



## RESEARCH ARTICLE

### THE COMPOSITION OF EXISTENCE AND THE DEFINITION OF SPIRIT, HEART AND MIND ACCORDING TO QUANTUM PHYSICS

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#### ABSTRACT

Due The study of the composition of our existence is divided into two schools: natural science and social or spiritual disciplines. Natural science tells us we are made of matter and energy. Social or spiritual disciplines study the spiritual and conscious aspects of our existence. In this paper, we demonstrate that everyone and everything is made of matter, energy, and information. We propose to identify and define spiritus the content of information, spiritual heart as the receiver of information, and mind as the processor of information respectively. We will show that these definitions make it possible to use quantum physics to explain and study spiritual phenomena, paving the way to integrate spirituality and natural science at the fundamental level. Furthermore, this framework reveals a great deal about the true potential of human beings and how they can access higher powers.

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## INTRODUCTION

What is everything made of at the most fundamental level? Natural science observes our physical existence and tells us that we are made of matter. Physics, as the foundation of natural science, studies all the material aspects of our existence. It uses quantities such as mass, weight, volume, energy, velocity, entropy, electric field, spin, and more to describe an object. Quantities in physics are the items that can be measured physically and calculated mathematically. Physics laws use mathematical formulas to express repeatable experiments. Because of the repeatability and calculability of the physics laws, physics and natural science have the great ability to create inventions to utilize, transform, and transport matter. The resulting inventions and new technologies have made it much easier to perform physical work. Physics and natural science have helped people live better lives on the physical plane. Quantum physics is currently the most fundamental physics theory that explains what everything is made of and how everything works at the deepest level. Quantum physics has changed our lives with advanced technology as well as profound insight about our existence. The spiritual and conscious aspects of our existence are also important for our well-being. They are normally explored in social sciences, such as philosophy and psychology, as well as spiritual and religious studies and practice.

Currently, research in cognitive science starts to explore the mystery about consciousness scientifically. In general, since the scientific revolution in the seventeenth century, natural science has excluded the study of spirituality and consciousness. Given the high impact of technology and science in our lives, we argue that this exclusion contributes to making us more materialistic, causing deep separation and disharmony within each person, our societies, our environment, and the world. Therefore, it is important to incorporate the study of soul, or spirit, and the spiritual heart, mind, and consciousness into natural science. Thus far, parapsychology (Harvey, 2007; Cordón, Luis, 2005) is a discipline that has attempted to use the scientific method to investigate the existence of spiritual and conscious abilities and phenomena, such as distant viewing, telepathy, psychokinesis, distant healing, and more. However, its status as a science has been vigorously disputed (Daisie Radner and Michael Radner, 1982; Paul Kurtz Kendrick Frazier, 1981; Terence Hines, 2003; Michael, 1998; Massimo Pigliucci and Maarten Boudry, 2013). Mainstream scientists regard the discipline as pseudoscience. Currently the controversies about parapsychology as a science revolve around three areas: the compatibility of parapsychological phenomena with the well-established laws of natural science, the consistency and repeatability of research studies, and the progress and achievement of parapsychology over the last hundred years. In this article, we give a brief review of quantum physics. Then we explore the fundamental question about what everyone and everything is made of. We propose and show that everyone and everything is made of

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matter, energy, and information. From this insight, we define spirit or soul as the content of information, spiritual heart as the receiver of information, and mind as the processor of information. (We make no distinction between spirit and soul and treat them as the same.) We then show how these definitions make it possible to explain and rigorously study spiritual phenomena using quantum physics, thereby providing a way to integrate natural science with spirituality at a fundamental level.

### **The indication of quantum physics about the constituents of the existence**

Quantum physics is the most fundamental physics theory to date. It has been shown that classical physics is an approximation of quantum physics. Quantum physics yields the most accurate predictions about nature so far. Quantum physics studies what everything is made of and how it behaves at the microscopic level. Studies in quantum physics indicate that at the deepest level, everything is made of various vibrations, also called waves. Vibrations or waves are periodic oscillations extending over space and time. Quantum vibration also has the character of a particle in the sense that it has specific energy and can only be absorbed or emitted as a whole. According to quantum physics, everything is basically a vibrational field consisting of various vibrations. These vibrational fields are described mathematically by wave function. Wave function is the mathematical formula that expresses the properties and quantity of vibrations or waves of an object. Quantum physics provides ways to calculate wave function. From wave function, one can derive the characters and qualities of an object and make predictions. We propose that quantum physics suggests that everyone and everything is made of information, energy, and matter. Here we define matter as anything we measure, observe, and experience. For example, length, width, height, distance, weight, mass, charge, electric field, spin, force, and many more are all different properties and aspects of matter.

Energy is the ability to do work, such as lifting a weight and heating up a pot of water. Energy moves matter or changes its state. For example, heat, kinetic energy, and potential energy can help do work which results in moving the matter and changing its state. Information is what informs. To inform is to give an answer to a question. The answer to a question can be represented as yes and/or no. Therefore, information can be represented as a series of yes's and/or no's. The founding of information theory makes it possible to define information as a measurable mathematical quantity. Claude Shannon, the founder of Information Theory, realized that to measure information is to count the number of possibilities in an object (Shannon, 1948). In the general case, Shannon found that the measure of information relates to the entropy discovered in the field of thermodynamics. We propose that quantum physics supports the assumption that everything is made of information, energy and matter. Quantum physics tells us that everything is made of a vibrational field, which can be mathematically described by a wave function. A wave function describes the possible states, i.e. possibilities, of an object. Therefore, wave function accounts for the informational aspects of the object. The matter aspect of each vibration/particle or state is described by its frequency and wavelength and other quantities such as charge, mass, and more, that can be measured. Each vibration or state also carries energy. Quantum physics tells us that the energy  $E$  of a vibration is related to its frequency  $\nu$  through the formula:

$$E = h\nu.$$

Here  $h$  is Planck constant, a physical constant discovered in quantum physics. Planck constant describes the value of basic quantum action. It is found to be of value  $6.62607004 \times 10^{-34} \text{ m}^2 \text{ kg} / \text{s}$ . Not only quantum physics indicates everything is made of information, energy, and matter, but classical physics also suggests this. Thermodynamics studies how pressure and temperature affect the movement of matter and energy. It uses an equation of state to describe a system. Thermodynamics discovers an important quantity to describe a system, which is entropy. Thermodynamics and information theory reveal that entropy measures the information in a system. The basic equation of state in thermodynamics is:

$$dE = T dS - P dV.$$

Here  $E$  represents energy and  $dE$  is the change of energy.  $S$  is entropy and  $dS$  is the change of entropy.  $T$  is temperature.  $P$  is pressure.  $V$  is volume, and  $dV$  is the change of volume. This equation basically describes the relation among matter, energy, and information. Therefore, thermodynamics supports our proposal that everything is made of information, energy, and matter. Since classical physics is an approximation of quantum physics, we conclude that physics corroborates our assumption that everything is made of information, energy, and matter.

### **Definition of Soul, Heart, and Mind**

Information has three related components: the content of information, the receiver of information, and processor of information. We suggest that soul (or spirit), spiritual heart, and mind represent these three aspects of information. To clarify, they are defined in the following way:

Soul is the content of information carried in everything.

Spiritual heart is the receiver of information in everything.

Mind is the processor of the information in everything.

According to the above definition, everyone and everything has soul, heart, and mind, in addition to energy and matter. Quarks, electrons, atoms, molecules, cells, animals, plants, mountains, water, minerals, planets, stars, galaxies, and universes all have soul, heart, and mind. This is because everyone and everything carries, receives, and processes information. With the above definition, soul, spiritual heart, and mind become measurable and calculable quantities. For instance, from the wave function, we can derive what kind of quantum information is inside something. In this way, we can calculate the quality and quantity of its soul. To calculate heart, we need to find out what kind of vibrations it can receive. According to quantum physics, everyone and everything receives vibrations through resonance. From its wave function, we can derive what kinds of vibrations the system can resonate with. In this way, we can know what kind of heart it has. Spiritual heart can be measured by a spectroscope. Spectrometry measures what kind of vibrations a system can receive and/or emit. To know about the mind property of an object, we can calculate or measure how it behaves or responds after receiving a vibration. If we know its wave function, this can also be calculated.

## Quantum Entanglement and Miraculous Spiritual Power

More accurately, quantum physics tells us that everything consists of quantum information, energy, and matter. Quantum information is the information carried by the object described by wave function (Nielsen *et al.*, 2010). Classical information is carried by the object described by the equation of motion in classical physics. Quantum information has the amazing ability to teleport itself through quantum entanglement. To teleport is to transport quantum information instantly to another location without physically moving matter and energy. Quantum entanglement is a physical phenomenon that occurs when pairs or groups of particles/waves are generated or interact in ways such that the quantum state of each particle cannot be described independently of the others, even when the particles/waves are separated by a large distance.

The quantum state must be described for the system as a whole. For the quantum entangled vibrations/particles or states, when one experiences a certain state, the other (s) will automatically and instantly experience a certain corresponding state regardless of the distance. Quantum entanglement phenomenon indicates that if one has quantum vibrations that are quantum entangled with other vibrations, when one's state changes, it affects those others instantly, independent of any separation or distance. In the same way, one can also be affected by the ones with whom one's vibrations are quantum entangled. The existence of quantum Entanglement phenomenon tells us that:

1. By changing the information within us, we may be able to affect others. This explains spiritual healing, soul healing, and psycho kinesis.
2. Our thoughts may affect others. Our thoughts are vibrations carrying information. By changing our thoughts, we change the information. This may lead to changes in the information of those with whom we are quantum entangled.
3. One may realize the ability to access information of others with whom one shares quantum entanglements, demonstrating abilities such as clairvoyance and telepathy. In other words, information about others may be available to you if you are quantum entangled with them, even though you are not in direct contact with them.
4. Our soul can teleport: Teleportation is the transfer of information, energy, and matter to another location instantly without physical movement.

The more quantum entanglement one has with others, the greater is one's potential to demonstrate the abilities mentioned above. We thus suggest that the parapsychological or spiritual abilities can be explained by quantum physics. Quantum physics provides a theoretical and mathematic framework as well as experimental methods to demonstrate proof about the possibilities of these abilities. Ancient Chinese Tao wisdom tells us that everyone and everything is made of Jing, Qi, and Shen. In the frame of this work, Jing is matter. Qi is energy. Shen is information and includes soul, heart and mind. In Chinese, the character "Shen" means miraculous quality. This work can explain Shen's miraculous abilities. Every culture and tradition has documented cases of people possessing the spiritual abilities mentioned here. Our physics definition and insight about soul, heart, and mind provides a way to explain these spiritual phenomena using quantum physics. It tells us

that everyone and everything intrinsically has these miraculous spiritual abilities. It shows us that to enhance our spiritual power, one should enhance one's quantum entanglement with others. Now it becomes meaningful to study scientifically how to enhance quantum entanglement and therefore, these abilities. We believe paying attention to, developing, and utilizing these abilities through the power of Shen (soul, heart and mind) can help take humanity to the next level of existence.

## Conclusion

In this paper, we show that everyone and everything is made of information, energy, and matter. We propose to define soul as the content of quantum information, heart as the receiver of quantum information and mind as the processor of quantum information. We show that with this definition, quantum physics can explain spiritual phenomena and abilities. This demonstrates that parapsychological phenomena are compatible with the well-established laws of natural science. It provides a way to integrate the natural science with spiritual and conscious studies. This work has application in the natural sciences, such as physics, medicine, biology, environmental science, and geology as well as social sciences such as education, psychology, philosophy, and more. It also has application in the emerging science of healing. This work also provides a new metaphysical explanation of quantum physics. We will explore these applications in our future work.

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