

# Metaphysics and Human Life

Kiyoung Kim<sup>a</sup>

## Abstract

The ontological interpretation of physical vacuum and its interactions in physical phenomena was initiated to understand the quantum philosophy or the reality matter in quantum mechanics, at the beginning; however, it must be a different worldview from any metaphysical view that used to be in philosophy, and thus, it affects on all branches of academic studies and human activities in general. Especially, the ontological interpretation of soul, such as what it is, how it interacts with its own living physical body and external physical objects, and so on, should have an influence on the basic human values and principles, which makes human life improved ultimately with a firm philosophical base.

---

<sup>a</sup> kkim.pvn@gmail.com

## Introduction

Although it couldn't be substantiated in a scientific way, the existence of soul or spirit has been believed in oriental culture as well as western culture by many people, if not in general. Similarly, it has been believed that human's life is subjected to so-called supernatural something more than mundane phenomenological nature. For what is life, the wonders and curiosities resulted in numerous superstitions and religions in human society; for what is fundamental truth in nature, such numerous great philosophers have considered for last thousands of years and brought many philosophical ideas, doctrines, etc., of course, which have affected in every aspects of human culture, such as religions, economy, politics, etc.

Human has incorporeal mind and material body. In philosophical mind-body problem, some philosophers have thought that there is only one kind of ultimate substance in nature that can be one substance, one being, or one category – monism. (Monism) However, for the question such as what human being is, one-eyed view such as idealism or materialism in philosophy is not enough to describe it. The question is how the two independent views in the respect of phenomenology, idealism or materialism, can include the other. In dualism (Patil 2018) (Dualism, Dualism and Mind), however, accepting both ultimate substance and ultimate being, still the question is how the non-matter mind and physical body can exist together and interact each other. In short, what is the mind? which is the most fundamental and oldest question about human being. (Philosophy of Mind, McLeod 2018)

## Fundamental Nature of Being

New paradigm of physics has been suggested: the ontological interpretation for physical space, 4-D complex space, was suggested to explain the reality matter in quantum physics and to find a comprehensive explanation for classical mechanics, the theory of relativity, and quantum mechanics. (Kim, The Wave Function in Quantum Mechanics, Schrödinger Equation and Phase Space in Quantum Mechanics 1997) The 4-D complex space has two subspaces; one is 4-dimensional real space (Minkowski space-time) and the other is 4-dimensional imaginary space corresponding to the real space. The real space is the physical space we have known – real world, while the imaginary space is included as the essential part of physical space -- imaginary world, which is ontological interpretation of reality. The imaginary space is completely filled with positrons (elementary particles), those of which are confined in the space with negative energy states and keep interacting with physical objects in real space. The interaction of the object with the positrons in the imaginary space is manifested in real space as physical phenomena, for example, wave-particle duality of light, physical fields such as gravitational field, electromagnetic field, etc. Not only the comprehensive explanation was found for classical physics and quantum physics, but also new concept of physical interaction was emerged naturally when applying the first principle in the space, that is mass-charge interaction and the definition of primitive-virtual negative (PVN) charge followed. (Kim, Primitive Virtual Negative Charge 2008, Paradigm Shift in Physics 2017) With the concept of PVN, the existence of earth's electric field on the surface and the field intensity in fair weather condition can be explained naturally. By the same token, however, it will supply a fundamental clue to understand the electric and/or magnetic phenomena in planetary science. (Kim, Electric Fields on the Moon 2019)

Once the realm of physical science is expanded as shown in 4-D complex space in new paradigm of physics, it could be explained that human consciousness can be involved in physical interactions such as “double-slit experiments” in which human consciousness affects on the experimental results. (Dean Radin 2012, IONS) New type of physical interaction, subtle-spin-string wave interaction in 4-D complex space was suggested to explain “quantum entanglement” that has been left puzzled in physics, the “double-slit experiments” affected by human consciousness, and existence of life-energy, so-called with many different names as “Ki”, “Chi”, “Qi”, “Aura”, “Prana”, “Pneuma”, etc. that has been known in many different cultures around the world for a long time. (Kim, Body and Soul in Physics 2018) As shown in the “double-slit experiments with human consciousness”, if the life-energy can be managed by human consciousness and interacts with physical phenomena, the entity of life-energy should be related to the soul of human that people have believed as the something supernatural.

Although it is hypothetical, the soul can be interpreted as the counterpart in the imaginary subspace of the corporeal body in the real subspace of 4-D complex space, in which the imaginary subspace is the other world being coexisted and interacting with real phenomenological world. From the beginning to the end of its life span, growing and interacting with its corporeal counterpart through consciousness or mental activity in general, the soul exists as the other essential and also inevitable part of life, which has been out of scope in natural science until now. Life needs physical body and its soul those of which are equally essential to be the whole of life, and the reproduction for next generation is one of fundamental aspects for the life to be continued. Then, the ontological genetic information of soul can be supposed to be passed down to next generation, which might be included in the genetic information of physical body. Surely, it is a new way of thinking about what life is because the soul, which has been considered as something beyond phenomenological reality, is no more simply in the abstract concept. (Kim 2018)

Once the existence of soul is interpreted as above in new paradigm of physics, it should be a fundamental clue to investigate for the something more than phenomenological nature that people have thought, and then we can discuss about “what the life is”, the most fundamental question human has ever had, more than ever in which we have considered only phenomenological reality or with an abstract concept of soul in religion and philosophy. For people those who have religions and/or beliefs in a specific cultural background, in which previous life, the eternal circle of life (birth, death, and rebirth), heaven and hell, etc. are frequently mentioned, the interpretation of soul as above should be unacceptable. Nevertheless, so-called the soul exists only with the corporeal body as long as it is alive; hence, the soul cannot exist by itself, and there is no life before birth and after death. Based on the metaphysical interpretation of fundamental nature of being in 4-D complex space in physics, the existence of soul is interpreted as above; then, if we say that science is just another religion as someone mentioned, is it too much exaggerated? (Dawkins 2019, Rider 2014)

With the view of life as above, it is interesting to review religions and philosophies that has influenced a lot on the common values in human society. In fact, we don't have to go through all the details of them since we begin with the interpretation of fundamental nature of being and the existence of soul that many people have believed in. With a deductive reasoning alternatively, we can discuss philosophy of nature, human life, moral principles of human beings, etc. However, It doesn't mean that all the philosophical works are useless done by great thinkers and religious leaders for last thousands of years. Like the human history, from which we can learn from the past and make the world a better place, we need to review their works and

corresponding changes in human society; anyhow, it should be different from classical paintings in a museum passively waiting for the appreciation from people because it already has been smeared in our educated mind-set. In addition, for superstitions for which any scientific connection has been absent, it might be interesting whether they can be explained in the domain of new paradigm of physics or not.

## Philosophy and Religion

In new paradigm of physics in which 4-D complex space is defined for physical space, human mind can be thought as a set of abstract images in corporeal body when consciousness communicates with soul in the imaginary subspace. Therefore, this view of life, which is different from any religious dogma or philosophical attitude we have known, can be considered as monism and physicalism in the new paradigm of physics, and also can be compared with pantheism by philosopher Spinoza except his philosophical attitude, determinism; however, It should be distinguished from the materialism we have known. (Spinoza, Smart, Historical and Dialectical Materialism 2019) Although we can identify or substantiate the entity of soul in new paradigm of physics, the soul is not extended one from the conventional materialism; it is beyond phenomenology and as essential as the physical body of life. Human should not be considered simply as a sophisticated machine. If the ontological genetic information of soul is passed down, somehow, as in the genetic information of physical body, although it is still controversial, human might be born with an innate reason from ancestor, which can be corresponded to the philosophical or religious view of human nature questioning whether it is innate goodness or badness. (Innatism)

To describe natural phenomena, at first, the determinism can be considered because natural phenomena might be thought as the results of cause and effect under the natural law that is supposed to be prearranged. However, it cannot be quite agreeable because there is always some randomness for outputs in natural phenomena, which has been shown in quantum physics last century. In Newtonian mechanics (classical physics) the determinism seems to be valid; however, in quantum mechanics in microscopic scale it doesn't. Then, to describe about human, surely, determinism is not enough; rather, self-determination by will is involved more than the determination prearranged by nature.

Since the beginning of human history, there have been numerous unscientific or simply unreasonable things going around; in personal jinx, taboo, talisman, hoodoo, etc.; in group wise secure belief; and religions in different societies or different cultures. As time goes by, tale, myth, legend, and religions in human society should have been made with all those of unscientific things. It seems that human needs both reasonable and unreasonable minds although the scientific rationalism has been prevailed in modern society. In fact, the mind of human being itself has two distinctive attributes, reason and emotion; however, those of which are incompatible to each other as like the wave-particle duality of light in physics, but inevitable to be the whole of mind.

People have had beliefs and worship in variety from ancient shamanism and totemism just among the member of a clan in a small area to modern and global religions with a huge population. The history of religion should be the same as the history of human being on the earth; yet, we don't have to know which is good or bad, or orthodox or not; however, it is clear

that those of beliefs have been made for people themselves worrying about their future and at least, to have a peaceful mind or consolation.

In the view of the hypothetical interpretation for the soul in life, there is no supernatural being, so-called gods in many religions. Although we still don't understand much about the interaction of souls among people and the soul itself, the soul cannot exist by itself but should be with a living corporeal body. Then, it's irony that people have believed in the existence of something, which doesn't exist, and have thanked for its beneficence giving consolation, peaceful mind, hope, etc. It seems that the ultimate truth in nature is not necessary for human beings to be happy in their lives. On the other hand, there are religion, religious tradition, and/or social and ethical philosophy that do not worship any god, such as Buddhism, Taoism, and Confucianism, respectively.

Depending on the interpretation for fundamental nature of being, however, the dogma in religion or the position in a specific branch of philosophy can be different from others, sometimes, which makes the difficulty to go with other religions or other branches of philosophy. There have been numerous religious wars in the world, such as The Crusades, The French Wars of Religion, The Thirty Years War, etc. For example, The Crusades were a series of religious wars in 11<sup>th</sup>, 12<sup>th</sup>, and 13<sup>th</sup> centuries in Europe, having left millions of casualties. Moreover, if people had just convinced of the fact that human nature cannot be described only with materialism, the communism -- economic political philosophy -- that has made lots of conflicts and confrontations in worldwide economics, politics, and human rights since 19<sup>th</sup> century with "The Communist Manifesto" (history.com 2019), wouldn't have been established in our society.

If someone is refused in a social group because he/she has a different opinion from others, it's a pity but still it can be fixed or improved through discussions among them. However, if a majority of people in a society harassed another group of people and even exterminated in the name of religion, race, or ethnicity, it is such deplorable behavior as human beings and, of course, intolerable crime. (Genocide) Then, It is wondered how they can justify their atrocious behaviors; it is about the basic human values in philosophy for social justice; they choose a typical philosophical view and take it to extremes or distort it for their purpose, which remind us of the quotes by philosopher Friedrich Nietzsche as following:

"Man is the cruelest animal."

"In individuals, insanity is rare; but in groups, parties, nations and epochs, it is the rule."

"Is man merely a mistake of God's? Or God merely a mistake of man's?"

"There are no facts, only interpretations."

(Friedrich Nietzsche)

In the last quotation, it seems that the philosopher pointed out the peculiarity of philosophy; philosophy is for view of the world not for the answer usually expected in natural science. Needless to say, we have to have a firm philosophical base for the social justice to stand on.

## Superstitions

Since the beginning of human history people have concerned for their future; for people having curiosity for the future there have been numerous ways of fortune telling; nevertheless, most of

them, depending on practitioner's individual special skill or ability, are too subjective to understand or confirm whether it is true or even meaningful in objectivity. Hence, so-called superstition has been called as it were because any scientific explanation cannot be found.

In East Asia, however, there has been an interesting way of fortune telling that is recorded in books written long time ago. It says that human's destiny is determined at the time of birth, which is called "four pillars of destiny" in which the four pillars literally means the year, the month, the day, and the hour of birth. If everything in life is prearranged and unalterable, it is so perplexing and seems to be too unreasonable to think whether it makes any sense to people living in 21<sup>st</sup> century modern society. Nevertheless, it has a long history in its cultural background even from the time long before the birth of Christ (BC), and still many people believe that the "four pillars of destiny" works with saying that it has been backed by statistics. Then, it might be wondered whether we still have to say, "It's nonsense", or not.

Although it cannot be proved whatever it says, if a somewhat realistic or affirmative interpretation is considered for the "four pillars of destiny", the attributes of a person is formed not only by its physical and mental heredity but also by congenital something supernatural on its soul, which has the cyclic pattern with 12 years period from the earth (local) and 10 years period from the heaven (global); hence, with 60 years period in general. Here, the something supernatural means the environmental factors in the imaginary subspace of 4-D complex space by which the soul is affected on the birth of life. Therefore, the destiny of human life is not determined at the time of birth although some innate attributes from ontological environment are given to the human. The innate attributes affect on the life of human; however, which can be managed by individual volition and educations although it depends on person by person.

Animals, such as dragon, snake, horse, rabbit, etc., on a merry-go-round are going through all different situations, good and/or bad, for each animal for the periodic round trip. This is an analogy for the "four pillars of destiny" describing the destiny of a person, which was originated in China but has been popular in East Asia, especially in China, Korea, and Japan. The animals are symbolic representations for humans born in different years, which are 12 different kinds of animals given in sequence and repeated every 12 years. The animals can be dropped at any point during the round trip of the merry-go-round, in which the animal can be one of the 12 kinds that represents a specific birth year, and which means that the journey of life starts like riding on the merry-go-round and going through all different, good and/or bad, situations during the journey of 60 years period.

Here, the cyclic pattern in the "four pillars of destiny" should be related with phenomenological objects that also have periodic phenomena because in 4-D complex space model the counterpart (imaginary subspace) of a physical object (real subspace) always exists and interacting with the physical object. If we look around, we can find that almost everything is periodic in regular base except unexpected accidents and natural disasters, such as day and night on the earth, the rotation of the moon around the earth, planetary motions in solar system, sun itself, etc. Interestingly, several practitioners and researchers have inferred that the cyclic pattern of the "four pillars of destiny" should be related with planetary motions in solar system as above.

First of all, the moon is the closest astronomical object affecting on human life on the earth, and of course, the sun is supposed to be the most important astronomical object for people to live on the earth. In addition, the distance from the earth doesn't have to be critical, if considering the

subtle-spin-string wave interaction in 4-D complex space that was suggested to explain “quantum entanglement” and the “double-slit experiments with human consciousness”. (Kim 2018) It is still behind the curtain how those astronomical objects can be related to the life of human beings living on the earth; however, as we know, we have just opened the door for another long journey.

## Prospects in Human Life

In the ancient parable of the blind men and an elephant; without arguing to each others about the truth such as what the elephant is, if all blind men acknowledge whatever they believe as the truth is just partial not the whole of truth and agree to share with others whatever they became to know, it wonders whether they can even make a whole picture of the elephant or not. In fact, they cannot complete the whole picture of elephant no matter how many men work together and how long period of time they spend because they have no spatial information for 3-D construction of the elephant except the sense of touch. In this case, the inductive reasoning shows two limitations to get the truth; one is the mind-set that they cannot recognize the whole of elephant, and the other is the method to describe the truth because they cannot draw the elephant just with physical sensation of touch.

On the other hand, sometimes, a religious approach is straightforward with top-down logic, which is given from a religious dogma; however, the dogma cannot be proved objectively, which is so-called ontology in metaphysics that have to be concerned even in natural science up to a certain point. However, if a fundamental clue or motivation to speculate on the ontology is given in the study of physics, and if many unsolved questions in physics can be explained with new interpretation of fundamental nature of being, it should be interesting to us if considering the abductive reasoning phrase (Duck test): “If it looks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck” and the fact that the ontological interpretation is fundamentally related to the philosophical view of the world that is the base of every branch of studies accomplished by human beings and human activities in general. Especially, for people those who are looking for a clue to break through in their research fields, it might be valuable to review their researches with the new interpretation of physical reality and the soul.

For example, in biology, against the scientific consensus of Darwin’s Theory of Evolution, many scientists have shown scientific doubts about Darwinian evolution (A Scientific Dissent from Darwinism, Carter 2011, Robert L. Crowther 2006), and there is an interesting theory insisting that human mental activity is also involved in the evolution. (Macisaac 2015, Lipton) (Bruce H. Lipton 2005) In addition, there have been another interesting studies such as Genetic Memory (Genetic Memory, Dean 2018), which is related to the evolution in biology and psychology, and Morphic Fields and Morphic Resonance (Horgan 2014, Sheldrake).

Based on ontological interpretation of physical reality, the interpretation of fundamental nature of being is not the same as any view in religions or philosophy we have known. That is about the soul for which human has tried to understand for last thousands of years with searching any tangible clue, if possible. Naturally, there have been numerous great philosophers and religious leaders with many different worldviews, which brought many different branches of philosophy and many religions in global and local societies.

Once the soul is substantiated as the counterpart of corporeal body in the new paradigm of physics, the soul is as essential as the corporeal body to be the whole of life; from the beginning to the end of life, it interacts with its physical body through consciousness<sup>b</sup>. There is no spirit existing by itself, which means that there is no god, no heaven or hell, and no eternal circle of life. One step further, it is supposed that the ontological genetic information of soul is also passed down to next generation. On the birth of human being there are two important factors affecting on its future life; one is physical and mental heredities from ancestors, and the other is environmental factors that exert influence on its congenital attributes of soul as mentioned in previous section (p. 5); however, which is supposed to be manageable by personal volition and educations. There might be a hereditary innate reason as mentioned in some religious and/or philosophical views, in which it is called goodness or badness. Then, the soul is growing by itself and being cultured under the influence of external environment.

Human beings live together in a society; hence, based on basic human values in the society a moral responsibility should be given among them. The moral responsibility is a kind of agreement among people in the society; therefore, the education in the society is necessary to share the basic human values. For any individual without being educated for the basic human values, the moral responsibility cannot be imposed in the name of justice for the society because the basic fairness and equality for everyone should be preceded in the society.

However, the conflicts among people or even between two individuals, in many cases, come from the differences of basic human values, such as the difference of race, religion, ideology, ethnicity, and/or culture in general. (Samuel P. Huntington) If we can share more common values among people in our society regardless of their origins, races, religions, etc., it could be better for the society to be in harmony than simply asking people to acknowledge the differences of values among them.

We have to have a sound philosophical base in human society as well as in natural science. Based on the philosophy, if the human basic values can be shared in a society as much as possible, for example, the metaphysical interpretation of mind-body problem, it might reduce lots of unnecessary conflicts and confrontations in the society.

Everyone doesn't have to be a philosopher in busy days; however, from time to time, we need to ponder a crumb of thought such as what a life is, what the happiness in human life is, or to make the world a better place what is the most important thing to do for our descendants and ourselves. No matter what it is, for which the philosophy should be sound and solid. Also, we need to remember, mundane life is centurial; spiritual life, millennial; that is to say, corporeal living is just for one hundred years at best; yet, spiritual living goes for one thousand years and more.

---

<sup>b</sup> Subconscious and unconscious interactions also should be involved.



## Works Cited

- "A Scientific Dissent from Darwinism." *Dissent from Darwin*. <https://dissentfromdarwin.org/about/> (accessed November 18, 2019).
- Bruce H. Lipton, Ph.D. *THE BIOLOGY OF BELIEF: Unleashing the Power of Consciousness, Matter & Miracles*. 1st Edition, October 2015. HAY HOUSE, INC., 2005.
- Carter, Robert W. "Darwin's Lamarckism vindicated?" *CREATION.com*. March 1, 2011. <https://creation.com/epigenetics-and-darwin/>.
- Dawkins, Richard. "Is Science a Religion?" *Skeptical Science*. skeptical science. 2019. <https://www.skeptical-science.com/essays/science-religion-richard-dawkins/>.
- Dean Radin, et al. "Consciousness and the double-slit interference pattern: Six experiments." *Physics Essays*, 2012: 157-171.
- Dean, Signe. "Scientists Have Observed Epigenetic Memories Being Passed Down For 14 Generations." *science alert*. April 27, 2018. <https://www.sciencealert.com/scientists-observe-epigenetic-memories-passed-down-for-14-generations-most-animal>.
- "Dualism." *New World Encyclopedia*. <https://www.newworldencyclopedia.org/entry/Dualism>.
- "Dualism and Mind." *Internet Encyclopedia of Philosophy*. <https://www.iep.utm.edu/dualism/>.
- "Duck test." *Wikipedia*. en.wikipedia.org.
- "Friedrich Nietzsche." *goodreads.com*. Goodreads, Inc. 2019. [https://www.goodreads.com/author/quotes/1938.Friedrich\\_Nietzsche](https://www.goodreads.com/author/quotes/1938.Friedrich_Nietzsche) (accessed October 28, 2019).
- "Genetic Memory." *Wikipedia*. en.wikipedia.org.
- "Genocide." *history.com*. August 21, 2018. <https://www.history.com/topics/holocaust/what-is-genocide>.
- "Historical and Dialectical Materialism." *New Dictionary of the History of Ideas*. Encyclopedia.com. November 8, 2019. <https://www.encyclopedia.com/history/dictionaries-thesauruses-pictures-and-press-releases/historical-and-dialectical-materialism>.
- history.com. "Karl Marx publishes Communist Manifesto." *History.com*. July 27, 2019. <https://www.history.com/this-day-in-history/marx-publishes-manifesto>.
- Horgan, John. "Scientific Heretic Rupert Sheldrake on Morphic Fields, Psychic Dogs and Other Mysteries." *Scientific American*. July 14, 2014. <https://blogs.scientificamerican.com/cross-check/scientific-heretic-rupert-sheldrake-on-morphic-fields-psychic-dogs-and-other-mysteries/> (accessed November 18, 2019).

"Innatism." *Wikipedia*. en.wikipedia.org.

IONS. *IONS Publications*. Institute of Noetic Sciences. <https://noetic.org/science/publications/>.

Kim, Kiyoung. "Body and Soul in Physics." *viXra e-prints*. vixra.org. 06 2018.  
<http://vixra.org/pdf/1806.0322v1.pdf>.

— . "Electric Fields on the Moon." *viXra e-prints*. vixra.org. 05 2019.  
<http://vixra.org/pdf/1905.0397v1.pdf>.

— . "Paradigm Shift in Physics." *viXra e-prints*. vixra.org. 02 2017.  
<http://vixra.org/pdf/1702.0179v1.pdf>.

— . "Primitive Virtual Negative Charge." *arXiv e-print*. 11 2008. [www.arxiv.org/pdf/0811.0522.pdf](http://www.arxiv.org/pdf/0811.0522.pdf).

— . "Schrödinger Equation and Phase Space in Quantum Mechanics." *arXiv e-prints* . 06 1997.  
<https://arxiv.org/pdf/quant-ph/9706063.pdf>.

— . "The Wave Function in Quantum Mechanics." *arXiv e-prints*. 01 1997.  
<https://arxiv.org/pdf/quant-ph/9701023v3.pdf>.

Lipton, Bruce. *Bruce Lipton I Epigenetics I Power of Subconscious Mind*. Mountain of Love Productions. 2019. <https://www.brucelipton.com> (accessed November 18, 2019).

Macisaac, Tara. "Your Thoughts Control Your DNA: Biologist." *The Epoch Times*. June 9, 2015.  
[https://www.theepochtimes.com/your-thoughts-control-your-dna-biologist\\_523100.html](https://www.theepochtimes.com/your-thoughts-control-your-dna-biologist_523100.html).

McLeod, Saul. *Mind Body Debate*. 2018.  
<https://www.simplypsychology.org/mindbodydebate.html>.

"Monism." *The Basics of PHILOSOPHY*.  
[https://www.philosophybasics.com/branch\\_monism.html](https://www.philosophybasics.com/branch_monism.html).

Patil, Komal B. "Two Schools of Thought in Philosophy - Dualism Vs. Monism." *Psychologese*. March 26, 2018. <https://psychologenie.com/dualism-vs-monism-in-philosophy>.

"Philosophy of Mind." *The Basics of Philosophy*.  
[https://www.philosophybasics.com/branch\\_philosophy\\_of\\_mind.html](https://www.philosophybasics.com/branch_philosophy_of_mind.html).

Rider, Cortical. "Top 10 Reasons Science is Another Religion." *LISTVERSE*. LISTVERSE. June 18, 2014. <https://listverse.com/2012/15/top-10-reasons-science-is-another-religion/>.

Robert L. Crowther, II. *Over 500 Scientists Proclaim Their Doubts About Darwin's Theory of Evolution*. February 20, 2006.  
[https://evolutionnews.org/2006/02/over\\_500\\_scientists\\_proclaim\\_t/](https://evolutionnews.org/2006/02/over_500_scientists_proclaim_t/).

"Samuel P. Huntington." *Wikipedia*. en.wikipedia.org.

Sheldrake, Rupert. <http://www.sheldrake.org> (accessed November 18, 2019).

Smart, John Jamieson Carswell. "Materialism." *ENCYCLOPAEDIA BRITANNICA*.  
<https://www.britannica.com/topic/materialism-philosophy>.

Spinoza. "Benedict De Spinoza." *Internet Encyclopedia of Philosophy*.  
<https://www.iep.utm.edu/spinoza/>.

"The Communist Manifesto." *Wikipedia*. [en.wikipedia.org](https://en.wikipedia.org).