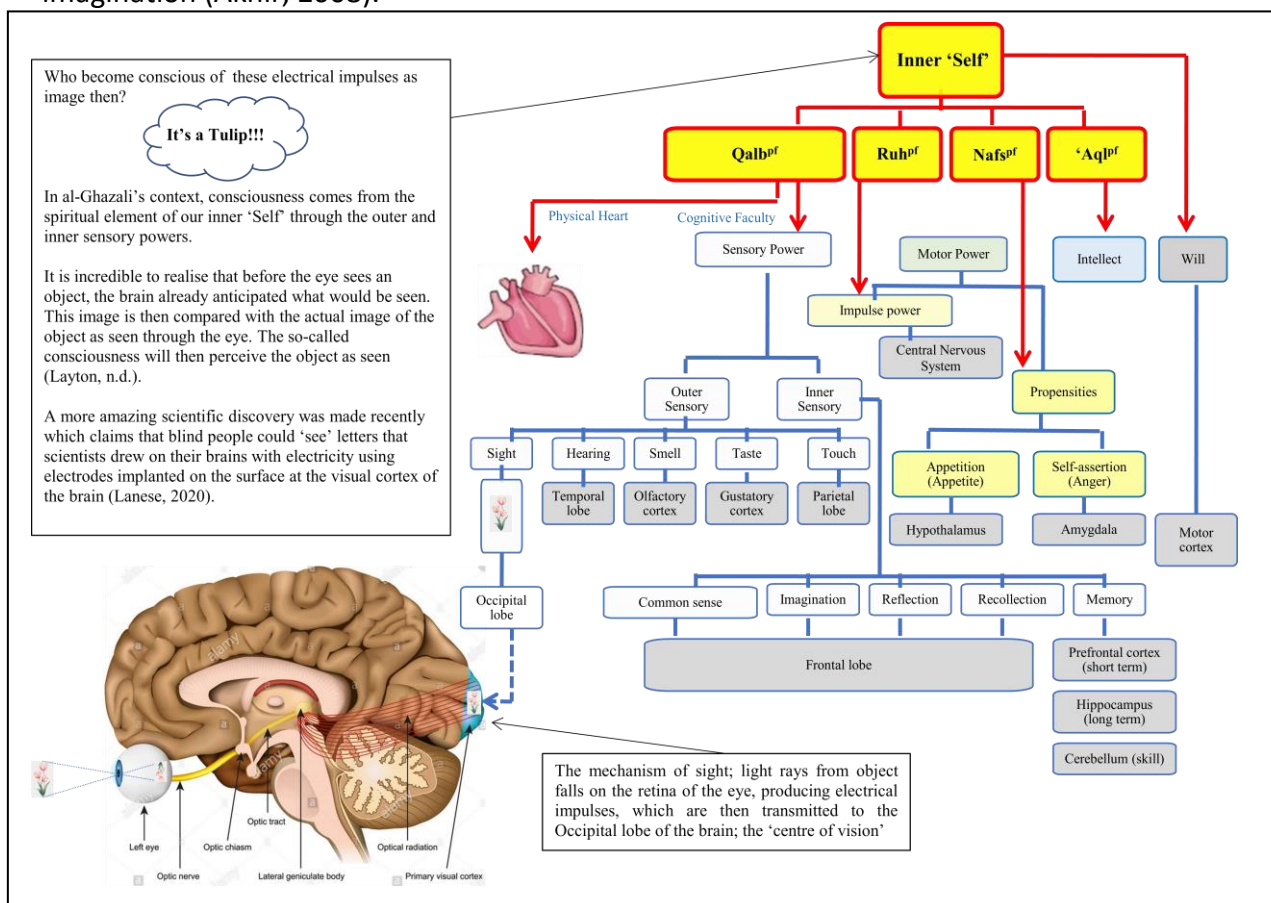


Figure 6(b): Central Nervous System (CNS)

Figure 7 provides an impression of the interfacing between the outer sensory power of sight and the brain Occipital lobe. The mechanism of sight functions when light rays from objects fall on the retina of the eye, producing electrical impulses which are then transmitted to the Occipital lobe of the brain, i.e., the “centre of vision”. The brain is shielded from light resulting in its inside being completely dark. Yet a normal person can perceive a luminous and bright

image in this stark darkness! Who becomes conscious of these electrical impulses as an image then? Materialists, who are only concerned with material things, would not be able to explain this because consciousness is the spirit created by God (Yahya, 2003). Al-Ghazali contends that consciousness, which means knowledge and perception to perceive and recognise, resides in the outer and inner sensory organs. They are related to the five outer organs of human senses i.e., hearing, sight, smell, taste and touch. There are five internal senses which reside in the brain. First, the power of visualising. After one sees an object and closes their eyes, one is still able to see the image of that object. Second, the image seen is retained by the power of memory which is what preserved the image of the object. Third, the power of reflection allows one to reflect over what is remembered to synthesise new combinations. Fourth, the power of recollection is where one can recall what is lost from the memory. Lastly, through the 'general sense' or common sense, one gathers the ideas of the senses into their imagination (Akhir, 2008).



**Figure 7: Interfacing Between the Outer Sensory Power of Sight and the Brain Occipital Lobe**

In al-Ghazali's context, consciousness comes from the spiritual element of our inner 'Self' through the outer and inner sensory powers. It is incredible to realise that before the eye sees an object, the brain already anticipated what would be seen. This image is then compared with the actual image of the object as seen through the eye. The so-called consciousness will then perceive the object as seen (Layton, n.d.). Grady (1993, para. 13) explains the analytical processes within the Occipital lobe to perceive seeing an object.

The optic nerves convey signals from the retinas first to two structures called the lateral geniculate bodies, which reside in the thalamus, a part of the brain that functions as a relay station for sensory messages arriving from all parts of the body. From there the signals



proceed to a region of the brain at the back of the skull, the primary visual cortex, also known as V1. They are then fed into a second processing area, called V2, and branch out to a series of other, higher centres - dozens, perhaps with each one carrying out a specialised function, such as detecting colour, detail, depth, movement, or shape or recognising faces.

Scientists are still researching how the individual centre interacts with each other at the higher centres, which are managed metaphorically by the "little green man" (Grady, 1993). Mat Akhir (2008, p. 186) stated that "If Spirit (Ruh) proceeds from God Most High, surely it is like the alien within the body; it is only an immigrant and always look towards its source (i.e. God Most High)". It is an interesting notion. Could the "little green man", the "alien within the body"? Earlier defined, Spirit (Ruh) as spiritual nature is the inner 'Self'. A more amazing scientific discovery was made recently which claims that blind people could 'see' letters that scientists drew on their brains with electricity using electrodes implanted on the surface at the visual cortex of the brain (Lanese, 2020).

The capability to modulate neural activity in particular brain circuits remotely and systematically could transform studies of brain functions and treatments. Low-intensity ultrasound pulses transmitted non-invasively to particular brain areas of macaque monkeys have been observed to influence their decisions pertaining to the target to select. "The effect was sizable, leading to about 2:1 bias in choice behaviour" (Kubanek et al., 2020, para. 16). Scientists have developed a wearable brain scanner, an enhanced technology to study the brain activities. This could revolutionise the way neurons 'talk' (Price, 2018). Information-processing in the brain involves flow of "electrically charged atoms called ions in and out of the neurons", as explained by most neurobiologists today. This flow triggers a kind of chain reaction travelling from one nerve cell to another. The reaction follows a logical rule which is metaphorically like the "AND, OR and NOT Boolean operations performed by today's computer gates". Consequently, these chain reactions produce outputs such as speech. The question being asked right now is, "instead of a code encrypted in the wiring of our neurons, could consciousness reside in the brain's electromagnetic field"? (McFadden, 2021, para. 4). In relation to human physical anatomy, embryology studies (see Figure 8) indicate that the heart of an embryo starts to beat at 6 weeks old, long before the existence of the brain. Actual cause to initiate the heart cells of the embryo to beat is unknown. But Pearsall (1998, as cited in Mushtaq, 2006, p. 22), argues that it is "the mother's heart energy conveyed in primal sound waves contains the information that is the code that jump-starts our lives". Is that truly so? Has it got to do with the initiation of the first physical function of the Spiritual Heart (Qalb<sup>pf1</sup>) which is, as stated by Mat Akhir (2008), connected to the human body by way of the physical heart? At four months old, the Central Nervous System (CNS) is activated and thus enables the fetus to start moving its limbs. Has it got to do with the physical function of Spirit (Ruh<sup>pf</sup>) which Mat Akhir (2008) stated as being related to the body and the nerves that activates or makes the brain to become alive. Al-Ghazali also connects the Qalb to the cognitive faculty of the human being as the second physical function of the Spiritual Heart (Qalb<sup>pf2</sup>) to operationalise the brain (Mat Akhir, 2008). The mother starts to crave as early as the first trimester and mostly very strongly in the third trimester. Does it have anything to do with the initiation of the physical function of the Soul (Soul<sup>pf</sup>), the place of desire and anger, as mentioned by (Akhir, 2008)?

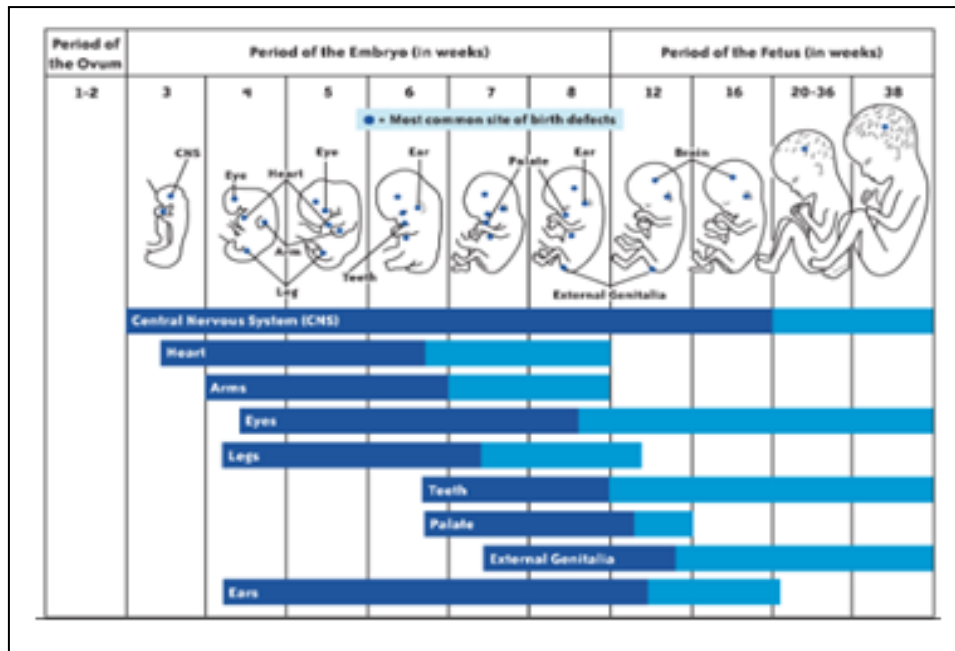


Figure 8: Fetal Development Chart

### Consciousness of Mind to Spiritual Heart

Craun (2013, p. 107) suggests that by reverting consciousness from the mind to spiritual heart allows the likelihood of nurturing “Nafs Mutma’inna or the Soul at Peace”. If the Spiritual Heart is lively, it will eventually become our hub of “perception and understanding”. The Islamic notion “al Basira (the spiritual eye of the heart)”, if correctly developed, would make a person spiritually conscious and understands the truth very profoundly and comprehensively. The human is made of a body that comprehends through “ocular vision (Basar)” and a Spirit (Ruh) together with Soul (Nafs) that comprehends through “inner sight (Basira)”. Moreover, the Soul that comprehends through “inner sight” is superior compared to the body that perceives through “ocular vision”. Soul in this context is the inner ‘Self’, which is defined as the essence of man by Umaruddin (2003). It is synonymous with the fifth meaning that unifies ‘Aql, Qalb, Ruh and Nafs that is the “subtle power which intuitively grasps and comprehends the knowledge of human beings i.e., something subtle in man that knows and perceives” as explained by Mat Akhir (2008, p. 178).

### Level of Consciousness

According to Bawa Muhaiyaddeen (2001) a Sufi Guru, feeling, awareness, intellect, assessment, subtle wisdom, divine analytical wisdom, and divine luminous wisdom are placed within man’s heart (Qalb or inner ‘Self’ in the context of this paper) to enable man to realise and know (to be conscious). Each of them plays a different role.

- i. Sensory feeling, or perception; to feel an emotion.
- ii. Awareness; to know, or be aware of feeling something, where it is being felt and whether it causes pain or pleasure, sorrow or joy.
- iii. Intellect; processes the information brought by feeling and awareness, identifies a cause, and decides a cause of action. In doing this, it is limited to accessing things it has perceived through the senses.
- iv. Assessment, or judgment; an instrument of evaluation. At this level man begins to assess, or inquire into the nature of life, and to question his fate. Assessment is the

highest mental activity in man, but its operation is limited by being founded on observed phenomena or on knowledge concerned with everyday living.

- v. Subtle wisdom; realises that the answers (to man's questions) cannot be found in the world, but only within. Although this is the beginning of turning inward, subtle wisdom is still limited to functioning in the realm of the elements, and so it can only suggest a variety of possible solutions, not come up with certainties.
- vi. Divine analytical wisdom, or divine discerning wisdom; this is the wisdom that possesses the certainty of knowing. It is the indwelling spiritual guide, to be found only in mankind. It gives immediate, certain answers from within, discerning between right and wrong, good and evil and real and illusory.
- vii. Divine luminous wisdom; the ultimate wisdom that removes from him all traces of human ego and duality. Man realises that God is within him, and that he is within God. It is the final attainment of knowing that nothing but God exists. (p. 4)

These levels of consciousness have parallel with al-Ghazali's descriptions on levels of consciousness.

Human soul possesses five faculties; firstly the sensory faculty, which receives information sent by the senses; secondly, the imaginative faculty which records and discriminate among this information; thirdly, the intelligential faculty which comprehends what is beyond the capacity of the sensory and the imaginative faculties; fourth, the discursive faculty or reasoning faculty which deduce fresh knowledge based on data of pure reason; and finally, the highest power is the transcendental (divine) prophetic faculty. (Mat Akhir, 2008, p. 221) Hence, it is suggested that feeling, awareness, intellect, and assessment, as well as sensory faculty, imaginative faculty, intelligential faculty and discursive faculty are related to functioning of the cognitive faculty (Qalb<sup>pf2</sup>) via the outer and inner sensory powers as depicted in Figure 5. Subtle wisdom, divine analytical wisdom, and divine luminous wisdom as well as transcendental (divine) prophetic faculty are related to functioning of 'Aql<sup>pf</sup> via the Intellect power (see Figure 5).

### Conclusion and Future Research

The human spiritual anatomy grounded in al-Ghazali's 12<sup>th</sup> century knowledge as deliberated in this paper could provide a fresh viewpoint to visualise the human model. It can assist to actualise the purpose of this paper which is to enable reverting consciousness in mind to inner 'Self'; metaphorically the 'alien' or the 'little green man'. Further research is needed to delve into the interfacing between the elements of spiritual anatomy with the human body - heart, brain and desire - by integrating the 12<sup>th</sup> century al-Ghazali's knowledge on spiritual anatomy and the 21<sup>st</sup> century's scientific knowledge of the human body. This is in line with what the third group Quantum Physicists' belief in the existence of physical and non-physical at-once. It should also be noted that al-Ghazali was not concerned about the Qalb's essence, rather its attributes and states. This is because how Qalb connects to the physical heart is God's knowledge, a privilege afforded to only selected individuals. (Mat Akhir, 2008). The same situation applies to the other spiritual elements of al-Ghazali's spiritual anatomy. The revival of al-Ghazali's 12<sup>th</sup> century's knowledge on human spiritual anatomy provides the groundwork for another Islamic theory of human psychology or Islamic psychology. Fundamentally, psychology is the knowledge of the Soul which comprises the individual's feelings, thinking and behaviour (Mujib, 2005; Jabar & Ahmad, 2018, as cited in Poad & Ibrahim, 2019). The knowledge pertaining to the Soul is Islamic psychology, leaning upon the Muslim shari'a which encompasses the physical and the spiritual. Thus, case in point, the

elements of al-Ghazali's Spiritual Anatomy could pave the way to novel insights into the uncharted spiritual dimension of Dementia, Alzheimer, Autism and Coma patients.

### **Theoretical and Contextual Contribution**

To Zhao (2019, para. 1) the definition of consciousness which needs "urgent understanding and resolution" continues to be a complex issue.

Quantum physics has moved toward spiritual and Social Science need to tow inline. However, this change has not been adopted by modern Social Science. Humans are still seen "as social atoms and their pattern of behaviour as material objects". As a consequence of this classical viewpoint of the human, the academic world is unable to fully account for consciousness (Russell, 2004, as cited in Matsham, 2019, p. 24). Therefore, according to Wendt, it has become essential to "rethink reality and consequently, human actions". As promoted by William Bennet Munro in 1927, this requires challenging the foundational, "taken-for-granted assumption that social life is governed by Classical Science by adopting a Quantum Paradigm", (Wendt, 2015, as cited in Matsham, 2019, p. 24).

Quantum Science originated from non-native English speaking physicist community. In particular was Schrodinger, a German whose writing "Geist und Materie" was translated as "Mind and Matter" by the Anglo-American. The irony is that Geist is more of spiritual a dimension. It should have been translated as "Spirit" and not "Mind". Thus, the German spiritual or non-physical aspect of Geist was lost in the translation and so too in the scientific community. As a result, the mind is being continuously perceived as an emergent property of the physical neuronal functioning of the brain (Matsham, 2019).

Experts mostly believe that consciousness can be categorised into two components: "the experience of consciousness (or personal awareness), and the contents of consciousness, which include thoughts, beliefs, sensations, perceptions, intentions, memories and emotions". Thoughts do not exist until we think them. Thus, these contents of consciousness can simply be assumed as somehow caused, controlled or chosen by our consciousness. What if the human mind is not driven by the consciousness? It is opined that what causes, chooses or creates our beliefs, feelings or perceptions is not our consciousness. But, "behind the scenes" via fast, efficient, non-conscious systems in our brains the contents of consciousness are generated. These processes occur without our consciousness interfering, whilst it's seated in the passenger seat passively. We become aware of our thoughts or our feelings although not consciously chosen (Oakley & Halligan, 2017, para. 2-5). This view is supported by Hayes (2016), a neuroscientist in Berlin at the Bernstein Centre for Computational Neuroscience who has researched "whether there is any difference between the instance of the moment of making a decision and the movement involved in the decision." The results of the experiment are as follows:

There has been a long controversy as to whether subjectivity 'free' decisions are determined by brain activity ahead of time. We found that the outcome of a decision can be encoded in brain activity of the prefrontal and parietal cortex up to 10 seconds before it enters awareness. (p. 7)

The most important theoretical contribution of this paper is the integration of the 12<sup>th</sup> century al-Ghazali's knowledge on spiritual anatomy and the 21<sup>st</sup> century's scientific knowledge of the human body. Al-Ghazali's Theory of the Soul can map out the interfacing between the elements of spiritual anatomy with the human body and explain the human consciousness by

changing the prevalent perspective from the Mind to the inner 'Self.' The novelty of this paper is its focus on the phenomenological aspect of consciousness. It postulates that the human spiritual anatomy, which interfaces with the human brain, explains human consciousness.

In addition, an extensive appraisal on the level of consciousness will deepen our understanding of this concept and offer novel information for patients undertaking "clinical treatment of consciousness disorders". Further research would assist to explain the concept of consciousness which could "have important scientific and clinical significance" (Zhao, 2019, p. 1).

The most important contextual contribution from this paper is highlighting the level of consciousness as elaborated by Bawa Muhaiyaddeen (2001) and al-Ghazali (Mat Akhir, 2008) as alternative viewpoints in studying patients' consciousness disorders. These viewpoints also could pave the way to novel insights into the uncharted spiritual dimension of Dementia, Alzheimer, Autism and Coma patients, among many other possibilities.

## References

- Alexander, E. (2012). *Proof of Heaven*. Piatkus.
- Bano N. (2017). Ethical philosophy of al-Ghazali: An analytical insight. *International Journal in Management and Social Science*, 05(07). <https://www.academia.edu/38689513>
- Badri, M. (2000). *Contemplation: An Islamic psychospiritual study*. Shlboulne Enterprise Sdn. Bhd.
- Muhaiyaddeen, B. M. R. (2001). *The resonance of Allah: Resplendent arising from the Nur, Allah's wisdom of grace*. The Fellowship Press.
- Craun, D. (2013). Exploring pluriversal paths toward transmodernity. *Human Architecture: Journal of the Sociology of Self-Knowledge*, 11(1), 91-114.
- Dossey, L. (2009). *Why Consciousness is not the brain*. <http://superconsciousness.com/why-consciousness-is-not-the-brain/#>
- Grady, D. (1993). *The vision thing; mainly in the brain*. <https://www.discovermagazine.com/mind/the-vision-thing-mainly-in-the-brain>
- Yahya, H. (2003). *The miracle of the immune system*. A.S. Noordeen.
- Hayes, J. D. (2016). Are We Masters of Our Destiny? *New Straits Times*. p.17.
- Lou, B. (2012). *The Science of Sense*. Department of Mathematics, Tongji University, Shanghai, China. <https://www.researchgate.net/publication/275660034>
- Karim, F. (2015). *Essential Ihya' Ulum al-Din: The revival of the religious sciences*. Revised edition of Fazlul Karim's translation volume 1, Imam al-Ghazali. Islamic Book Trust.
- Know Your Brain: Motor Cortex. (2015). *Neuroscientifically challenged; Neuroscience made simpler*. <https://www.neuroscientificallychallenged.com>
- Kubanek, J., Brown, J., Ye, P., Pauly, K. B., Moore, T., & Newsome, W. (2020). Remote, brain region-specific control of choice behavior with ultrasonic waves. *Science Advances*, 6(21), eaaz4193. doi: 10.1126/sciadv.aaz4193
- Lanese, N. (2020). *Blind people could 'see' letters that scientists drew on their brain with electricity*. <http://www.livescience.com>
- Layton, J. (n.d.) *How does the brain create an uninterrupted view of the world?* <https://science.howstuffworks.com/life/steady-view.htm>
- Marsh, M. N. (2016). The near-death experience: A reality check? *Humanities* 5, 18, doi:10.3390/h5020018



- Mat Akhir, N. S. (2008). *Al-Ghazali and his theory of the soul: A comparative study*. Universiti Sains Malaysia.
- Matsham, A. (2019). *Beyond the physical realm of mindfulness: the nature of reality and concept of mind in traditional eastern philosophy of sufism and the quantum paradigm*. (Master's Thesis). [www.jultika.oulu.fi/files/nbnfioulu-201904121457](http://www.jultika.oulu.fi/files/nbnfioulu-201904121457)
- McFadden. (2021). *Does consciousness come from the brain's electromagnetic field*. <https://aeon.co/essays/does-consciousness-come-from-the-brains-electromagnetic-field>
- Mohammed, W. (2008). *An introduction Islamic spirituality*. A.S. Noordeen.
- Mushtaq, G. (2006). *The Intelligent Heart, The Pure Heart*. Ta-Ha Publishers Ltd.
- Niikawa, T.(2020). A map of consciousness studies: Questions and approaches. *Frontiers in Psychology*. <https://www.frontiersin.org › articles>
- Oakley, D. A., & Halligan, P. (2017). What if consciousness is not what drives the human mind? *The Conversation*. <https://theconversation.com>
- Poad, A. F. M., Ibrahim, A. (2019). A Preliminary Study on the Elements of Hisbah in Islamic Psychology. *International Journal of Academic Research in Business and Social Sciences*, 9(11), 664–672.
- Price, M. (2018). This wearable brain scanner could transform our understanding of how neurons 'talk'. <https://www.sciencemag.org/news/2018/03/wearable-brain-scanner-could-transform-our-understanding-how-neurons-talk>
- Salleh, A., & Ahmad, A. (2008). *Human Governance: A paradigm shift in governing corporation*. MPH.
- Schulman, J. S. (2018), *Hypothalamus: Anatomy, Function, Diagram, Conditions, Symptoms*. <https://www.healthline.com/human-body-maps/hypothalamus>
- Tiller, W. A. (2009). It is Time for a Consciousness – Inclusive Science. *The William A. Tiller Foundation*. <https://24c66bd1-1de0-411e-b098-022364943bdd.filesusr.com ›>
- Umaruddin, M. (2003). *The ethical philosophy of al-Ghazali*. A.S. Noordeen
- Valverde R. (2015). Neurotechnology and transpersonal psychotherapy. *Neuroquantology*, 13(4), 502-517. doi:10.14704/nq.2015.13.4.870
- Zhao, T., Zhu, Y., Tang, H., Xie, R., Zhu, J., & Zhang, J. H. (2019) Consciousness: New Concepts and Neural Networks. *Frontiers in Cellular Neuroscience*. <https://www.frontiersin.org › fncel.2019.00302 › full>