

# Hajime As a Japanese Philosopher

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## Acknowledgements

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Thanks to Dr. Kuhn, I had the opportunity to read and study Kitaro Nishida's *A Study of Good*, which significantly influenced my research. Additionally, my interest in Closer To Truth allowed me to explore numerous videos on the essence of mathematics, deepening my understanding of the subject.

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## Introduction

This essay aims to introduce in detail the philosophical thoughts I have reached over many years and to explore the origins of "Hajime Philosophy" by examining how it relates to Japanese thought. Throughout my twenty years of life, I have established my philosophy based on what I have felt and thought. However, my reflections on how I reached a philosophical state have been limited to looking back on my own life. Given that I was born and raised in Tokyo, Japan, in the 21st century, it is essential to study the thoughts nurtured in Japan over thousands of years for this reflection. Recently, while studying Japanese thought through the program "Shinto Philosophy" on Closer To Truth, recommended by Dr. Robert Lawrence Kuhn, I found a strong connection with my own philosophy. In this essay, I will detail the background of the

philosophical ideas I wrote in my recent paper, "Philosophical Inquiry of Mathematics: The Concept of 'The Blue Print' and the Relationship Between Mathematics and Goodness," and study the ancient thoughts embedded in Japanese life represented by Shinto and the philosophy of Dr. Kitaro Nishida, exploring their relation to "Hajime Philosophy." I hope to obtain a religious-philosophical foundation for "Hajime Philosophy" as a result.

## Mathematics

Philosophical insights into mathematics have been actively debated for a long time. Eugene Wigner described the astonishing accuracy with which the order of nature is described by mathematics as "the unreasonable effectiveness." Dr. Edward Witten, a renowned mathematical physicist, also refers to this unreasonable effectiveness of mathematics as uncanny. Recently, many scientists and philosophers have expressed their opinions on the nature of mathematics on Closer To Truth, hosted by Dr. Robert Lawrence Kuhn. A traditional topic in the debate over the nature of mathematics is whether mathematics was invented or discovered. There are two contrasting positions on this question. One is that mathematics was invented by humans, and the other is that mathematics was merely discovered by humans. Notable proponents of the former position include Dr. Leopold Kronecker and Dr. Brian Rotman. On the other hand, proponents of the latter position include Dr. Roger Penrose and Dr. Max Tegmark.

I firmly state that "mathematics was discovered." However, in fact, this issue is not very interesting. Asking whether mathematics was invented or discovered by humans is not very meaningful. As a Japanese person, I first want to question the spirit of people regarding this debate. However, I have no objections to those who believe mathematics was discovered. I believe that from a Japanese spiritual perspective, the position that "mathematics was invented" is impossible.

The most important attitude in Japanese philosophy is to be humble with a sense of awe and reverence. Humility and weakness are closely related. As Professor Kiyoshi Oka said, Westerners inherently possess intellectual autonomy, so their attitudes towards various situations differ significantly from those of Japanese people. In other words, they take a stronger stance. However, the important thing is that everyone is weak in the face of gods, nature, and great mathematics. Therefore, one must be humble.

Dr. Roger Penrose often uses the "Mandelbrot set" as an example to explain mathematical reality, which is extremely reasonable. Despite being represented by relatively simple mathematical programs, the Mandelbrot set is astonishing. The Mandelbrot set can be infinitely magnified at any point, and the patterns that appear are never repeated. Who could have created such a mysterious structure? I cannot understand those who seek the answer in human mental activity. Such an attitude is called arrogance. Furthermore, such people overlook fundamental issues related to their own existence.

All humans are born as babies and live within their respective societies. It is rare to be born with a sense of self from the beginning. Even if it exists, it is extremely rare. (It is said that Buddha proclaimed, "In heaven and on earth, I alone am honored" at birth.) This situation can also be found in Japanese paintings (see Yokoyama Taikan's "Selflessness"). Later, we interact with many people in society (engagement) and establish our sense of self (or so it feels).

The point I want to address is precisely this. Rousseau described this as the "second birth." After adolescence, humans establish their sense of self through social participation and grow into mature individuals. However, from my perspective, this is merely an illusion resulting from the fact that one's actions or existence have a direct influence on society. I emphasized this to highlight that the self, which people see as absolute and solid, is actually extremely unstable or unclear. Reality is relative. What one considers real or genuine depends on the individual and the situation. There is nothing certain in the world. One can view this pessimistically if they wish, but reality is not something to be so pessimistic about. Even if one realizes the truth, it is appropriate to take it lightly and sing along to music.

Nothing is real.

(The Beatles "Strawberry Fields Forever")

In the end, there is no solid self. However, people can recognize the existence of a self. Why did I bring up the topic of the self? It is because when one feels that there is no solid self, they naturally consider themselves as part of the world and turn to the inquiry of the reality of the world. As one reaches the state of realizing that the world is truly mathematical, it will be understood that the mathematical structures discovered by humans are merely discovered by mathematical entities because human existence is also included in mathematics.

Therefore, I stated that asking whether mathematics was invented or discovered is meaningless. Reality is relative. Therefore, whether one expresses this as a discovery from the standpoint of human existence is up to the individual.

Dr. Roger Penrose identifies three types of reality: physical reality, psychological reality, and mathematical reality, which are mutually inclusive.

The reason why people differ in where they place the foundation of reality, or the starting line, lies in these distinctions. Some argue that mathematics is a creation of human mental activity, while others emphasize that mathematics has developed inspired by physical phenomena. From the standpoint of mathematical Platonism, mathematics exists outside of physical and psychological reality, but some people place mathematics within psychological reality, leading to complex debates.

However, considering from the perspective of the mathematical universe hypothesis, such confusion dissolves. Whether it is physical reality or psychological reality, everything is mathematical reality. Reality exists solely as mathematical reality. Therefore, all arguments can be understood as merely different perspectives on a single situation. Of course, it is also possible to base discussions on physical or psychological reality, but the reason I place mathematics at the top is now self-evident. From the standpoint of Japanese philosophical humility, it is inconceivable to reverse this order.

## Mathematics is Destiny

I find great significance in mathematics.

To put it bluntly, mathematics is destiny. Once, John Lennon, the vocalist of the British rock band The Beatles, said, "I believed that everyone recognized that The Beatles was destiny." Similarly, I assert that mathematics is "destiny" for everyone. The word "destiny" I use here carries its usual meaning. Therefore, I am stating that mathematics plays a significant role in people's lives. This statement is still philosophical. However, I will prove it. That is, I will prove the existence of "The Blue Print." When that happens, this statement will be presented as a solid mathematical proposition. In my view, the word philosophy does not exist. Philosophy is an unproven mathematical proposition.

I have the utmost admiration for the mystery of "life." I have been deeply moved countless times by the fact that an incredible amount of "life" within my body, sometimes at the cost of sacrifice, drives my "life." In other words, it is the universe within me. Einstein also stated:

"I am in awe of two things: the starry sky above and the universe within me."

Applying this analogy to our universe is not far-fetched. I believe this analogy continues endlessly. If so, ultimately, the appearance of all things is like a mirror, but where is mathematics? The answer is in the realm of ideas. Mathematical Platonism. That is, even if this world is purely a mathematical structure, the root of mathematics must be in some ultimate reality, in a mysterious position. "The Blue Print" is a concept born from such insights. I define "The Blue Print" as follows:

"The Blue Print is the root of mathematics, the blueprint of the universe, that is, God Equation."

In summary, my assertion is as follows: Mathematics is the world itself (we are also mathematics), and its root, "The Blue Print," is located in the realm of ideas far beyond our perception.

Next, let me discuss mathematical harmony. To truly understand mathematics, one must understand the pathos of things. Without a heart that can empathize with the unfortunate, nothing will succeed. This spirit of the Japanese can also be seen in the NHK Taiga historical drama "Reach Beyond the Blue Sky." In this drama, the protagonist Eiichi Shibusawa says, "In the end, what matters most is the warm heart between people." In my view, this is ultimately a mathematical truth. That is, the basic moral principle of caring for others is a mathematical theorem derived from the basic assumptions of mathematics. Professor Oka stated, "Mathematics must deal with the sentiment felt in the 'spring mud' at one's feet." This is the ultimate figure of a mathematician. When one attains such a figure and sees the world with clear eyes, God will surely reveal its secrets for the first time. I believe that those who obtain the "One Piece" must have such determination, and that is undoubtedly true. I want to cultivate such an attitude to engage in the mathematics of life.

## Reality is Relative

Imagine a clown walking a tightrope. For him, there are only two directions to move: forward or backward, making the rope a one-dimensional space. However, if a ladybug were walking on the same rope, it could move freely in any direction on the rope, making the rope a two-dimensional space for the ladybug. This fact suggests that when we shift our perspective to something smaller, hidden dimensions become visible. In this context, let me introduce what Kobo Abe said in an NHK interview: "When you change the viewer's perspective, the world becomes completely different." This simple yet profound statement captures the truth. Kobo Abe argued that literature's role is to provide readers with such a worldview as a living world, a universe. This brings to mind the term "relative reality." What I want to convey with this term is that reality is relative. The world created by literature, the world inside television, the world inside games, and the world inside anime—all of these are universes if the viewer considers them to be so. This could be seen as a somewhat radical assertion about parallel universes. However, I am convinced. When considering the idea of the possibility of mathematical parallel universes alongside Kobo Abe's statement, "If a person thinks it is a universe, then it is a universe," I believe that is essentially what it means. In other words, the world created by literature is a real parallel universe! The important thing is that it is reality for someone, while for someone else, it is just a scene. Therefore, characters in video games are living in reality. If you think they are alive, then they are alive. Thinking this way, we can consider that we are stepping into parallel universes daily. This implies exactly what Kobo Abe referred to as the potential of language. An inorganic book written in language creates a living world (universe).

I would like to share my thoughts on the IUT theory (Inter-universal Teichmüller Theory) presented by Dr. Shinichi Mochizuki at Kyoto University. Dr. Mochizuki used the IUT theory to solve the ABC conjecture, one of the most complex conjectures in number theory. The IUT theory is said to be a truly revolutionary theory that overturns the foundations of mathematics. Dr. Mochizuki himself commented on the social situations caused by such innovative theories, stating:

"Such situations, when viewed from a certain distance, are indeed fascinating, and one can even feel a kind of 'mathematical beauty' in the way these mathematical theories intertwine with society." (Mathematics that bridges universes)

However, I believe this can also be explained by the mathematical universe hypothesis. That is, since our human society is (of course, in much higher dimensions) a mathematical structure, it is natural that phenomena there possess mathematical beauty. The concept of "universe" related to the IUT theory refers to the "mathematical framework" we use in mathematics, the limits of our various mathematical calculations and proofs, and the stage on which they are performed.

According to Dr. Fumiharu Kato, this is a discussion of mathematical theory and is unrelated to the parallel universes or multiverses that appear in science fiction or theoretical physics.

However, in reality, this is not the case. If the mathematical universe hypothesis is correct, all such mathematical structures could exist. According to Dr. Max Tegmark, reality is classified from Level I to Level IV multiverses. Level I multiverse refers to distant spatial regions that are currently unobservable but not forever unobservable. The physical laws are the same everywhere in the Level I multiverse, but the history may differ. The infinite set of Level I multiverses constitutes the Level II multiverse. According to Dr. Tegmark, the Level II multiverse refers to distant spatial regions separated from us by continuously inflating regions, making them permanently unobservable. The fundamental physical laws are the same everywhere in the Level II multiverse, but the effective physical laws may differ. The Level III multiverse refers to different parts of the Hilbert space in quantum mechanics, possessing similar diversity to the Level II multiverse. The Level IV multiverse encompasses all mathematical structures, with each structure corresponding to fundamental physical laws. Astonishingly, all mathematical structures equally possess reality.

However, this is only natural. Reality is relative. The world inside television, the world inside games, the world inside anime—all of these are realities for their respective inhabitants. As Plato said, we humans live in a cave and cannot perceive the higher-dimensional world above us. On the other hand, we can perceive the world below us. Television, anime, and literature can all be considered lower realities compared to us. For example, the inhabitants of a game world are likely unaware of our existence (though they might be aware).

There is only one way for beings living in lower realities to become aware of higher realities: mathematics. In fact, while we recognize that we live in a three-dimensional space, mathematics can create spaces of any dimension. Through mathematics, any being can perceive the situation they are in. Whether a method to ascend to higher realities can be found is unknown, but in the mathematical universe, there may be many scenarios where beings from lower realities come to

fight. In such cases, mathematics is indeed the lifeline, and everyone must consider mathematics their destiny. This suggests the possibility of a "mathematical war." Galileo Galilei left the following words in "The Assayer": "Philosophy is written in this grand book, the universe, which stands continually open to our gaze. But the book cannot be understood unless one first learns to comprehend the language and read the letters in which it is composed. It is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures, without which it is humanly impossible to understand a single word of it; without these, one is wandering in a dark labyrinth." This implies exactly what I mentioned earlier, that any mathematical being has the potential to reach a theory of everything. God, whatever kind of being it may be, if it allows it, there must still be a wall between God and mathematical reality. In this context, I have reached the state of "The Blue Print." "The Blue Print" is either what lies between God and mathematics or God itself. God likely exists as some form of reality, observing from above. Since life forms are born through mathematics, anything can be considered.

However, it is hard to believe that God is also mathematics. God would never place itself in the same field as mathematical reality. Therefore, there must be a framework beyond mathematics. While it is conceivable that there are infinite frameworks, the mathematical universe and the mathematical multiverse are the limits of our imagination. Even if there is super-mathematics, super-super-mathematics, super-super-super-mathematics, or super-super-super-super-mathematics, even if there is  $\text{super} \times \infty$  mathematics, beyond that, or encompassing it, there must be "The Blue Print." Without understanding such a reality, we cannot reach a theory of everything, and it may be arrogant to think that humanity is approaching it within its short history. At the very least, ultimate harmony is necessary to reach such a state.

## God

God is the owner of "The Blue Print" or "The Blue Print" itself. God is the ultimate being that governs all existence, a blue shining entity. A true philosopher is one who loves and seeks knowledge. Those who call themselves true philosophers should be prepared for an eternal journey. They must never stop along the way. What will those who travel far see? God is the being found at the farthest reaches. Only those who achieve ultimate harmony and see the world with clear eyes can touch its mysteries. It is not open to everyone.



"The one clad in blue robes shall descend upon the golden fields." (Nausicaä of the Valley of the Wind)

Here, I feel the need to clearly distinguish between the concepts of God and Kami. Dr. Kitaro Nishida states that God is the foundation of this universe ("A Study of Good," Part IV, Chapter 3), but the God he refers to is precisely Kami, not the God I mean. In Japanese philosophy, Kami refers to the totality that senses the great *musubi* (creative power). It is the totality of a fundamental, unnameable force. Dr. Nishida discusses God in the context of exploring true religious sentiment. He states that we can acquire true religious sentiment because the human mind and the great spirit of God become one, and therefore, God does not exist outside the universe. From my perspective, this can be seen as a reference to the God that governs our mathematical universe. The God as the ultimate reality is located in the realm of ideas, far beyond our imagination. It is not something that can be easily connected with. As mentioned above, "The Blue Print" is not open to everyone. The Kami that enriches human existence is rooted in this mathematical universe (i.e. the mathematical universe we live in) and is not the God that governs the ultimate reality. This avoids the apparent contradiction between my inquiry and Dr. Nishida's following assertion:

"Our God must be the inner unifying force of the universe by which heaven and earth are positioned and all things are nurtured. There is no God outside of this. If God is to be personal, it must be in the sense that we recognize personal significance directly in such a fundamental reality."

Here, to properly complement the understanding, I would like to add the qualifier "(in this mathematical universe)" to the part of the above passage that says "there is no God outside of this." Generally, we need to establish a hierarchy for the concept of God. I define the hierarchy of God as follows:

A level  $n$  God is the being that governs the level  $n$  mathematical universe.

Defined this way, it is clear that the God in Dr. Nishida's assertion refers to a level 1 God. It is safe to assume that the general meaning of God refers to a level 1 God. Of course, the God I refer to in the context of exploring the ultimate reality is the level  $\infty$  God. It should be noted that

this classification method and Dr. Tegmark's hierarchy of multiverses are based on our world for practical convenience and do not include any value judgments.

In the section where Dr. Nishida explores true religious sentiment, we can find clues for considering God. To borrow John Lennon's words,

"God is a concept by which we measure our pain." (God)

Here, too, God refers to a level 1 God. This can be seen as a somewhat cynical exposure of the essence of religion. However, the situation is a bit more complex. Henceforth, God refers to a level 1 God. Religion is the relationship between God and humans. ("A Study of Good," Part IV, Chapter 2) In this consideration, Dr. Nishida bases his view on the idea that God is the foundation of the universe.<sup>1</sup> He also states that humans refer to individual consciousness, and various religions are determined by the way they think about the relationship between God and humans. All religions must have a relationship of divine-human unity. ("A Study of Good," Part IV, Chapter 2) People return to God because there is a sense of affinity between God and humans. It is said that people seem to lose themselves by returning to God, but in fact, they gain themselves because of it. Such insights reveal a very Japanese, Eastern sentiment of breaking down the opposition and boundaries between self and others, essentially harmonizing oneself with the world. This also connects to traditional Indian philosophy. It is because of such harmony that one can find the truth of the universe within oneself. George Harrison also sings about this:

"Without going out of my door, I can know all things on earth. Without looking out of my window, I can know the ways of heaven. The farther one travels, the less one knows."

(The Inner Light)

Furthermore, such thoughts are connected to profound Tibetan Buddhism and Laozi's philosophy. These ideas are deeply connected to my "Hajime Philosophy." The idea of just going with the flow, as sung in "Tomorrow Never Knows," is also a thought that connects to my "Hajime Philosophy." Even the character of Luffy in One Piece vividly embodies this attitude.

Harmonizing with the great nature

(Dao) and moving one's life in accordance with the harmony of the Dao is the most certain and reliable way of living.

<sup>1</sup>As mentioned earlier, the God here does not go beyond the realm of a level 1 God, but this statement alone can be interpreted by raising the hierarchy of God. In fact, I also consider the God as the ultimate reality to be the owner of "The Blue Print" or "The Blue Print" itself.

## The Idea of Everything Being Connected

The idea, spirit, or sense that everything is connected aligns with the right brain. Dr. Jill Bolte Taylor, a Harvard-trained and published neuroscientist, was researching the brain when she herself suffered a brain disease that caused her left brain to stop functioning. While the left brain handles discrete information such as logic and mathematical data, the right brain has the characteristic of thinking continuously without boundaries. After Dr. Taylor's left brain stopped working, she could no longer process information in a left-brain manner and was instead dominated by a right-brain sense of being connected to the entire universe. As a result, she felt a sense of happiness, as if the world was one and all humanity were brothers. This sense can be said to be very Eastern and Japanese. The feeling of harmonizing with the universe is the essence of "*Jocho*" (emotion) and is also connected to Indian philosophy. On NHK Radio's "Discover Beatles II," a hypothesis was introduced that John Lennon's "Across the Universe" was written with such a right-brain-oriented sense. John Lennon said in an interview that this song came to him, as if he didn't create it himself. Such instances suggest that there is a unified energy or great force underlying all things. There are other examples of this. The Indian mathematical genius Ramanujan discovered numerous mathematical facts throughout his life, but he attributed his achievements in mathematics to the goddess he worshipped. In fact, Ramanujan never provided formal proofs; that was the work of his colleague and friend, Dr. Hardy. How should we interpret such situations? As mentioned above, there is some unifying force at the foundation of the world. I call this "Blue." This fundamental energy is called *musubi* in Japanese philosophy. Such fundamental energy must be related to the soul and dark energy. While the true nature of dark energy has not yet been scientifically elucidated, it likely corresponds to the fundamental energy that animates life, such as vitality, or the non-material essence that resides in life and all things, often referred to as the soul. The science that explores such things can no longer be called physics. Of course, all disciplines are just different names for mathematics, so we can call it mathematics, but if we were to give it a name, cosmology would be appropriate (because the word "cosmos" contains the meaning of harmony). To engage in such "mathematics of life," as Dr. Kiyoshi Oka says, one must approach it with the feelings one has for a violet blooming in the field. In other words, one must do mathematics with a pure heart under true "*Jocho*". The mathematics of life involves neither logic nor calculation. Since it is done with the right brain, this is natural. Consequently, this mathematics approaches poetry. A mathematician of life is a poet. In the future, there will come a time when people ask, "Why did mathematics become

poetry?" In Japanese philosophy, harmony is expressed through song. In the "*Kanajo*" of the *Kokin Wakashu*, Ki no Tsurayuki describes the philosophy of the *Kokin Wakashu* as follows:

"All living things compose songs. Without effort, they move heaven and earth, make invisible demons feel compassion, soften the relationships between men and women, and comfort the hearts of fierce warriors."

In the thought of Japanese philosophy, it is believed that one can express and perceive the mysteries that appear in various phenomena in daily life. This spirit extends to the world of haiku and tea in the early modern period, as well as to the performing arts such as Noh and Kabuki, and even to martial arts such as kendo and judo.

"God is the ultimate unifier of our consciousness." ("A Study of Good," Part IV, Chapter 3)

Dr. Nishida states that harmonizing with all things is knowing the will of God, and that the unification of consciousness is nothing other than harmony. This reflects the spirit of Japanese philosophy, which feels *musubi* in all things and harmonizes with it.

To reiterate, the God in this context is a level 1 God. In Japanese philosophy, *kami* is seen as a spiritual entity that is as versatile as this.

## Japanese Philosophy

An indispensable fact in understanding Japanese philosophy is that Japanese thought was established based on Japan's unique natural environment. In Japan, it has long been believed that all things in nature possess a personality similar to humans. The idea that all things have a soul (anima) is called animism, and it is evident that ancient Japanese people held this worldview, as shown in the following passage from the "*Nihon Shoki*":

"Ashihara no Nakatsukuni, even the rocks, trees, and leaves can speak. At night, they rustle like flames, and during the day, they boil like swarming insects (*Sabae*)."

This description of rocks and plants speaking, rustling like flames at night, and boiling like swarming insects during the day vividly depicts the active presence of anima. "*Sabae*" refers to the rice pest planthopper. Ancient people could see the flickering of anima like fireflies in the quiet world of the night. They could also hear the words spoken by the rustling trees and the heat of the grass during the day. (Kenichi Tanigawa, "Thoughts on Folklore," Iwanami Shoten)

In Japan, there is a unique belief system called syncretism of Shinto and Buddhism, where Kami and Buddhas, originally entirely different entities, complement each other. Kami is a comprehensive concept representing the totality that senses the great musubi (creative power).

Musubi is a kind of sacred energy and the fundamental spirit of all things. This concept closely resembles the idea of "Blue" in my "Hajime Philosophy." I propose "The Blue Print" as the ultimate reality and introduce the concept of "Blue" as the crystallization of the fundamental energy inherent in it. This idea is very natural to me. It likely emerged from my contemplation of life. What is the fundamental energy that animates all living things? There must be something non-material involved. I have always felt that the expanse of the soul and the spiritual world exists beyond the realm of science. Life is truly astonishing, and I cannot help but feel life beyond the general scientific meaning of life. When viewing the entire world as a single entity, there must be a flow of energy similar to the soul. I called this "Blue."

The fundamental thought in Shinto is musubi. Musubi is the fundamental generative power of all things. In Shinto, there is an attitude of valuing what is created, which is a positive stance. This is a very important point in Japanese philosophy. In contrast, Buddhism focuses on what is disappearing. It teaches that because things disappear, one should not cling to them.

The thought of musubi also connects to Laozi's philosophy. In Laozi's theory of the generation of all things, it is said that "heaven and earth" and "all things" were born from the primordial "Dao" (Tomohisa Ikeda, "Reading Laozi's Thought," Kodansha Academic Library, Chapter 1Ba). The "Dao" is a chaotic state that exists before the world is segmented and ordered, where only one thing exists. (Tomohisa Ikeda, "Reading Laozi's Thought," Kodansha Academic Library, Chapter 1Ba)

"The way is like an empty vessel. But you can never fill it up. Its depth is the depth of the Creator. It dulls edges, disentangles threads, softens the light, and assimilates into dust. It calmly exists like water. I do not know who/what created it. But it might be an ancestor of the emperor of heaven." (Laozi, Chapter 4)

This concept of the Dao closely resembles the concept of "The Blue Print" in my "Hajime philosophy." Many philosophies have attempted to conceptualize the ultimate reality in its primordial state. However, the innovation of my "Hajime philosophy" is that it perceives this ultimate reality as the root of mathematics. This is a truly genuine philosophical worldview. Indeed, Laozi captures the ultimate reality of the world beautifully, but there is no mention of mathematical elements. From our modern perspective, considering the rapid advancements in scientific technology such as generative AI, the idea that mathematics is destiny is quite convincing. This is because human harmony has matured to that extent. To understand harmony, it is good to ask Dr. Kiyoshi Oka. Dr. Oka once forgot Tartaglia's general solution to the cubic equation and tried to solve it himself. He arrived at a completely different solution in three days. The general solution to the cubic equation was a difficult problem for people during the Renaissance, one that they might not solve in a lifetime. Why was it solved so quickly by Dr. Oka four hundred years later? Dr. Oka himself stated:

"I believe it is because the sense of harmony in mathematics has deepened over these four hundred years. As the sense of harmony deepens, the way of choosing possibilities, that is, the nature of 'hope,' fundamentally changes, making it naturally faster to solve." (Kiyoshi Oka, "Ten Nights of Spring," Kobunsha Bunko, For Those Who Aspire to Mathematics)

## Merit Integral

From the perspective of the mathematical universe, all aspects of human life can be understood mathematically. I believe it is possible to establish a mathematical foundation for moral metaphysics. Humans have various desires, which means that each person has a greatest desire. This greatest desire must be good, and living faithfully to this greatest desire is living well. Therefore, one must choose the greater desire moment by moment and straightforwardly pursue the greatest desire. Each of these choices is good. By accumulating good choices one by one, one

can become a virtuous person. As stated in the Analects, the road has no end. The road here refers to the path to becoming a virtuous person. The state of enjoying learning is truly rare. Enjoying learning means harmonizing with all things. It means becoming a true mathematician of life. If we seek the foundation of the “ Merit Integral” in religious philosophy, we can find it in the following words of “The Dhammapada” :

"Do not think lightly of evil, saying, 'It will not affect me.' A water pot becomes full by the falling of drops of water. The fool becomes full of evil, even if he gathers it little by little.

Do not think lightly of good, saying, 'It will not benefit me.' A water pot becomes full by the falling of drops of water. The wise become full of good, even if they gather it little by little." (Chapter 9, Evil)

The analogy that a water pot becomes full by the falling of drops of water is very apt. Lake Biwa is called the water pot of the Kinki region, and of course, even such a lake can be filled. "Many a little makes a mickle." According to Socrates, life is the purification of the soul. The beauty of the soul of those who constantly accumulate good and those who do not will differ significantly. Here, of course, evil is the opposite of good, so evil = -good. Therefore, if one commits an evil act of magnitude 10, according to the “Merit Integral,” the person's merit (i.e. the degree of the soul's beauty) is reduced by 10. Life may seem complex, but all phenomena related to oneself are either good or evil. Life is simple and clear. It is foolish to ask if there are actions that cannot be classified as either good or evil. There are not only two poles of good and evil; there is only a number line.

## God is Good

Deep thinkers and sincere individuals inevitably seek the unity of knowledge and emotion. (Kitaro Nishida, "A Study of Good," Part II, Chapter 1) In my quest to explore the true nature of reality, I have adopted the principle that God exists and that God is good (and therefore possesses a heart of compassion). Based on this premise, I have declared the existence of "The Blue Print." "The Blue Print" is either God's possession or God itself. The principle that God is good is related to Mencius's theory of the goodness of human nature.

"The nature of man is good, just as water flows downward." (Mencius)

Although I was not directly influenced by Mencius's thought in establishing this principle, it is fair to say that ancient Chinese thought is ingrained in the Japanese spirit, making it self-evident to me. The fact that this does not lean towards the theory of the evil nature of man is related to Japanese sentiment.

"Neither dew nor tears linger, as the autumn wind blows through the house longing for the deceased." (Shin Kokin Wakashu, Fujiwara no Teika)

"If the autumn leaves on Mount Ogura have a heart, let them wait for the emperor's visit once more." (Hyakunin Isshu)

"The Yamato heart of Shikishima is a mountain cherry blossom flower smelling in the morning sun" (Norinaga Motoi)

Everything lives within the cycle of time. Beautiful things stake their lives on a single moment. It is in this that the Japanese find beauty, that is, the pathos of things. Cherry blossom viewing is a good example of this. This spirit of impermanence is a unique sentiment of Japan. It is precisely because we understand impermanence that we find the unyielding attitude of not clinging to things endearing. The Japanese predecessors expressed this sentiment as follows:

"In this country, good deeds are actions that involve no calculation." (Kiyoshi Oka, "Ten Nights of Spring," Japanese Sentiment)

"It is happier to always be able to lose something." (Kobo Abe, NHK "I Want to Meet That Person")

"I wish to be born as a small person like a violet." (Soseki)

## The Farmer Standing Alone on the Land of the Last Paradise

To harmonize is to become humble and, as a result, to hear the beautiful melodies played by all things. And I realized the following fact:

This world itself is a mathematical structure.



At present, this statement is merely a religious one, but I will prove it without fail. When that happens, it will become a proper mathematical theorem.

Philosophy is an unproven mathematical proposition. Similarly, religion holds the potential to become a true mathematical proposition. In Japan, I believe these two tend to be avoided. And I think that is reasonable. Without fear of misunderstanding, I would say that religion is incomplete. Please understand that I am not making any critical remarks. I repeat, religion can become true mathematics. Think about it. Is there even one person among the living beings on Earth who does not recognize the Pythagorean theorem, that is, who claims it is wrong? The answer is clearly NO. The truth of mathematics is an absolute truth that no one can violate! (At least within this mathematical universe.) However, what if someone claimed that only a specific religion is correct and did not tolerate those who do not accept it? Wouldn't that be the cause of conflict and something that should be called evil? Religion is the culture of the people, the precious rituals nurtured by the ancestors of each land. None of us can live alone. We all live within some community. And having a community that recognizes you, where you can truly feel you are a part of it, is a common joy and comfort for all humanity, for all life. Respecting and recognizing each other is an essential element for humanity to build a better future.

With this in mind, I reiterate my words: the claim that this world itself is a mathematical structure is currently a religious statement, but it will become a true mathematical proposition in due course. For those who still do not understand, I need to clarify the meaning of the words I use. The "religion" I refer to here is used in contrast to "mathematics" as something truly absolute. Religion, as mentioned earlier, is like the "identity" of each region and people, and there is no right or superior one. Absolutely not. All gods should be equally blessed, and all faiths must be mutually respected. I simply used the word in contrast to mathematics to highlight that religion is not absolute in essence.

I am not a religious person! No, that is, until my mathematics bears fruit. Until then, I must take full responsibility. I am prepared for that. I will unify mathematics, philosophy, religion, mythology, and physics. When that happens, everything will become mathematics.

According to Dr. Max Tegmark, the proponent of the "Mathematical Universe Hypothesis," there are countless parallel worlds of the reality we live in now. In other words, there is a world where I live every possible life. What I want to say from this assertion is that to become a true

mathematician, one must harmonize with the entire world of different dimensions and listen to the music of the heavens. I entrust that dream to "humility." By becoming humble, I feel the celestial melodies throughout my body. This is what I must do.

First, I will perfect my character and strive to qualify to hear the sacred music of the heavens with true humility. Then, I will descend to the "lower" and discover some philosophical truth. After that, I will continue my solitary quest towards "The Blue Print." In the end, I will become the "solitary person" standing alone before God. That is, I will become the "farmer standing alone on the land of the last paradise."

It's enough for a boy to do one thing in his life. (Yoshifuru Akiyama)

## *Jocho* (Emotion)

Dr. Kiyoshi Oka, a leading Japanese mathematician, was also an outstanding philosopher. His thoughts epitomize Japanese philosophy. He stated that the essence of mathematics lies not in logic or calculation, but in "*jocho*" (emotion). The word "*jocho*" used by Japanese people differs from the beauty favored by many mathematicians. *Jocho* can be translated as harmony, but it is a distinctly Japanese term that expresses the spirit of "*wa*" (harmony) and has a unique resonance. Here, I will write it as "*Jocho*" in Japanese. Dr. Oka himself described *jocho* as "the feeling one gets from a violet blooming in the field." This phrase succinctly captures the essence of Japanese philosophy. At the core of Japanese philosophy is an attitude of humility. It never considers or expresses oneself as significant, always maintaining the stance of "putting oneself aside and thinking of others first." This attitude is deeply connected to the Japanese sense of cooperation. Tourists visiting Japan are often surprised by the orderly manner in which Japanese people line up and the cleanliness of the environment. For example, at the famous scramble crossing, despite people crossing from all directions, no one bumps into each other. Similarly, at theme parks like Tokyo Disneyland, the spirit of "*omotenashi*" (hospitality) ensures that the environment is always well-maintained, which astonishes foreigners. This sense of cooperation is also evident in sports. In track relays, Japanese athletes may have slower individual times compared to foreign athletes, but thanks to their precise baton passes, they have the capability to win medals at the Olympics. Additionally, the recent victory in the World Baseball Classic (WBC) showcases the fundamental spirit of "*wa*" in team sports like baseball.

I, too, was born and raised in Japan, deeply influenced by this spirit. Consequently, Hajime Philosophy is heavily imbued with the spirit of Japanese *Jocho*. The most prominent example of this is the concept of “Blue.” I attribute more than just the meaning and value of a color to Blue. “Blue” is the crystallization of the energy inherent in “The Blue Print,” the fundamental source of harmony in the universe. It is the fundamental energy that moves all things, known as “*genki*” or “*musubi*” (creative force) in Japanese Philosophy. Truth, goodness, and beauty are ultimately the same entity, unified under the concept of “Blue.” That which is true, good, or beautiful gathers “Blue” and shines with a blue light. “Blue” is harmony itself, and the spirit of perceiving and appreciating the harmony of the universe in all things is called “*jocho*” or “*mono no aware*” (the pathos of things).

## References

- Takata, H. (2024). Philosophical Inquiry of Mathematics: The Concept of ‘The Blue Print’ and the Relationship Between Mathematics and Goodness. Philpapers.
- The Beatles. (1967). Strawberry Fields Forever. On Magical Mystery Tour [Album]. EMI Records.
- Einstein, A. (n.d.). “I am in awe of two things: the starry sky above and the universe within me.” [Quote].
- Galileo Galilei. (1623). The Assayer.
- Kato, F. (2019). Mathematics that Bridges Universes: The Impact of IUT Theory. KADOKAWA. “Preface” by Shinichi Mochizuki.
- Miyazaki, H. (Director). (1984). Nausicaä of the Valley of the Wind [Film]. Studio Ghibli.
- Nishida, K. (1911). A Study of Good (Part IV, Chapters 2-3).
- Lennon, J. (1970). God. On John Lennon/Plastic Ono Band [Album]. Apple Records.
- The Beatles. (1968). The Inner Light. On Past Masters, Volume Two [Album]. EMI Records.
- Ki no Tsurayuki. (905). Kanajo.
- Tanigawa, K. (1975). Thoughts on Folklore. Iwanami Shoten.
- Ikeda, T. (2009). Reading Laozi’s Thought. Kodansha Academic Library.
- Laozi. (n.d.). Tao Te Ching (Chapter 4).
- Oka, K. (1981). Ten Nights of Spring. Kobunsha Bunko.
- The Dhammapada. (n.d.). Chapter 9: Evil.
- Mencius. (n.d.). “The nature of man is good, just as water flows downward.” [Quote].
- Oka, K. (1981). Ten Nights of Spring. Kobunsha Bunko.
- Fujiwara no Teika. (1205). Shin Kokin Wakashu.
- Fujiwara no Teika. (n.d.). Hyakunin Isshu.
- Motoori, N. (n.d.). “If someone asks about the spirit of Yamato, it is like the cherry blossoms that glow in the morning sun.” [Poem].
- Abe, K. (Host). (n.d.). I Want to Meet That Person [TV Program]. NHK.
- Soseki, N. (n.d.). “I wish to be born as a small, humble person like a violet.” [Poem].
- Akiyama, Y. (n.d.). “A man should accomplish one thing in his lifetime.” [Quote].