

Original Article

# Human Spiritual Potential

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Received Date: 07 March 2024

Revised Date: 06 April 2024

Accepted Date: 05 May 2024

**Abstract:** This paper explores and defines the human spiritual potential by presenting a timeline of evolutionary breakthroughs leading up to the realization of free will. Starting with the restrictions on thinking independently of the scholastic dogma imposed by Roman law and the Catholic Church, this paper follows an unfolding of scientific discoveries and philosophical insights that allow one the possibility to experience free will. The 20<sup>th</sup> century witnessed an explosion of scientific discoveries that initiated a profound paradigm shift in our understanding of the relationship between humanity and the universe. Quantum theory reconnects our thinking mind with our human spirit by allowing for the existence of an intrinsic metaphysical force. Living as an awakened being with the awareness of this force offers the opportunity to evolve into a spiritual being with the free will to develop one's human spiritual potential.

**Keywords:** Spiritual, Roman Law, Philosophical Insights, Scientific Discoveries, Scholastic Dogma.

## I. HUMAN SPIRITUAL POTENTIAL

### A. History

Aristotle's (384 BC – 322 BC) geocentric view of the universe, which positions Earth as the stationary center, was the accepted cosmological theory for more than 1800 years. Four hundred years after Aristotle, Ptolemy (100 AD – 170 AD) reinforced Aristotle's geocentric model with mathematics that calculated the rotational position of the sun, moon, and planets as well as the rising and setting of the stars and the eclipses of the sun and moon. The Holy Roman Empire adopted the Ptolemaic/Aristotelian cosmology, which “pleased religious people because it gave pride of place to human beings – God's special creation” (Singham, 2007). “The geocentric worldview became engrained in Christian theology, making it a doctrine of religion as much as a natural philosophy” (Riebeek, 2009).

The Church's strict adherence to philosophical and religious dogma prevented the progress of scientific development for more than 1300 years. “The flame of independent and creative philosophical reflection which had burned so brightly in ancient Greece was practically extinguished until it was revived at the Renaissance” (Copleston, 2003, Vol 4).

The geopolitical climate during the middle ages was riddled with power struggles between the Catholic Church and the Holy Roman Empire. Popes and saints were executed because their beliefs differed from those held by the prevailing Holy Roman rule. Medieval philosophy was driven by theology, which was “regarded as the supreme science” (Copleston, 2003, Vol 4, p. 15). The primary academic focus was twofold: understanding our relationship with God and understanding God's manifestation of knowledge.

Saint Albertus Magnus' 13<sup>th</sup> century Latin translation of Aristotle's *corpus* had a profound impact on the world of academia. Aristotle's philosophies “reopened the question of the relation between faith and reason, calling into question the *modus vivendi* that had obtained for centuries” (McInerny & O'Callaghan, 2014, Introduction). This newly translated corpus of Aristotle's philosophy, which includes the senses in addition to the mind as a source of knowledge, fueled a schism between the scholastic theological community and the Holy Roman Empire.

Some of the darkest days of the medieval times came at the end of the era. The Great Famine of 1315–1317 and the Black Death from the bubonic plague were among many crises that haunted the middle ages. The death toll ranged from 75 to 200 million people (“Black Death,” 2021) in Eurasia and North Africa, due to both political and natural disasters. The Black Death alone claimed more than 45–50% of the European population (“Black Death,” 2021).

### B. Renaissance

The Renaissance (15<sup>th</sup>–16<sup>th</sup> century) was a cultural movement that came to life in Italy with Dante's poem *Divine Comedy* setting the stage. The impact from Dante's “unforgettable visionary journey through the infinite torment of Hell, up the arduous



slopes of Purgatory, and on to the glorious realm of Paradise” (Ransom, 2003) permeated society as people shifted to a new paradigm focused on human reason, faith, and divine love. This was a period of cultural, artistic, political, and economic rebirth that spread throughout Europe “under the combined influences of an increased awareness of nature, a revival of classical learning, and a more individualistic view of man” (Renaissance Art, 2009).

“While there were identifying features, [the Renaissance] did not have a single unifying thesis or goal ... there was no guiding ideology like rationalism or empiricism” (Carneades.org, 2020). Although there was no guiding ideology to launch the Renaissance, what did arise during this era was the philosophy of humanism. The focus of humanism is the “belief in self, human worth, and individual dignity” (Johnson, 2021). The fact that western civilization was organized around a geocentric model of the universe made way for the “humanistic belief that man was the center of his own universe” (History.com Editors, 2010). The humanistic movement “called for a comprehensive reform of culture – the transfiguration of what humanists termed the passive and ignorant society of the ‘dark’ ages into a new order that would reflect and encourage the grandest human potentialities” (Grudin, 2020). Renaissance art (including works by da Vinci, Michelangelo, and Raphael) reflected the values of the period. The path to self-realization began to emerge.

Many significant events occurred during the Renaissance: Columbus crossed the Atlantic Ocean, making way for European exploration and colonization of the Americas; Copernicus shocked the world with his heliocentric model of the universe, “[challenging] the notion that man is the center of the universe” (Morgan, 2017, p. 21); Gutenberg invented the printing press, which played a significant role in spreading Martin Luther’s message challenging papal authority. Martin Luther prompted a movement that caused the peasants to revolt, culminating in the Reformation of the Roman Catholic Church, the deconstruction of the religious unity of medieval Christendom, and the advent of Protestantism.

At the beginning of the 16<sup>th</sup> century, mathematician, astronomer, and Polish Jesuit priest Nicolaus Copernicus (1473–1543) presented his heliocentric theory in a manuscript titled *Commentariolus*, which places the sun (rather than the earth) at the center of the universe. “Afraid of criticism [from the Church], Copernicus did not publish his theory until 1543, shortly before his death” (Riebeek, 2009). As he feared, the Copernican heliostatic system met with fierce opposition from the Catholic Church, which eventually banned Copernicus’ books in 1616; this ban held until 1835 (Spindel, 2019).

Those who advocated Copernican ideas became targets for the Roman Inquisition, an ecclesiastical tribunal established by the papacy in 1542 to suppress heresy. In 1600, Italian philosopher, astronomer, mathematician, and Dominican priest Giordano Bruno “was burned at the stake for teaching, among other heretical ideas, Copernicus’ heliocentric view of the Universe” (Riebeek, 2009). Ten years later, Galileo pointed his telescope at the sky and discovered that moons orbited Jupiter, providing the empirical evidence to support Copernicus’ heliocentric theory.

In 1615, “the Roman Inquisition concluded that heliocentrism was foolish and absurd in philosophy, and formally heretical since it explicitly contradicts in many places the sense of Holy Scripture” (“Galileo Galilei,” 2021). In 1633, Galileo, like Bruno, was tried for heresy under the Roman Inquisition. While Galileo did not share Bruno’s fate, he was found “vehemently suspect of heresy and spent the rest of his life under house arrest” (“Galileo Galilei,” 2021) with a gag order preventing him from perpetuating Copernicus’ theory either orally or in writing (Van Helden & Autrey, 2021).

### C. Modern Science

Galileo Galilei (1564–1642) was an Italian mathematician, astronomer, physicist/natural philosopher, and engineer. He is known as the “father of modern science” (“Galileo Galilei,” 2021). Galileo’s mechanical concepts of a physical world displaced Aristotle’s widely accepted metaphysical categories (substance, quantity, quality, relation, place, time, situation, condition, action, and passion) and became the foundation for the *new sciences* (science as we know it today, independent of theology). Galileo declared that “the book of nature is written in the language of mathematics” (Machamer, 2017), introducing a new lens for viewing natural philosophy: changing from a verbal qualitative account of the universe to a mathematical one “in which experimentation became a recognized [scientific] method for discovering the facts of nature” (Van Helden & Autrey, 2021).

When Galileo was born, theology was the supreme science. By the time he died, the new science was a budding discipline. Galileo’s research and discoveries initiated a paradigm shift that manifested “as an introduction of new mental models” (Palmieri, as cited by Machamer, 2017) or as “a new model of intelligibility” (Machamer, 2017). This shift from the old view of Aristotle’s metaphysics to the new view of Galileo’s mathematics lays the foundation for the future Age of Reason.

Aristotle's *First (or Basic) Philosophy*, which we know today as metaphysics, is the study of the inner world: the internal, intrinsic principles and virtues that support the force of motion and action stemming from our aliveness. In addition to motion and action, metaphysics addresses the concept of an individual entity. Most importantly, metaphysics embraces the concept of being (Nirenberg, 1996).

Galileo "changed the acceptable way of talking about matter and its motion and so ushered in the mechanical tradition that characterizes so much of modern science" (Machamer, 2017). Galileo displaced Aristotle's five elements (one celestial element: the aether or fifth element, and four terrestrial elements: earth, air, fire, and water) with only one element: corporeal matter. Focusing exclusively on the physicality of matter, the new modern physics of Galileo clashed with Aristotle's metaphysical doctrine "in the sense that [Galileo's] motion turns out not to be an intrinsic quality of things" (Nirenberg, 1996). By focusing only on corporeal matter, Galileo isolates physics from metaphysics, omitting intrinsic spirituality from the mathematical equation of human existence. It is this omission that most troubles the Church. The dogma that supports a rational proof of the existence of God cannot work without metaphysics.

Galileo's way of thinking became the way of the scientific revolution culminating in Modern Science. Modern Science replaced Scholasticism, which was the existing systematic view of the world. Scholasticism was largely based on ancient texts (Euclid, Aristotle, and Ptolemy) and Christian dogma. The credo of the founders of modern science was "to ignore, or to dispense with, what they called 'occult virtues or qualities of things' [the inner world]: these had been thoroughly abused by the Scholastics" (Nirenberg, 1996).

#### **D. Modern Philosophy**

While Galileo was in Italy facing the Roman Inquisition, Descartes was in France forming his own philosophical school of thought. Rene' Descartes (1596–1650) was a mathematician, natural scientist/philosopher, and metaphysician. He was a Roman Catholic who lived through the Counter-Revolution of the Church and was a soldier in the 30-year war, a religious war over Roman Catholic absolutism.

Burning at the stake was still (and had been for centuries) the penalty for the conviction of heresy or witchcraft. Descartes was four years old when Bruno was convicted and burned at the stake and 37 years old when Galileo was convicted, gagged (metaphorically speaking), and sentenced to house arrest. Unlike Bruno, who died for the advancement of science, Galileo recanted his own teachings and beliefs to save his own life (Nirenberg, 1996). Of this, Descartes was aware.

Descartes took a different tack than Galileo. Rather than ignoring the force of our inner being by rejecting the lens of metaphysics, Descartes postulated that there are two distinct substances that co-exist: the mind (or spiritual, per Frederick Copleston) (2003, Vol 4) and the material/physical (objects). This distinction, called Dualism, is the foundation of Cartesian philosophy. Saint Thomas Aquinas separated theology from philosophy; Galileo separated physics from metaphysics, and Descartes—by separating the mind/spiritual from the physical—separated science from philosophy.

Like Galileo, Descartes was a mathematician. He is the founder of analytic geometry, a mathematical tool that reduces geometric problems to algebraic equations. Analytic geometry laid the foundation for the invention of calculus, which led to the development of modern physics, the discovery of quantum mechanics, and the advancement of technology.

Descartes and Galileo both strove to keep metaphysics out of the mathematical expression of space and motion. In this regard, Descartes was consistent with the credo of modern science "that no 'occult virtues' were to be accepted when speaking of physical phenomena" (Nirenberg, 1996). Motion was an extrinsic phenomenon transmitted via physical contact of object to object/particle to particle; there was no empty space, as "motion could not possibly be transmitted across empty space" (Nirenberg, 1996). For Descartes, and later for Albert Einstein, this means "no spooky action-at-a-distance," which was Einstein's response to the quantum phenomenon of *entanglement* (Popkin, 2018).

At this point, the remaining unknown variable is force. At the time, it was accepted that the principles of inertia were in play. Inertia keeps an object in motion, moving in a straight line with the same velocity, or keeps an object at rest unless there is interference by an extrinsic force. This principle of physics later evolved to become Isaac Newton's first law of motion. Inertia is an intrinsic force of resistance, a quality of mass (Newton, 1726). The existence of inertia as an intrinsic force holds the door open for metaphysics.

Galilean physics, and later Newtonian physics, accepted that for an object to start moving, there needs to be a force of action. So, the next question is: What is the universal force responsible for the initial start of motion? Galileo ignored this question, but for Descartes, the answer is God.

Descartes differs from Galileo in his dedication to metaphysical thought; from this dedication, Descartes earns the title “father of modern philosophy.” However, Descartes was adamant about keeping the philosophy of metaphysics separate and distinct from the science of physics. Descartes postulated that the inner world of the mind (and spirit) is separate and distinct from the physical outer world of the body: hence, Cartesian dualism.

Like Aristotle, Descartes was a metaphysician. However, a major difference exists between the two schools of thought: Aristotle’s metaphysics includes the senses as an integral source of knowledge while Descartes’ epistemological theory insists that knowledge comes solely from the reasoning/rational/thinking/intellectual mind, independent of the senses. To Descartes, senses were associated with “occult virtues.” Descartes’ argument, *Cogito, ergo sum*, “I think, therefore, I am,” is the foundation of existence: as long as he is thinking, he exists; senses are irrelevant (Cottingham, 2015).

Aristotle presented a verbal qualitative view of the universe as a blend of the metaphysical intrinsic/inner/spiritual world and the physical/outer/material world. Galileo presented a mathematical view that ignored the existence of our inner being and focused entirely on the physical world; metaphysics had no place in Galileo’s modern science. Descartes presented an inner world of a reasoning, rational, and thinking mind (or soul, per Copleston) that is separate and distinct from the outer world of mass and matter, with “God as the link between the sphere of finite spiritual substances and the corporeal sphere” (Copleston, 2003, Vol. 4, p. 20). “This, for Descartes, was another proof of the existence of God” (Nirenberg, 1996).

The Catholic Counter-Reformation ended concurrently with the end of the 30-year war of religions in 1648. This war initiated a paradigm shift from the sacerdotalism previously enforced by the church to a new freedom of thought, where ideas were permitted to flow and circulate without fear of recrimination. This was a time to begin anew with the reconstruction of an infrastructure autonomous from the Roman Catholic stronghold.

### **E. Age of Enlightenment**

The Age of Enlightenment (1685–1815) was an intellectual movement anchored in “the belief in the power of human reason” (Random House, 2021). This was a time of scientific innovations and enlightened awareness reflected in ideals such as liberty, progress, tolerance, fraternity, constitutional government, and separation of church and state (Bristow, 2017). These ideals, expressed by John Locke (1632–1704), framed America’s Declaration of Independence from England in 1776. (History.com Editors, 2009). Throughout this era, reason had become the primary source of authority, displacing the authoritarianism of the Holy Roman Empire. Therefore, this period is also referred to as the “Age of Reason.”

This undertaking “to employ and rely on one’s own intellectual capacities in determining what to think for oneself and how to act” helped to cultivate individual freedom. A great awakening to humanity’s intellectual power occurred, which “supported the philosophical confidence to achieve a systematic knowledge of nature, and to serve as an authoritative guide in practical life.” This philosophical confidence created an environment where traditions, prejudices, superstitions, myths, and miracles “competed with the authority of one’s own reason and experience” (Bristow, 2017). This is when Sir Isaac Newton arrived on the scene.

Isaac Newton (1643–1727) was born during a time when the western world was transforming from an organized structure controlled by Catholic dogma and Roman law, with limited opportunity to expand one’s consciousness, to a modern world with a newly established freedom of thought. This cultural transformation resulted from centuries of chaos and turbulence where many people lost their lives because they not only dared to think for themselves but also chose to share their thoughts with others. Isaac Newton was born into a much different world than his philosophical and scientific predecessors. Newton experienced a freedom of thought that his forefathers did not.

Isaac Newton’s most significant contribution to the modern world of physical science was his invention of calculus (rooted in Descartes’ analytical geometry), which in turn provided the mathematical support for his theory of universal gravity and laws of motion (*Philosophiae Naturalis Principia Mathematica*, 1687). Newton’s theory of gravity was predicated on the premise that objects are attracted to one another based on their mass. Contrary to Descartes’ thinking, there was not a contact mechanism by which forces of gravity could act, as gravity is the force that pulls objects towards each other. Newton theorized that the gravity

that keeps the Earth revolving around an unmoving sun is the same force that pulls objects to the ground. Gravity, therefore, is an intrinsic force of motion.

Newton challenged the existing accepted theory of Descartes, who agreed with Galileo that motion is extrinsic to the object and can only be transmitted by contact, by asserting that force is intrinsic (inertia). Lacking a proposed contact mechanism by which forces of gravity could act, therefore positioning motion to also be intrinsic, Newton's theory rattled modern scientist who feared that gravity was "invoking an occult power of action at a distance" (Smith, 2007). However, his work, published in *The Principia*, used reason and observation to theorize a scientific universal force of motion to justify the replacement of the metaphysical actions of God (proposed by Descartes) with science legitimized by experiment and validated by mathematics.

Calculus is the mathematical foundation for Newton's redefinition of what had been perceived as an "occult power of action." Newton's theory postulates that gravity is an intrinsic force of motion. Herein lies a scientific phenomenon, supported by mathematics, which "eliminates the need for the supernatural" (Caldwell, 1998). Newton became a dominant figure in the scientific revolution when his theory of gravity and laws of motion mathematically validated Copernicus' heliocentric model of the universe. As Newton's theory of gravity was substantiated, a new paradigm shift occurred and Newtonianism began to flourish.

In 1704, Isaac Newton published *Opticks*, a record of experiments and deductions on the separation of light into a spectrum of component colors. Newton deduced that pure white light contains within itself all the colors of the spectrum, which can be separated by a prism. This theory is predicated on light being made up of tiny corpuscles, unique "packets of light," i.e., particles (Dolnick, 2012). The prevailing theory of light was Christiaan Huygen's (1629-1695) wave theory which stated that "light traveled in waves through a rare substance called luminiferous ether" (Redd, 2012). Huygen's theory proposed that ether vibrated in the same direction as light; forming a unique wave itself as it carried the light waves (Spring & Davidson, n.d.).

Modern science was being explored, invented, and developed in the privacy of the Royal Society [of London], a community of scientist whose mission was/is the improvement of natural knowledge. The Royal Society's motto, *Nullius in verba*, means "take nobody's word for it," expressing the Society's determination to "withstand the domination of authority and to verify all statements by an appeal to facts determined by experiment" (Royal Society, n.d.).

Still reeling from a history that included the threat of annihilation as punishment for independent thinking, inventors kept their solutions, conclusions, formulas, and mathematical equations secret, hesitating to disclose details and discoveries. Newton's confidence in his theory of light as particles led him to be the first to fully disclose a scientific discovery in a printed periodical. "Newton's paper, almost as much as the discovery itself, marked a breakthrough" (Dolnick, 2012).

Newton paved the way for others to challenge existing thought paradigms that had been instilled through centuries of Scholasticism. "Christians sought to reposition their faith along rational lines, [while] deists and materialists argued that the universe seemed to determine its own course without God's intervention" (History.com Editors, 2009). Modern science is predicated on the idea that reason is the primary source of authority and legitimacy. Beliefs by way of reasoning were affirmed using Galileo's scientific method, which required repeated experimentation, observation, and mathematics. Modern science displaced the senses as a source of knowledge and this new paradigm displaced religion as a primary way of life.

#### **F. Wave-Particle Duality**

Seventy-four years after the passing of Sir Isaac Newton, English mathematician and physicist Thomas Young (1773-1829) conducted his first double-slit experiment, which demonstrated the wave behavior of light. The empirical data derived from Young's experiment validated the wave interference behavior of light. For a century, the Royal Society operated on the results published in Newton's *Opticks*, which is based on reason and mathematics, that light was delivered in particles. Here again, someone exercised their relatively new freedom of thought to advance the understanding of physical science by challenging Newton's theory with empirical data that confirmed that light travels in waves. Young's actions widen the door for the continued pursuit of scientific understanding.

German physicist and experimentalist Heinrich Hertz (1857-1894) proved conclusively from experiments conducted between 1886 and 1889 that electromagnetic waves, previously predicted by James Maxwell in 1864, actually exist (Edwards, 2012). In 1900, German theoretical physicist Max Planck discovered *energy quanta* (particles that can be measured), which led to his hypothesis "[that] energy carried in electromagnetic waves [light energy] could only be release in 'packets' [quantized

form/particles] of energy” (“Photoelectric effect,” 2021). This discovery was the genesis of quantum theory and led to Plank earning the Nobel Prize in Physics in 1918 and the title “father of quantum physics” (Stuewer, 2016). In 1905, Albert Einstein advanced Planck’s hypothesis with the publication of his paper explaining the data from the research of Heinrich Hertz on the photoelectric effect. Einstein’s theory supports Planck’s hypothesis that light energy is carried in discrete, quantized packets: that light is made of particles.

The discovery that light is made of particles left the scientific community with a dilemma. Now there exists experimental data that supports both the theory that light travels in waves and the theory that light travels as particles. This dilemma brought a team of physicist together in Copenhagen (1925-1927) with the objective of understanding this physical phenomenon and advancing the theory of quantum mechanics.

Erwin Schrödinger, who was part of this scientific endeavor, formulated a mathematical equation that validated his wave theory of particles, postulating that the waveform collapses into particles upon observation. This mathematical expression was based on the double-slit experiment, as first conducted by Thomas Young in 1801, enhanced by adding photon detectors. This allowed the experimentalists to observe the action of the energy as it approaches and passes through the two slits.

When the light passed through the two slits without observation, the light reflected the classical interference pattern of wave behavior, i.e., a fringe pattern of light and dark stripes (the same result as Thomas Young’s experiment in 1801). When the photon detector was activated at the two slits, the experimentalist observed the light energy as particles that demonstrated the ability to discern which of the two slits to pass through. With observation, the light reflected a pattern of particle behavior, i.e., two solid stripes extending from each slit. The enhanced double-slit experiment proved that light behaves as both waves and particles by demonstrating the collapse of the energy wave into energy particles upon observation. (Hobbs, 2020). The transformation from wave to particle is solely dependent on observation, which is the independent variable in Schrödinger’s famous 1926 equation.

In 1927, American physicist Arthur Compton (1892–1962) won the Nobel Prize in Physics for his discovery of the particle nature of electromagnetic radiation. At the same time, experimentations by Davisson and Germer showed that electrons demonstrated the same wave behavior as photons; later, this was found to be true for atoms and molecules (“Wave-particle duality,” 2016). In 1933, Erwin Schrödinger was awarded the Nobel Prize in Physics for his equation.

### **G. Human Spiritual Potential**

Since the advent of modern science, humans have been indoctrinated to rely solely on the intellectual, rational mind and to resist metaphysics as a reliable source of knowledge. In response to centuries of scholastic dogma, experiences of the senses from our inner being were discounted as occult virtues. There remains a strong memory of the many people who were burned at the stake for heresy/witchcraft. Quantum philosophy of the 20<sup>th</sup> century brings metaphysics back to the realm of understanding our relationship with the universe.

In addition to the advent of quantum physics, the 20<sup>th</sup> century also launched another new scientific theory with the 1905 publication of Albert Einstein’s paper on relativity. In this paper, Einstein presents his famous equation,  $E = mc^2$  (energy equals mass times the speed of light squared), as a footnote, stating that energy (light) and mass (matter) are different forms of the same thing. In other words, everything in the macrocosm of the world we can see and everything in the microcosm of the subatomic world is composed of energy. Therefore, everything in the physical world and everything in the non-physical world is energy (Hobbs, 2020). The law of conservation of energy states that energy can neither be created nor destroyed; it can only be transformed or transitioned from one form to another (Feynman, Leighton, & Sands, 1989, p. 4-1). Energy is eternal.

Schrödinger’s wave theory of particles (1926) is the bedrock of the Copenhagen interpretation of quantum theory. The dependency on observation for the transformation from a wave of energy to particles of energy validates the metaphysical aspect of our being. The empirical data provided by the enhanced double-slit experiment reveals that the smallest piece of matter that makes up our existence has both the ability to sense when it is being observed and to respond in a manner that demonstrates free will. What is the source of this force manifested in the power of free will? Nobel laureate Richard Feynman says, “this is the central mystery of quantum mechanics” (Al-Khalili, 2013).

The best description that we have of the natural world, that subsumes both the particle and wave nature of matter/energy, is Quantum Field Theory. In Quantum Field Theory everything (matter/energy, particles/waves) is represented by a field that exists everywhere and encompasses all of the properties of these entities including their positions, interactions,

interconnectedness, and strange effects such as entanglement (Einstein's "spooky action at a distance"). Quantum Field Theory also encompasses the non-deterministic nature of this interconnection (Carroll, 2019, p. 249).

In the world according to Donna Hobbs, this empirical data supports the reality that in the quantum field, there is consciousness at the smallest degree of existence, i.e., subatomic particles. Fundamentally, quantum theory/quantum mechanics/particle physics is about existence; it is about the true metaphysical nature of being. Consciousness is the source of the human spiritual potential. The human spiritual potential is one's awareness of one's innate ability to be self-observant, to be fully present in the moment, to be at home with oneself. Senses connect the outer world with the inner world. Through self-observation (via our inner/spiritual eye/sight), we actualize our spiritual existence.

In the *Human Potential Movement*, American author and activist Jean Houston says that "consciousness [is] the underlying organizing principle in the universe" (as cited in Laszlo, 2016, p.5). The enhanced double-slit experiment validates Jean Houston's postulate that consciousness is the independent variable of the universe. This reality is legitimized by Schrödinger's mathematical equation.

#### **H. Praxis**

The human spiritual potential is directly related to the skilled ability to be at home with ourselves when we have developed the awareness that free will is available only in the present moment. If we are lost in our minds, reviewing the past or looking to the future, distracting ourselves with games and busy-ness, we are not at home with ourselves in the present moment. We are functioning with an undisciplined mind organized around waves of habit energy, navigating life using defensive energy as protection.

As we evolve spiritually, there is a point in the maturation process when we awaken to the reality that we are something other than our minds. When we can "see" ourselves, understanding that we are the observer, we transform from living as an intellectual being to living as a spiritual being. This transformation is the stage in spiritual development when we accept responsibility for ourselves; it is the dawning of self-awareness. The senses are awakened such that we can see our human spiritual potential while our conscience recognizes the moral responsibility that comes with free will.

The moral responsibility of free will manifests in how we actualize our thoughts, actions, words, and deeds. Responsibility is a learned behavior, and such skills are learned best through experience (senses). Lessons learned through experience are held in our conscience. The energetic impact of our experience registers on a spectrum of light to dark. The choices we make in the present moment reflect where we are in our spiritual development. Sir Isaac Newton's third law of motion is about the equality of action: for every action there is an equal and corresponding reaction (Newton, 1726). As we evolve into a spiritual being, we come to understand this universal law of motion, also known as karma.

Living as an awakened spiritual being with the awareness of our moral responsibilities is predicated on our skilled ability to be in the present moment. Developing this skill takes practice. Coming home to ourselves is the practice of coming back to the present moment. When our attention is directed to the machinations of the mind, we are not in the present moment. To be fully present requires skill developed through the practice of mindfulness.

Mindfulness is the skilled ability to come home to ourselves and to be present in the moment, independent of the thinking mind. Contemporary Zen Buddhist master Thích-Nhất-Hạnh (1926-) offers a secular practice of spiritual exercises that support the development of mindful living as well as practical exercises to maintain awareness in the present moment. The practice of mindfulness starts with the breath. "Breath remains the vehicle to unite body and mind and to open the gate of wisdom" (Thích-Nhất-Hạnh, 2013, p. 38).

As we practice awareness of our breath, mind chatter calms and quiets. When the mind is calm and quiet, we can enjoy the experience of being at home with ourselves in the present moment. When we are at home in the present, we have a higher probability of making choices that benefit rather than harm. Harm is often a defense used by the "unskilled." In any given moment, we have infinite possibilities from a spectrum of light to dark to choose from. Practicing mindfulness allows the wisdom of free will to make morally responsible choices, knowing that the energetic reaction to the action of our choice remains in the eternal particle field referred to as our conscience.

## II. CONCLUSION

The contemporary world is the product of the persistence, bravery, and courage of the people who paved the way for the freedom of thought. This freedom set in motion an energy wave that manifested in the 20<sup>th</sup> century science and technology that is now the foundation for 21<sup>st</sup> century life. As scientific discoveries are openly shared, technology advances exponentially, creating a sense that the universe is accelerating. This sense comes from how we experience the inundation of information that became available with the technology explosion in the 20<sup>th</sup> century. This sense of experience corresponds to Einstein's theory that there is no time, just the experience of space-time.

From the 20<sup>th</sup> century discovery of quantum mechanics, a reality of self-empowerment is conceived. Self-empowerment is the skilled ability to live as the observer of an awakened soul with free will, independent of the rational/thinking mind. Self-empowerment is achieved through our skilled ability to be fully aware in the present moment, consciously choosing the next step in our eternal journey. Achieving this skilled ability requires the praxis of coming home to ourselves. By coming home to ourselves, we actualize our true human spiritual potential.

## III. REFERENCES

- [1] Al-Khalili, J. [The Royal Institution]. (2013, February 1). *Double Slit Experiment explained! by Jim Al-Khalili* [Video]. YouTube. <https://youtu.be/A9tKncAdlHQ>
- [2] Black Death. (2021, March 31). *Wikipedia*. [https://en.wikipedia.org/wiki/Black\\_Death](https://en.wikipedia.org/wiki/Black_Death)
- [3] Bristow, W. (2017, August 29). Enlightenment. *Stanford Encyclopedia of Philosophy*. Stanford University. <https://plato.stanford.edu/entries/enlightenment/>
- [4] Caldwell, A. B. (1998). [lecture notes on The Enlightenment]. Department of English, Louisiana Tech University. [https://www2.latech.edu/~bmagee/212/intro3\\_enlightenment/enlight\\_notes.htm](https://www2.latech.edu/~bmagee/212/intro3_enlightenment/enlight_notes.htm)
- [5] Carneades.org. (2020). *What is Renaissance Humanism?* [Video]. YouTube. <https://youtu.be/lhooDL5jdOI>
- [6] Carroll, S. (2019). *Something Deeply Hidden: Quantum Worlds and the Emergence of Spacetime*. Penguin Publishing Group.
- [7] Copleston, F. C. (2003). *A History of Philosophy*. Continuum.
- [8] Cottingham, John. (2015). *Rene Descartes: Meditations on First Philosophy*. Cambridge University Press.
- [9] Dolnick, E. (2012). *The clockwork universe: Isaac Newton, the Royal Society, and the birth of the modern world*. New York, NY: Harper Perennial.
- [10] Edwards, S. A. (2012). Heinrich Hertz and electromagnetic radiation. American Association for the Advancement of Science. <https://www.aaas.org/heinrich-hertz-and-electromagnetic-radiation>
- [11] Galileo Galilei. (2021, April 1). *Wikipedia*. [https://en.wikipedia.org/wiki/Galileo\\_Galilei](https://en.wikipedia.org/wiki/Galileo_Galilei)
- [12] Grudin, R. (2020). Humanism. *Encyclopædia Britannica*. <https://www.britannica.com/topic/humanism>
- [13] Royal Society. (n.d.). History of the Royal Society. <https://royalsociety.org/about-us/history/>
- [14] History.com Editors. (2009, December 16). Enlightenment. History.com. <https://www.history.com/topics/british-history/enlightenment>
- [15] History.com Editors. (2010, October 18). Italian Renaissance. History.com. <https://www.history.com/topics/renaissance/italian-renaissance>
- [16] Hobbs, D.T. (May 11, 2020). *Bridging Science and Spirituality* [Unpublished Manuscript]. School of Psychology. Graduate Theological Foundation.
- [17] Johnson, L. (2021, March 2). 5 Reasons Why the Renaissance Began in Italy. History Hit. <https://www.historyhit.com/reasons-why-the-renaissance-began-in-italy/>
- [18] Laszlo, E., Houston, J., & Dossey, L. (2016). *What is Consciousness?: Three Sages Look Behind the Veil*. SelectBooks, Inc.
- [19] Machamer, P. (2017, May 10). Galileo Galilei. *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/galileo/>
- [20] McInerney, R., & O'Callaghan, J. (2014, May 23). Saint Thomas Aquinas. *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/aquinas/>
- [21] Morgan, J. H. (2017). *Clinical Psychotherapy: A History of Theory and Practice*. Mishawaka, IN: GTF Books.
- [22] Newton, I. (1726). *Principia*. James Maclehose Publisher.
- [23] Nirenberg, R. (2021, March). The Birth of Modern Science: Galileo and Descartes. Project Renaissance, Fall 1996. Albany; University at Albany. Retrieved from <https://www.albany.edu/~rn774/fall96/science2.html>
- [24] Photoelectric effect. (2021, March 17). *Wikipedia*. [https://en.wikipedia.org/wiki/Photoelectric\\_effect](https://en.wikipedia.org/wiki/Photoelectric_effect)
- [25] Popkin, G. (2018, April 25). Einstein's 'spooky action at a distance' spotted in objects almost big enough to see. Science. <https://www.sciencemag.org/news/2018/04/einstein-s-spooky-action-distance-spotted-objects-almost-big-enough-see>
- [26] Random House. (2021). Enlightenment. In *Dictionary.com, Random House Unabridged Dictionary*. <https://www.dictionary.com/browse/enlightenment>
- [27] Ransom, J.C. (2003). [Blurb/review of *The divine comedy: the inferno, the purgatorio, and the paradiso*, by Alighieri, D.]. New American Library.
- [28] Redd, N. T. (2012, June 8). Christiaan Huygens Biography. Space.com. <https://www.space.com/16070-christiaan-huygens.html>



- [29] Renaissance Art. (2009). *Encyclopædia Britannica*. <https://www.britannica.com/art/Renaissance-art>.
- [30] Riebeek, H. (2009, July 7). Planetary Motion: The History of an Idea That Launched the Scientific Revolution. NASA. <https://earthobservatory.nasa.gov/features/OrbitsHistory>.
- [31] Singham, M. (2007). The Copernican Myths. *Physics Today*, 60(12), 48–52. <https://doi.org/10.1063/1.2825071>
- [32] Smith, G. (2007, December 19). Isaac Newton. *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/newton/>
- [33] Spindel, B. (2019, December 31). Copernicus blazed a trail for early astronomers to follow. *The Christian Science Monitor*. <https://www.csmonitor.com/Books/Book-Reviews/2019/1231/Copernicus-blazed-a-trail-for-early-astronomers-to-follow>
- [34] Spring, K. R., & Davidson, M. W. (n.d.). Light: Particle or a Wave? *The Physics of Light and Color*. Olympus Life Science Solutions. <https://www.olympus-lifescience.com/en/microscope-resource/primer/lightandcolor/particleorwave/>
- [35] Stuewer, R. H. (2016, March 9). Max Planck. *Encyclopædia Britannica*. <https://www.britannica.com/biography/Max-Planck>
- [36] Thích-Nhất-Hạnh. (2013). *The miracle of mindfulness: An introduction to the practice of meditation*. Boston, MA: Beacon Press.
- [37] Tuckness, A. (2020, October 6). Locke's Political Philosophy. *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/locke-political/>
- [38] Van Helden, A., & Autrey, L. (2021, February 12). Galileo. *Encyclopædia Britannica*. <https://www.britannica.com/biography/Galileo-Galilei>
- [39] Wave-particle duality. (2016, December 2). *Encyclopædia Britannica*. <https://www.britannica.com/science/wave-particle-duality>