

12 Arguments for the Existence of God

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CONTENT

| | |
|--|------------|
| Preface | 1 |
| Introduction | 2 |
| PART I | |
| ARGUMENTS FROM THE UNIVERSE | 9 |
| 1. The Kalam Cosmological Argument | 10 |
| 2. Argument from the Existence of Laws | 18 |
| 3. Argument from the Discoverability of the Universe | 24 |
| 4. Argument from the Potentiality of the Universe | 32 |
| 5. Argument from the Fine Tunings of the Physical Laws and Constants | 39 |
| 6. Argument from the Fine Tuning of Physical Phenomena | 46 |
| 7. Argument from Life's Design | 52 |
| PART II | |
| ARGUMENTS FROM HUMAN NATURE | 65 |
| 8. Argument from Natural Desires | 66 |
| 9. Argument from Innate Morality | 76 |
| 10. Argument from Reason | 85 |
| 11. Argument from Will | 93 |
| 12. Argument from Consciousness and Self | 104 |
| Epilogue | 121 |

Preface

Claims of obsolescence for presenting arguments for the existence of God, or that these arguments now belong to the dusty shelves of history; stemming often from Hume, Kant or Marxist philosophies, from New Atheism, from positivism or from religious cults belittling human reason... I contend that these claims are naïve, and they do not stand on consistent grounds. I present details of my contention organized into twelve arguments. Some of the arguments are also presented in greater depth in my other works.

Judgment on whether God exists or not has a profound impact on our perception of ourselves, our beloved ones, the earth and the entire universe. “Why do I exist?” “Where did it all come from?” “Why are we here?” “What will happen to us after we die?” These, and all similar ontological and existential questions, have answers linked to this judgment. The existence of God also brings about the important implications such as conscious creation of mankind and all beings, meaning and purposefulness of existence, and possibility of life after death if God wishes. While reading this book, always keep in mind that our main concern is this critical subject of the existence of God, as the basis of all ontological and existential queries.

I specially thank Nilgün Türkileri for her careful reading of my book and many insightful suggestions. For comments, critics and suggestions, please visit my web page www.canertaslaman.com, where you will also be able to reach my other work.

Introduction

Discussions on arguments for the existence of God are as old as the history of religions and philosophy. In this book, we will deal with this question, which is of utmost importance for religion and philosophy. In our treatment, we have given particular emphasis to the contribution of modern scientific findings to the subject. In the Muslim schools of thought, many works of ‘Ilm al-Kalam¹ begin with this same topic, showing the emphasis given to it in Islamic thought. Reflecting upon creatures and contemplating their Creator is a method encouraged in the Quran. There are many verses in the Quran pointing to the universe, phenomena on earth, life and our inner world; and inviting us to receive relevant messages.

*Verily, in the creation of the heavens and of the earth, and the succession of night and day: and in the ships that speed through the sea with what is useful to man: and in the waters which God sends down from the sky, giving life thereby to the earth after it had been lifeless, and causing all manner of living creatures to multiply thereon: and in the change of the winds, and the clouds that run their appointed courses between sky and earth: there are messages indeed for people who use their reason.*²

*Verily, in the creation of the heavens and the earth, and in the succession of night and day, there are indeed messages for all who are endowed with insight.*³

*Say: “Travel around the earth and see how He began with creation; later on God raises up fresh growth. God is Capable of everything!”*⁴

Reasoning is not the sole source of our beliefs and disbeliefs; psychological and other factors also play critical roles. Yet reasoning

1 *Ilm al-Kalam is the name given to Islamic studies aiming to establish and defend the tenets of Islamic faith against doubters and detractors. Throughout the book, we will foreshorten the term to “Kalam”.*

2 *Surah al-Baqarah, 2-164.*

3 *Surah Ali-Imran, 3-190.*

4 *Surah al-Ankabut, 29-20.*

is an integral part of human nature. Failure to grasp the importance of reason in faith would be contradictory to human nature. This failure also means turning a blind eye to many verses of the Quran. While not idolizing reason, the Quran teaches that reasoning nourishes the faith. In order to appreciate the importance of reason-based arguments (scientific and philosophical considerations based on reasoning) for the existence of God, we should first properly understand the status of reasoning in religion.

We often encounter the question of how to understand the verity of articles of faith⁵ in Islam, using reason-based methods. I consider two possible approaches towards the establishment of rational grounds for the articles of faith. The first is what can be called the “bottom-up” method. In this pathway, one first observes that the content of the Quran cannot be the work of a person or a group of people; based on this, he/she establishes that it is a book from God and all fundamental beliefs (including the articles of faith) mentioned in the Quran are true. Indeed, the Quran challenges people on the futility of manufacturing a similar book;⁶ and this fact can be used as a token of consistency of this pathway with the content of the Quran. In the second, “top-down” method, one first establishes the existence of God and eliminates philosophical and religious disbeliefs; then moves towards evaluating individual matters in religion. Verses pointing towards contemplating creatures (examples given above) can be brought forward to show the appropriateness of this method. It is also possible, of course, to adopt a complementary pathway. This is what I adopt. However, I give priority to the second method. In the second pathway, after establishing the evidence for the existence of God, the attitude towards religion and the choice among religions are evaluated using the content of the Quran (as in the first method). The distinction of the second method is prioritizing reason-based arguments for establishing evidence for the existence of God. Since the existence of God is central to the ontology of the Quran, such arguments are not independent from its content. Nevertheless, our categorization clarifies the roots of reason-based arguments.

⁵ *These are fundamental beliefs accepted in all schools of Islam including belief in God, the prophets of God, the Quran, and the Hereafter.*

⁶ *Read, for example, Surah al-Baqarah, 2 – 23, 24; Surah an-Nisa, 4 – 82; Surah Hud, 11 – 13, 14; Surah al-Isra, 17 – 88; Surah al-Ankabut, 29 – 50, 51.*

Arguments for the existence of God should not be considered as the foundation of merely one of the articles of faith. This article is actually the main pillar carrying all others. Let us recall these articles of Islam: the Prophethood of Muhammad, the Quran being the Message of God, the existence of life after death in the Hereafter etc. Understanding the existence of God means understanding that prophethood is possible since “the Creator of everything” is able to provide answers to “Where do I come from?”, “What will happen to me after death?”, “What is my responsibility towards the Creator?”. Prophethood is a means of answering these questions. Existence of God implies the possibility of Him sending a messenger to teach a God-centered ontology and rejecting any other god or idol, as well as sending a scripture containing the details of the message delivered to mankind. Understanding the existence of God also entails the belief in the possibility of life in the Hereafter. For an omnipotent God who brought this universe into existence out of nothing, it is not hard to create a new one.

Proving the possibility of something is not the same as proving its existence. For the articles mentioned above, in order to cross from possibility to reality, either the content of the Quran should be utilized, or independent arguments should be established. When the arguments for the existence of God are established, the paramount message of the Quran, the existence of God; the world and the universe with all their contents, mankind and other living beings all being created by God (the basic elements of the ontology and cosmology taught by the Quran) will also be comprehended, covering the predominant message of the Quran. Furthermore, starting the arguments about the other articles of faith from the perspective of their “possibility” provides a significant advantage. For example, when the existence of God is proven, the possibility of prophethood follows naturally. Evaluating the prophethood of Muhammad after having a solid grasp of this possibility is significantly advantageous, compared to arguments without such a realization.

Inspired by the Quran, I group the arguments for the existence of God into two categories. Arguments in the first group consist of our observations of the outside world, whereas those in the second are related to evidence we witness within ourselves (through introspection). I call the first group “arguments from the universe” and the second “arguments from human nature (fitrat)”, the naming based again on the inspiration of the Quran, as indicated in the following verses:

*In time We shall make them fully understand Our messages [through what they perceive] in the utmost horizons [of the universe] and within themselves, so that it will become clear unto them that this [revelation] is indeed the truth. [Still,] is it not enough [for them to know] that thy Sustainer is witness unto everything?*⁷

*And on earth there are signs [of God's existence, visible] to all who are endowed with inner certainty, just as [there are signs thereof] within your own selves: can you not, then, see?*⁸

In the first part of this book (arguments from the universe), I will present seven arguments. The first argument, the one most commonly used in the history of kalam, aims to show that the universe is not eternal. Here, I will include the findings of modern science as arguments and call this piece “the kalam cosmological argument”. The second piece is the “argument from the existence of natural laws” and it is based on the existence of universal laws in nature. These laws enable us to comprehend the universe. The third is also based on a condition that enables science: The mathematical structure and discoverability of the universe; hence it is named the “argument from the discoverability of the universe”. The fourth, the “argument from the potentiality of the universe” stems from the rich potential possessed by the universe, best explained by the creation of God. The fifth argument emerges from the findings of modern science relating to the fine-tuned balance, making life possible, in the intrinsic laws of nature and physical constants. This is the “argument from the fine tunings of physical laws and constants”. The sixth is also related to fine-tuned balance, again enabling life; the “argument from the fine tuning of physical phenomena”. The last piece evaluates phenomena about life in light of expansive discoveries in modern science, and is called the “argument from life’s design” (this piece will include a short discussion on whether the theory of evolution poses a problem against God’s existence).

In the second part, “arguments from human nature”, five additional arguments will be discussed, fulfilling the twelve arguments. Arguments presented in this section are based on intrinsic properties of human

7 *Surah Fussilat, 41 – 53.*

8 *Surah adh-Dhariyat, 51 – 20,21*

beings, bringing about conclusions that support theism⁹ and weaken materialist-atheism¹⁰. The eighth chapter, “argument from natural desires” is built upon intrinsic desires of man and claims that God’s conscious creation of these desires is the best explanation for their existence. The starting point of the ninth piece are the outcomes of modern psychology and cognitive sciences indicating the innate nature of morality and ethics in humans. “Argument from innate morality” asserts that God’s conscious placement of these values inside human nature merits the best explanation. “Argument from reason” takes the reasoning capacity common to all psychologically healthy human beings to reach theism. The eleventh chapter is on the “argument from will” and it expresses the best explanation of the will in human as being God-given. The last piece takes God’s existence as the best explanation for possession by humans of consciousness and self, and is called “argument from consciousness and self”.

I would like to briefly touch upon the methodology of reasoning I use for the arguments. One quite basic way of reasoning that we often use in our daily lives, as well as in philosophy and science, is to evaluate all options and among them choose the most appropriate. This method

9 Throughout the book, “theism” is synonymously used with “monotheism”. This terminology refers to the belief in God, the All Mighty, Omnipotent, Omniscient creator of everything but himself. Atheism, as the name implies, refers to rejecting the existence of God.

10 “Atheism” is the philosophical thought rejecting the existence of God. “Naturalism” is the philosophical thought rejecting the existence of anything other than nature, namely matter, energy and space-time. As a consequence, naturalists reject God, as He is not a physical being. All naturalists are atheists, but not all atheists are necessarily naturalists, since they might believe in other super-natural existence. In reality, however, most atheists are also naturalists. “Materialism” is the philosophical thought that matter is the fundamental building block of everything in the universe, including mental processes and consciousness. In this regard, materialism is closely related to naturalism, and yet, even though nearly all materialists are also atheists, materialism does not necessitate atheism. One can believe in God and still hold the view that all the processes in the universe are materialistic. Since God is not a material being, this latter thought is rarely adopted and nearly all materialists define themselves as atheists. Despite these nuances, the terms atheism, naturalism and materialism are often used interchangeably. Likewise, almost all well-known atheists in history can be placed in all three of these categories. Thus, throughout this book, whenever we use the term materialist-atheism, the reader can consider it synonymous to naturalism.

is analogous to “inference to the best explanation” used in philosophy of science¹¹. The history of thought presents two main lines of explanation for understanding the existence of the universe we witness, life and our own nature. According to the first, all beings owe their existence, with all details and aspects, to God. From galaxies to the earth, from plants to animals and humans, from desires of man to his consciousness, everything is a product of God’s creation. According to the second, all those mentioned above are explained through “coincidence and necessity”. This latter view is the one adopted by materialist-atheists. The underlying implication here is that the universe and its laws have necessarily existed for eternity, and from galaxies to the earth, from plants to animals and humans, from desires of man to his consciousness, everything is a product of coincidences taking place in the framework of the laws of nature¹². Renowned atheists of the past, as well as neo-atheists of our time, are materialist-atheists¹³. Nearly all agnostics state that it is unknowable which one of these two views is true. Determination of the truth of either one of these two views overrules agnosticism. Throughout this book, these two views will be compared/contrasted for each argument and “the best explanation” will be determined. Nevertheless, I would like to clarify one point before moving on: I do not claim that theism is only better than materialist-atheism. My main position in this book is that theism is better than any other view, and it is the best explanation. However, when we consider various arguments

11 *Many arguments of reasoning such as “inference to the best explanation” and “abduction” commonly used in daily life and science are based on finding the most suitable among alternatives. To read more about this subject, refer to: Peter Lipton, Inference to the Best Explanation, London, Routledge, 2001.*

12 *There might be exceptions in these theist and materialist-atheist definitions. Nevertheless, we can comfortably say that these definitions briefly summarize their general views. For further discussions on “coincidence-chance” and “necessity” explanations, see, for example, Jacques Monod, Chance and Necessity, Vintage Books, New York, 1972.*

13 *For example, contemporary prominent atheists like Richard Dawkins, Daniel Dennett, Sam Harris, Christopher Hitchens etc. are all materialist-atheists. There are also views rejecting the existence of God without adopting materialist-atheism. Shintoism, for example, attributes divinity to the Sun and is a belief outside theism and materialist-atheism. However, even though there are still followers of this tradition, it is not possible to find any philosopher supporting these beliefs on rational grounds, since the nature of the Sun is now well understood to be an ordinary star, with a certain beginning and lifetime. In short, even though there are thoughts outside of theism and materialist-atheism, none of them can be considered as a serious alternative.*

for the denial of God today and in the history of thought, materialist-atheism seems to be the only real alternative to theism. Therefore, I demonstrate not only that theism is better explanation than materialist-atheism but also that theism is the best explanation of all.

Reaching a conclusion after evaluation of all facts and evidence from different fields is an ideal method that is used not only in daily life, but also in science. This method is called “consilience of induction”¹⁴. Since we use arguments from the universe, laws of nature, fine tuning, design of life, innate morality, will and consciousness etc. to reach conclusions about the existence of God, we will essentially be using consilience of induction. It would be worthwhile to evaluate the overall picture of arguments for the existence of God after each piece of evidence is examined individually.

Reason-based evidence presents an opportunity to the believers of the Quran to ground and strengthen their faith, and serves as a mediator for communicating with non-believers, based on rational arguments. In addition, these approaches reveals concrete examples of contemplation and reflection on the universe, life and our inner world, as encouraged by the Quran. In the history of thought it is expressed that there are two books to be used as resources for contemplating God; the first is the holy scripture(s) containing the revelation of God, and the second is the book of the universe. Inspired by verses mentioned above, it is possible to add “human nature” as a third book. The consistency of conclusions reached from all three books strengthens the conclusions from each. The book you hold concentrates on conclusions reached from books of the universe and human nature; those reached from revelations in scriptures are subject of other studies.

¹⁴ Robert E. Butts, “William Whewell”, *The Cambridge Dictionary of Philosophy*, Ed: Robert Audi, Cambridge, Cambridge University Press, 1999, p. 850-851.

PART I
ARGUMENTS FROM THE
UNIVERSE

1. The Kalam Cosmological Argument

Leibniz's famous question "Why is there something rather than nothing?" verbalizes the need for an explanation of the existence of the universe and matter that surrounds us. According to the cosmological argument, the existence of the universe needs an explanation and that "explanation" itself is not part of the universe. It can only be made through a transcendental Being, whose existence is mandatory and does not depend on anything else. This Being is what we call God. Actually, the cosmological evidence does not have a unique form; it is rather a name given to a family of arguments.¹⁵ In Islamic schools of thought, especially in kalam, the most commonly used cosmological argument is "emergence" (called "khudus" in kalam terminology). Here, "emergence" refers to "something coming to existence out of non-existence, and having a certain beginning". Early use of this argument can be seen in kalam scholars of Mu'tazilah (9th Century), and later in writings of al-Maturidi, ibn-Hazm, al-Ghazali and other notable Muslim scholars. For example, the famous work of al-Ghazali, "Incoherence of the Philosophers" (Tahafut al-Falasifah), contains a large section devoted to this topic.¹⁶ These argumentations contain sophisticated abstract philosophical reasoning (at the time, there was no scientific data on the origin of the universe) and aim to respond to those who claim the eternity of the universe goes against the existence of God (or along with His existence). In the past century, combined with the findings of modern science in the western world, a new presentation of this argument is introduced to the philosophy of religion, with the name "the kalam cosmological argument".¹⁷ This argument can be presented as follows:

15 Mehmet S. Aydın, *Din Felsefesi, İzmir İlahiyat Fakültesi Vakfı Yayınları, İzmir, 1999, p. 41-56.*

16 *The Incoherence of the Philosophers, Abu Hamid Muhammad al-Ghazali (Author), Michael E. Marmura (Translator), Brigham Young University - Islamic Translation Series, 2005.*

17 *Examples of presentations of this evidence, together with the scientific results, can be found in the following books: William Lane Craig, The Kalam Cosmological Argument, Wipf and Stock Publishers, Eugene, 2000; Mark Nowacki, The Kalam Cosmological Argument for God, Prometheus Books, Amherst NY, 2007; Caner Taslamam, Big Bang ve Tanrı, İstanbul Yayınevi, İstanbul, 2014.*

If the materialist-atheist philosophy is correct, the universe should be eternal; if theism is correct, it is expected to have a beginning.

The universe has a beginning, the evidence for which is:

The claim for the universe's past to be "actual infinity" is inconsistent, hence impossible. This shows that the universe has a beginning.

The law of entropy shows that the universe has a beginning.

The Big Bang theory shows that the universe has a beginning.

As a result, theism should be preferred against materialist-atheism.

We can comfortably assume that the majority of theists and materialist-atheists would accept the first item above. In the history of thought, the eternal universe has always been the fundamental standpoint of materialist-atheism and its main discreteness from theism, which regards God as the eternal Being. For example, Marx and Engels stated the "eternity of God or matter/universe" as the most fundamental distinction between idealism/theism and materialism.¹⁸ There is a seemingly possible alternative for rejecters of God's existence: the universe having emerged from non-existence. Nothing can be further from common sense than this argument, however. If things could have emerged out of non-existence, it would be unsurprising to see a computer, a car or an elephant emerging from time to time; if universes can come to existence out of nothing, any other thing should be able to do the same at any time. For this reason, materialist-atheists have always defended the eternal universe, rather than the emergence of the universe from nothing. Another alternative that we will not deal with here is the theist view (adopted by some Aristotelian philosophers), asserting eternity of God along with the eternal universe. This position is adopted only by a minority of philosophers, and considering our discussions here, it does not pose a serious difficulty. Once the argument presented in this chapter is accepted to be true, this alternative position would readily be addressed.

The critical proposition here, the one materialist-atheists would object to, is the second. The logical conclusion necessarily follows if the first two propositions are true. In other words, for the argument

¹⁸ Karl Marx, Frederick Engels, *Collected Works*, International Publishers, 1987.

discussed in this chapter, the paramount objective is to show that “the universe has a beginning”. When it is shown, we will reach a “best-explanation type” evidence to prefer theism over materialist-atheism. As outlined above, we will show that the universe has a beginning, in three different ways. The first is based purely on philosophical reasoning. The other two utilize findings of modern science (all three will be presented as briefly as appropriate).

Evaluation of 2.1: The eternity claim attributes “infinite” past to the universe. Thus, the term “infinite” deserves careful consideration here. In the universe, there is actually no entity that is infinite. Infinity implies a continuous, non-ending advance. Accepting existence of “completed infinities” in the universe is paradoxical. Let us consider, for example, the sequence of natural numbers (0,1,2,3,4...). When we say this sequence of numbers goes to infinity, we do not mean that they actually approach a certain target. We rather imply that the sequence always advances with steps of 1 unit. Therefore, we never reach infinity by counting the numbers one by one; we always advance. If the sequence were to stop, it would have an end, and contradict the definition of infinite.

After this description, we should distinguish between the claims of infinite past and infinite future. The claim of infinite future for the universe implies that time continuously advances without ever stopping, and there is no apparent problem in this assumption. Such an advance towards the future is sometimes referred to as “potential infinity”. This definition has no effect on our proclaimed conclusion. Yet, I prefer not to use this definition, as the term “potential” evokes the idea of possibility, whereas an infinite process never actually stops. Infinity is not an actual target; it states advance with no cessation. In such an advance, wherever we stop, we will never obtain a “completed infinity”. On the other hand, those who attribute an infinite past to the universe inherently claim that the past of the universe is a “completed infinity”. The critical distinction of this argument from the one above should be clearly established. Here, the infinity is attributed an ending and consumption, contradicting its very definition. Several paradoxes stem from such an assumption. Let us consider the following, for example. The past before “now”, before “ten years before now”, or before a hundred or a billion years before now, are all infinite pasts. We also know that when we add a finite number to infinity, it is still infinity. That means that the number of years does not change by adding ten, a hundred or a billion,

which is clearly absurd. The bottom-line here is that the infiniteness of past is quite different from the infiniteness of the future. This critical distinction is often overlooked. The absurdity of “completed infinite past” is inevitable and the sole exit out of the resulting paradoxes is acknowledgement that the universe has a beginning.¹⁹

When we say we are in the present time “now” after the passage of infinite time in the past, we mean that the infinity can be surpassed: another contradiction with its definition. This point is often missed by those who do not properly comprehend that the concept of infinity does not have a corresponding reality in the universe. I can briefly demonstrate this as follows:

The universe has either a beginning or an infinite past.

The term infinite expresses endless advance and cannot be completed by this advance.

If the universe had infinite past, our existence at the present time would have required infinity to be completed.

Since the infinite cannot be completed by definition (i.e. point 2 above) and since we cannot deny our existence, the past of the universe cannot be infinite.

As a result, the universe has a beginning (according to points 1 and 4 above).²⁰

Another important implication of our argument is that, like the universe, time should also have a beginning. Al-Ghazali and al-Kindi also pointed this out and suggested God as the Creator of time together with the universe.²¹ Briefly stated, God is transcendental to time as well as transcendental to the universe. Such a statement sheds light on many important discussions in kalam and the philosophy of religion. It can also contribute to understandings and interpretations of “destiny”. Furthermore, questions such as “why didn’t God create the universe before?” or “why did God wait for billions of years to create

19 For more on this refer to William Lane Craig, *Time and Eternity: Exploring God’s Relationship to Time*, Crossway, 2001.

20 Caner Taslaman, *Big Bang ve Tanrı*, p. 79-80.

21 Peter E. Pormann (Editor), Peter Adamson (Editor), *The Philosophical Works of al-Kindi*, Oxford University Press, 2012.

the universe” become meaningless. The Creator of time is not bound by time. Thus, temporal expressions such as “waiting” and “before” are unspeakable of God.

As a result, this argument both forms evidence showing the falsehood of the most basic assumption (eternity of universe) of materialist-atheism and sets the ground for God being transcendental to the universe and time as their Creator.

Evaluation of 2.2: The most prominent advocates of materialist-atheism in history took the eternity of the universe as the standpoint of their philosophies.²² The debate between theism and materialist-atheism can be reduced to a single Hamlet-esque expression: “The universe to be eternal or not be; that is the question!” Since the non-eternality of the universe implies a beginning for it, we can restate the expression as “The universe to have a beginning or not, that is the question!” Attributing a beginning to the universe separates theism not only from materialist-atheism, but also from Hinduism, Taoism etc. and the philosophies of Ancient Greece. The idea of restricting the power of God or considering a universe independent from the God’s creation are unacceptable in theism. On the other hand, for deniers of God, the eternity of the universe appears to be the only plausible alternative. In addition to this, as a notable supporter of agnosticism, Kant stated that whether the universe has a beginning or not cannot be falsified or proven, and therefore it is impossible to establish a rational cosmology.²³

As we have seen, the idea that the universe is created and has a beginning is the most serious conflict of theism with all other philosophies and agnosticism. Prior to the 19th century, discussions on this issue were solely based on philosophical arguments. The first contribution to this issue from the natural sciences came with the discovery of the law of entropy. Furthermore, this law is one of the most fundamental laws in the universe and there is not doubt about its validity in the mind of any scientist, theist or atheist.

22 Georges Politzer, *Elementary Principles of Philosophy*, International Publishers, 1976.

23 Though a theist himself, Kant believed a rational cosmology and theology was impossible to establish and tried to show that rational approaches lead to agnosticism. Immanuel Kant, *The Critique of Pure Reason*, Chicago, 1971.

Also known as the second law of thermodynamics, the law of entropy was established chiefly by the work of Rudolf Clausius in the second half of the 19th century.²⁴ This law states that energy continuously evolves from a more usable form to a less usable one. In other words, the disorder in the universe always increases and this is a non-reversible, unidirectional process. This process advances towards thermodynamic equilibrium, where motion stops. Famous physicist Arthur Eddington claimed that the law of entropy has the single most important place among the laws of nature. According to Eddington, a physical theory had a chance of still being correct even if it had contradicted, say, Maxwell's equations or some experimental observations; yet, it would be certainly wrong if it had contradicted the entropy law.²⁵

All unidirectional processes are an indication of an ending. Aging of man and increase of entropy in the universe are both irreversible. We have the fact established that, according to the law of entropy, the disorder in the universe continuously increases and, as this increase cannot go on forever, the universe must eventually come to an end. This conclusion also implies that the universe must have a beginning. This can be elucidated as follows:

The entropy in the universe increases, continuously and irreversibly.

Accordingly, the universe will eventually reach thermodynamic equilibrium, or "heat death". In short, the universe is not everlasting; it has a finite lifetime.

If the past were infinite, the thermodynamic equilibrium should have been reached and all motion should have stopped.

We witness that motion still continues.

As a result, the universe cannot be eternal; the universe must have a beginning.

Scientists tend to concentrate on the implication of entropy on the end of the universe, overlooking the implication about its beginning.

24 Michael Guillen, *Five Equations that Changed the World: The Power and Poetry of Mathematics*, Hachette Books, 1996.

25 Arthur Eddington, *The Nature of the Physical World*, Macmillan, New York, 1929, p. 74.

However, regarding philosophical, theological and cosmological discussions, the beginning of the universe is a much more critical matter. On this point, Paul Davies says:

It is clear that if the universe is irreversibly running down at a finite rate, then it cannot have existed forever. The reason is simple: if the universe were infinitely old, it would have died already. Something that runs down at a finite rate obviously cannot have existed for eternity. In other words, the universe must have come into existence a finite time ago. It is remarkable that this profound conclusion was not properly grasped by the scientists of the nineteenth century.²⁶

Evaluation of 2.3: The next major scientific support for the idea of the finite past of the universe came with the Big Bang theory, first introduced in the 1920s and matured in the next couple of decades.²⁷ This theory also enabled the calculation of the “birth date” of the universe, as well as an understanding of the processes that took place in its early days. Modern calculations mark the age of the universe as 13.8 billion years. According to the Big Bang theory, the universe started off as an extremely hot, dense and small point. Subsequently, it expanded and cooled down, gradually forming galaxies, stars and planets. The entire process is actually still going on.

Throughout history, the proponents of the materialist-atheist view of the universe have argued for the eternal universe, and claimed that the universe has no beginning and end; hence, to come into existence, it does not need a transcendental being. After the hard evidence was established for the Big Bang theory and no serious alternative to the theory remained, materialist-atheists turned to reconciliation of their views with the Big Bang. Nevertheless, when we consider the historical background of materialist-atheists regarding the universe, we can appreciate the profound opposition.

Advocates of materialist-atheist views try to make the universe stand in the place of God. In doing this, they praise their “god” by defending the eternal/everlasting magnificent universe containing billions of stars and other bodies (even though it is nothing but a bulk of “matter”). On

26 Paul Davies, *The Last Three Minutes*, Basic Books, New York, 1994.

27 For further discussions on the Big Bang theory and its philosophical implications, see Caner Taslaman, *Big Bang ve Tanrı*.

the contrary, the Big Bang theory shows that the past of the universe is nothing more than a singularity smaller than the size of a marble, falling short of magnificence. This singularity, of course, does not explain the transition from non-existence to existence; since science cannot deal with non-existence, it cannot provide an input here. Since this singularity is scientifically undefined, it can be considered as non-existence. At the beginning of the universe, at the point we call singularity, all physical laws are collapsed; questions regarding the singularity are all metaphysical, rather than physical. Calling the singularity “non-existence” is not an exaggerated argument because, firstly, at the stage of the singularity space-time does not exist; consequently, matter cannot exist out of space-time. Secondly, at the same stage, the equations of physical laws diverge to infinity; since no real physical quantity can be infinite, this situation can well be described as non-existence.

Theism attributes the glory of the universe not to nature itself, but to its Creator. It perceives the universe as a finite (with beginning and end) entity, granted motion. As a result, the historical framework of theism is in accordance with the Big Bang theory. If we consider the singularity at the beginning of the universe as an entity, the Big Bang theory squeezes the idol of materialist-atheism to a small point, demeans it and brings it to disappearance. If you have doubts about this view, consider first the universe with billions of stars, then a very tiny point. If we take the ontological status of the singularity at the beginning of the universe as equivalent to non-existence, then the Big Bang theory also becomes the description of transition to existence. Whether we take the singularity as non-existence or a tiny point, the Big Bang theory of the 20th century appears to be in much better accord with theist expectations than with materialist-atheist notions. The latter assumed that the universe is eternal and has existed with a structure more or less similar to present time. Such a view is abandoned today; instead, the philosophical discussions focus on the status of the singularity, whether it describes a point or non-existence.

In summary, the abstract mathematical-philosophical arguments provided by al-Kindi, al-Ghazali and other philosophers; the law of entropy, one of the most fundamental laws in physics, discovered in the 19th century; and the Big Bang theory of the 20th century, the most important theory of cosmology regarding the roots of the universe; each of these three approaches agree upon the conclusion that the universe has a beginning. All together, they constitute the cosmological argument of kalam, as a powerful piece of evidence for God’s existence.

2. Argument from the Existence of Laws

Scientific endeavor aims to discover the laws of nature and thereby comprehend the universe, predict the future and provide comfort and safety to humanity. This endeavor, however, does not attempt to answer why the laws exist in the first place. Indeed, most scientists perform their studies without even realizing the possibility of vital philosophical questions like “Why do we have laws, instead of complete chaos?” or “Why are the laws of nature the same at every part of the universe?” Most scientists tacitly accept that there exist laws worth discovering, and embark upon their work with this presupposition in mind.

In this chapter, we will elucidate that when compared to materialist-atheism, the paradigm of theism is much more successful in explaining why there are laws (that make science, and even our daily lives possible) instead of chaos. Let us begin with the example of the scientific description of the atom. It tells us that the atom is made of particles like protons and neutrons, and these particles are made of smaller units called quarks. The scientific description explains the structure and physical-chemical behavior of atoms. Yet none of these answer the question “Why these laws are in action, instead of chaos?” The scientific description tells us that the protons are held together by the strong nuclear force against the electrostatic repulsion of their charges; but this is not an explanation of why this situation holds at every corner of the universe or why it exists at all. The distinction between the definition of a law and the explanation for the existence of the law is often overlooked, despite its critical importance. It should be noted that science describes the universe but does not “explain” it. In fact, to search for an explanation of the laws of the universe, we have to leave the realm of science and move to the field of philosophy. We can attempt to explain the laws of nature only by referring to an ontology encompassing the universe. When this attempt is made, explanations provided by theism and materialist-atheism should be compared as two opposing views. I contend that such a comparison yields arguments for the preference of theism over materialist-atheism. My argument can be outlined as follows:

There exist laws in nature.

The explanation of these laws can be provided by either theism or

materialist-atheism.

Theism explains the reason for the existence of these laws better than materialist-atheism, because:

The existence of a rational, conscious, omnipotent lawmaker better explains the existence of laws.

The existence of the same One lawmaker better explains the validity of the same laws at different parts of the universe.

The paradigm of theism, which considers the world as the place of trials is only possible in a universe with laws, and hence this paradigm is in better accord with the existence of laws.

As a result, theism should be preferred over materialist-atheism.

The first item in this outline is indicated both by scientific data and our daily experiences. For example, the existence of laws in nature can be realized through the law of gravity or through observing that each time a pot of water is put on a hot plate it starts to heat up. Indeed, a basic target behind scientific endeavor is to discover the laws behind various phenomena. The phenomenon of the existence of laws in nature includes both mandatory (deterministic) laws and probabilistic laws, such as the Schrödinger equation. The first item above would not receive much objection and would be readily accepted by theists and materialist-atheists.

The history of thought presents theism and materialist-atheism as two main opposing views for the explanation of the universe before us and the laws therein. The most common approach put forward by proponents of materialist-atheism is that the laws of the universe are intrinsic to matter; together with matter these laws are eternal; and no further explanation is needed for the observed laws. The theist description, on the other hand, perceives the laws of the universe (and the universe itself) as creations of God, and as a manifestation of the Might and Will of God. On this subject, most serious opposition to materialist-atheism comes from theism and vice versa. Therefore, we can safely assume that there should not be many objections to the second item, either.

In this argument, the objections of atheists will be directed to the third item. From a materialist-atheist perspective, while the first two points are directly accepted, the third one is impossible to do so. As a result, the critical step here is this item and its three claims (indicated

as 3.1, 3.2 and 3.3.) will be defended below. When the validity of the third item is shown, the conclusion of the argument “theism should be preferred over materialist-atheism” will have been established.

Evaluation of 3.1: The first major question we must focus on here is “Why do we have laws instead of chaos?”²⁸ From the perspective of logic, the universe could have existed just as well without laws; the presence of laws is not a logical necessity (notice the distinction between logical necessity and physical necessity). The existence of a universe with no laws at all is not logically inconsistent. Most scientists merely focus on the discovery of laws and leave aside the question of why they exist. Notwithstanding, some significant figures such as Einstein noticed the extraordinariness in the comprehensibility of the universe. Einstein stated that “The most incomprehensible thing about the universe is that it is comprehensible”. According to him, the comprehensibility of the universe and the human mind’s comprehension is a manifestation of God.²⁹ (Einstein’s reasoning was not in the same format as arguments used here).

If the universe were disordered and chaotic, we would never have come out of the confusion of childhood. If the universe were ordered but with a structure much more complicated than the perception capacity of human mind, it would still be incomprehensible. We understand the laws of the universe thanks both to their existence and comprehensibility. The existence of such laws is one of the “external” prerequisites of the mind’s understanding of the universe.³⁰

If the apple you were eating suddenly turned into a rock, if the furniture on the floor started to fly around sporadically, if every morning we woke up in a different place, if a glass of cold water suddenly started to boil, if things disappeared from time to time... in short, if we lived

28 *The term “chaos” used here should not be confused with the “chaos theory” developed in the second half of the 20th century. In our usage, chaos refers to a fictitious situation where no laws exist. The chaos theory, on the other hand, deals with nonlinear processes taking part within the framework of laws.*

29 *Ian G. Barbour, **When Science Meets Religion**, Harper Collins Publishers, New York, 2000, p. 52-53.*

30 *These properties of the universe are “external” prerequisites of understanding the universe. The prerequisites related to the mind are “internal” prerequisites. They will be discussed in Part II (arguments from human nature), particularly in Chapters 10, 11 and 12.*

in a universe with no laws at all, neither rational reasoning, nor the language as a mediator of reasoning would have existed. If we gave a name to an object with a certain state (e.g. shape), but that state changed unpredictably, “naming” would become meaningless. Likewise, if the result of our actions changed each time we performed them, expressing the action verbally would become impossible. In such a chaotic world, induction and deduction and thus rational reasoning cannot exist.

As we have just seen, our understanding of the universe and science are only possible with the rational (in accordance with reason) structure of the universe, designed by the laws of nature. Since theism accepts God as the rational, conscious and mighty Creator of the universe, the rational structure of the universe can be readily understood. The only possible explanation from the materialist-atheist view is that matter has contained these properties for eternity. However, as agreed by materialist-atheists, the essence of matter has no relation to rationality; therefore, there is no reason to expect such an entity to have a rational structure. Armed with the accomplishments of science in showing the spectacular order in the universe, the theist approach uses the laws of nature to reach the deeper “cause” behind this order. As a result, the rational structure of the universe is easily explained by theism, while materialist-atheism does not present any satisfying account.

Evaluation of 3.2: The next point to be considered is the fact that the laws of nature are universal: they have the same structure at every point in the world, at every corner of the universe. The supposition that the laws of nature are the same at every point (space) in the universe, and for all time (in the past and in the future) is one of the basic elements of science. This property of the laws of nature allows us to make predictions about the past and the future using scientific discoveries. As expressed by Oxford philosopher Richard Swinburne, if we find a large number of identical coins in an archeological dig, or if we find documents in a room with the same handwriting, we will search for an explanation of “common source”.³¹ Likewise, the ordered structure observed at every location, the same yesterday and today, deserves a common explanation. Just imagine more than a quadrillion times a quadrillion times a quadrillion quarks obeying the same laws; it is impossible to call this a coincidence and materialist-atheists have no apparent option other than calling this a “necessity”. However, calling this a “necessity”

31 Richard Swinburne, *Is There a God?*, Oxford University Press, 2010.

actually means not saying anything; it is more of a sweep under the carpet. What makes this necessary and why the necessity yields the same results at every location and time is not answered.

One of the central elements in theism is belief in the existence of only One God (Wahdaniyyah). This ontological belief presents a token for understanding the unity of laws. Since God is the sole Creator of all points in space and time, there is no surprise in observing exactly the same, omnipresent laws. Materialist-atheism, however, offers no reasonable explanation here. Polytheist beliefs, that we do not pay much attention in this book (as they do not pose a serious alternative to theism), do not provide an explanation, either; they attribute different parts of nature to different powers, ruling out the necessity for unique laws. On the contrary, in such beliefs, different laws should be expected in different corners and chaos would emerge from the conflict between different powers (gods).³² Therefore, no ontology other than theism properly explains the validity of the laws of nature at different places and times.

Evaluation of 3.3: Another essential element established by systems (paradigm) of theist religions is of human being in a place where they can use their free will to choose between right and wrong, good and evil. This free will is also the reason why God does not force beliefs on human; this brings about the notion that the world is a place of trials. The responsibility of human for his actions is a crucial claim in these beliefs. The following verse from the Quran illustrates the point:

*He who has created death as well as life, so that He might put you to a test [and thus show] which of you is best in conduct, and [make you realize that] He alone is almighty, truly forgiving.*³³

We can predict the outcomes of our actions only in an environment governed by laws, and we can be responsible for our actions only if we can predict their outcomes. Consider the following example: if someone pushes an innocent person off a cliff, we directly decide that he has done something terribly wrong. We would condemn this action humanly and a judge would find the actor guilty. Now imagine for a moment a world without natural laws: a world in which people pushed

32 *Surah al-Anbiya, 21-22 points out to this fact.*

33 *Surah al-Mulk, 67-2.*

forward sometimes come back, or move upward; people falling from cliffs sporadically receive no harm but enjoyment and a feeling of goodness. In such a world, since the pusher cannot predict the outcome of his action, he cannot be responsible for it. (The physical necessity of natural laws does not mean that these laws must be deterministic; they can also be probabilistic. Nevertheless, such a probabilistic structure should not bring about a chaotic medium where the results of actions are unpredictable.)

In fact, in a world with chaos instead of natural laws, neither life nor learning would be possible. As mentioned above, language is possible only in a place with laws. With no language, a state of mind suitable for trial cannot be reached. It is worth remembering that in theist religions, the speaking ability of human is strongly emphasized; the “responsible human” is placed on the earth with the ability to speak a language (living in a world with laws is just one of the conditions for speaking a language).³⁴

In brief, the theist claim that “we live in a world of trials and we are responsible for our actions” is rational only in a world governed by certain natural laws. This makes the existence of laws in the universe an expected phenomenon for theists. When this point (item 3.3) is combined with a successful explanation of the rational structure of the universe by the existence of a rational, willful, conscious God (item 3.1), and a successful explanation of the universality of the laws of nature by the theist belief in only One God (item 3.2), we reach the conclusion that the existence of laws in the universe makes theism more preferable to all other options including materialist-atheism.

³⁴ *Surah al-Baqarah, 2-31.*

3. **Argument from the Discoverability of the Universe**

We do not have voluntary control of our own heartbeat, but our mind can reach out to the stars. We are like a tiny spot compared to infinity, yet we are able to thoroughly examine the meaning of infinity. In the vastness of the universe, our solar system is like a spot; our earth in this system and we on the earth are like ever-smaller spots. Despite their immense weakness, it is impossible not to be astonished by human who send vehicles out to the sky and produce theories about the beginning of the universe like Big Bang as well as by their capacity of thinking and reflecting upon their own thinking, which penetrates into the micro world such as their own cells and atoms. Our astonishment will ever grow as we reflect more and more on the elements making all those possible.

As with the existence of laws in nature, most scientists embark on their endeavors without thinking about the discoverability of the universe. They are like singers who sing without thinking about their vocal cords or like athletes who run without thinking about their feet. These singers and runners often focus so intently on their songs or on running that they do not even ponder upon what it is that makes these actions possible. It is only in those rare cases when their vocal cords or feet become injured that they start thinking about these issues, but even in these cases this thinking focuses only on the cure; they do not focus on how the vocal cords produce sound or on the physiology of the feet. Likewise, when scientists undertake discovering the properties of the universe, they only target the discovery; a physicist targets discovering the Higgs particle (also called the God particle), a biologist targets discovering the working mechanisms of organelles in the cell. However, they seldom ask questions like “How is it possible that the mathematics allowing us to discover Higgs is compatible with the universe?” or “How come we are in such a universe that allows us to invent microscopes and see deep inside the organelles, through the laws of optics?” Such questioning is quite rare, even amongst theist scientists.

Science would be impossible if the universe were not discoverable, together with the presence of laws. In the previous chapter, our main concern was the existence of laws in nature. Here, our focus will be on

the discoverability of the universe. (The existence of laws in nature is actually a prerequisite for the discoverability of the universe; since this was discussed previously, we will not repeat those discussions here and only consider other conditions for discoverability.) Scientific work is performed with the expectation of the discoverability of the universe. However, even though this work shows us what can be discovered about the universe, it is not an answer to why it has a discoverable structure. This question brings us outside the borders of observational and experimental science and inside the realm of philosophy as an endeavor for treating fundamental questions. In this chapter, I will present an argument showing that theism is preferable over materialist-atheism in explanation of the discoverability of the universe:

Despite their immense weakness, human beings are able to make extensive discoveries on the universe.

The discoverability of the universe can be explained by either theism or materialist-atheism.

Theism explains the discoverability of the universe better than materialist-atheism, because:

It better explains the mathematical structure (a prerequisite for discoverability) of the universe.

It better explains the presence of laws making discoverability possible.

It better explains our living in a universe where devices for discovering the universe are achievable.

It better explains the presence of so many clues and evidence in the universe towards discoverability.

As a result, theism should be preferred over materialist-atheism.

Theists and materialist-atheists can comfortably agree on the first point above. Anyone who considers the greatness of the universe, the place of human and their biological structure can easily appreciate human's weakness. Despite this fact, the examination of things happening billions of light-years away and the classification of millions of species on the earth are successes of this same weak human.

Despite this apparent weakness, penetration into various fields with

theories, observing the micro and macro objects using microscopes and telescopes, are immense phenomena – they mean discovering the universe, hence doing science – deserving of an explanation. (In addition to the discoverability of the universe, man’s performance of understanding is also important. This will be dealt with in the second part under “arguments from human nature”, particularly when we discuss reason, will and consciousness.) Only comprehensive explanations encompassing such structure of the entire universe can be considered satisfactory. As before, we encounter two opposing candidates for this explanation: theism and materialist-atheism.

The main objection by materialist-atheists would come from the third item above. For a materialist-atheist the claims listed under this item are impossible to accept. As a result, the critical item here is the third of which four points will be evaluated below. They will eventually bring us to the conclusion “theism should be preferred over materialist-atheism”.

Evaluation of 3.1: It is thanks to the mathematical structure of the universe that we can discover so many things, like what happened in the first moments of the universe or the age of the earth. If it were not for mathematics we could never have been able to manufacture or use many technological wonders like mobile phones, computers and satellites. The compatibility of mathematics with the universe has a crucial role in the discoverability of the universe. (This compatibility could be discussed as a separate argument by itself.) This is often overlooked by many physicists (despite the fact that they constantly use mathematics in their work). Certain philosophers, mathematicians and physicists, however, have appreciated the importance of the fundamental questions behind the applicability of mathematics to the structure of the universe. Famous mathematician and physicist Eugene Wigner stated his astonishment as: “*The miracle of the appropriateness of the language of mathematics for the formulation of the laws of physics is a wonderful gift which we neither understand nor deserve.*”³⁵ Anthony Flew, once viewed as one of the most sophisticated atheists of the 20th century, counted the mathematical structure of the universe as one of the main reasons for his departure from atheism and conversion to belief in

35 Eugene Wigner, “*The Unreasonable Effectiveness of Mathematics in the Natural Sciences*”, *Communications in Pure and Applied Mathematics*, Vol. 13 - 1, 1960.

God.³⁶ Many prominent figures of the scientific revolution in the 17th century, including Descartes, Kepler, Galileo, Leibniz and Newton, clearly exhibited their regard of mathematics as being the language in which God has written the universe.

Mainly two alternative approaches can be taken towards mathematics itself. The first is the “discovery” approach. According to this, mathematical truths were valid even prior to the existence of the universe. The same mathematics would be valid in any possible universe. In other words, expressions like “ $3+7=10$ ” or “11,13,17 are prime numbers” state universal truths. The second is the “inventive” approach, which views mathematics as a product of the human mind. We create mathematics based on axioms; hence it is meaningless to talk about it as transcendental to the universe. These approaches cause serious disputes among mathematicians and philosophers of mathematics. Here, I will not defend any particular one of these two views.

If the “discovery” view is correct, it means that mathematical truths are independent from the universe. This brings up the question why abstract mathematical objects suit the universe. The existence of mathematical truths and the mathematical structure of the universe (critical for its discoverability) are two independent things. Mathematical objects are by definition abstract, and consequently they do not causally affect the universe. For example, in the expression “ $3+7=10$ ”, neither the number 3 nor 7 nor the addition operation nor the number 10 causally define something in the universe. The numbers themselves do not give you 3 or 7 dollars or their sum 10 dollars. If abstract mathematics does not designate structures in the universe, then why is the universe (an entity independent from mathematics) compatible with it? Materialist-atheism does not give any answer to this question and the “happy coincidence” response is not at all satisfying. Theism, on the other hand, can explain the mathematical structure of the universe by God’s creation of this structure and making it suitable for discovery.

If the “inventive” approach is correct, it would mean that mathematics is an invention of the human mind. However, it cannot claim the same for the universe. If mathematics is an invention of the human mind, its coherence with the universe is as unexpected as the

36 Antony Flew, *There Is A God: How The World’s Most Notorious Atheist Changed His Mind*, Harper Collins, New York, 2007, p. 96-112.

rules of chess – another product of the human mind – to exhibit the same accord.³⁷ Then how is this coherence, which makes science possible, established? The power of mathematics allowed the proposition of the Higgs particle well before its experimental discovery. The experimental validation came 48 years and billions of dollars after the theory.³⁸ If the materialist-atheist who advocates of the “inventive” approach attributes the coherence of mathematics with the universe to happy coincidences, how far would you be satisfied? Such coherence and the consequent ability for making comprehensive predictions cannot be readily explained by coincidence or by regarding the issue as not worth explaining. Theist supporters of the “inventive” approach for the appointment of mathematics and the universe can comfortably describe this as appointment by God. As a result, the mathematical structure of the universe, a critical factor in its discoverability, is explained by theists better than materialist-atheists, regardless of whether the “discovery” or “inventive” view is adopted.

Evaluation of 3.2: Regarding the discoverability of nature, certain laws of physics are indispensable: the discovery of the universe would have been totally impossible without them. The laws of optics making vision possible are good examples. There are also certain other laws, without which only part of the discoveries would have been impossible; the Doppler Effect can be given as an example.

The human eye has the size of a couple centimeters, but with it, we observe the gigantesque universe. Our tiny eyes absorb stars much larger than our Sun. This is not magic, of course. The laws of physics and optics allow images of huge objects to fit into the tiny eye and be perceived. Note that physics describes the laws of optics and vision, but it does not tell us why we are in a universe equipped with these laws. Without the laws of optics, no scientific discovery could have been possible. Moreover, without them, since vision would have been impossible, it would not be possible for mankind to sustain its existence. These laws and the resulting ability of seeing are part of the factors allowing human to reflect upon the vast universe, despite their extreme smallness. An alternative universe where such a small spot cannot

37 Caner Taslamam, *Enis Doko, Kuran ve Bilimsel Zihnin İnşası*, İstanbul Yayınevi, İstanbul, 2015, p. 79.

38 Caner Taslamam, *The God Particle: A Philosophical and Theological Account*, İstanbul Yayınevi, İstanbul, 2020.

observe the entire space is logically possible; the existence of laws of nature in their present form is not a logical necessity. Indeed, we cannot talk about laws of optics in a fictitious universe where there is no light; yet such a universe is logically possible. The Doppler Effect allows us to detect relative motion, thanks to wave behavior. For example, we can determine whether a source of sound is moving toward us or away from us. (Policemen use this effect to detect the speed of vehicles in traffic.) This effect has allowed us to determine that galaxies billions of light-years from us are moving away from each other, paving the way to the discovery of the expansion of the universe (one of the most important findings of modern cosmology). Scientific knowledge flourishes with the use of such “utility” laws; for scientific discoveries about the universe, these utility laws should exist *a priori*. Followers of scientific works encounter many other examples of such laws.

According to theist paradigm, God created the universe in a discoverable structure in order to make his Might and Art understandable. Hence, there is nothing to be surprised that the laws of optics or the Doppler Effect contributes the comprehension of God by man. In materialist-atheist paradigms, however, such structure of the universe cannot be perceived to serve a purpose. The laws and processes in the universe are not related to purposefulness. So, we are faced with two options for an explanation of the presence of many utility laws making the discovery of the universe possible: a purposeful design (theist view) or happy coincidence (materialist-atheist view). This issue can be resolved by answering the following: Who should be surprised that the utility laws contribute to the discoverability of the universe: a theist or a materialist-atheist? Whichever paradigm sees the present situation less surprising is closer to the truth. Here, there is no surprise in the theist view. On the contrary, from a materialist-atheist angle, the presence of so many opportunities (utility laws) that allow man (despite his smallness and weakness) to make discoveries about the endless universe is utterly surprising. The dependence of the discoverability of the universe on the existence of so many laws, and the actual existence of these laws in the universe and their contribution to the discovery, is a spectacular fact. While theism presents a rational explanation to this fact, materialist-atheism does not present a reasonable explanation.

Evaluation of 3.3: In addition to the power and suitability of mathematics and the presence of utility laws, another crucial factor about the discoverability of the universe is the invention of scientific

instruments. Let us consider the telescope and microscope, for example. Thanks to the telescope, firstly the planets in our solar system, and then much farther corners of the universe, became objects of scientific investigation. The microscope allowed us to permeate the micro world; the invention of the microscope is the most important step in the establishment of modern biology.³⁹

The possibility of manufacturing these instruments is a crucial factor in making the discovery of the universe possible. If it were not the universe making it possible, these instruments could not have been manufactured. No matter how intelligent humans are, no matter how suitable mathematics is to the universe, no matter how many laws help the discovery of the universe; if the universe had not contained the raw materials for the making of telescopes and microscopes, production of these instruments could not have been possible. Likewise, without the pertinent raw materials, neither computers, nor satellites or particle accelerators could have been built. The relevant question here is “How come we live in a universe that contains raw materials readily available for building instruments towards its own discoverability?” In the theist view, there is no surprise in the possibility of building instruments required for the discovery of the universe. For materialist-atheism, this is a happy coincidence. We witness that theism better explains our living in a universe where conditions for doing science exist, as compared to materialist-atheism.

Evaluation of 3.4: The last element we will consider related to the discoverability of the universe is the presence of countless clues and evidence (to better comprehend the universe) all around the universe waiting to be discovered. We will consider two examples: the cosmic background radiation and the radioactive isotope of carbon in living organisms.

The cosmic background radiation was discovered in the 20th century. This ubiquitous radiation validates the Big Bang theory and contains crucial information about the beginning of the universe. It was this clue that enabled man, a smaller-than-tiny spot in the universe, to talk about the universe’s roots and make discoveries about its early stages.

³⁹ To read more on the scientific revolution caused by the invention of the microscope, see: Catherine Wilson, *The Invisible World: Early Modern Philosophy and the Invention of the Microscope*, Princeton University Press, Princeton, 1995.

Radiocarbon is an isotope of carbon naturally existing in nature, also found in living organisms. The physical properties of this isotope allow us to date unearthed animal and plant fossils and remains. This dating method provides valuable information about the time periods of the lives of ancient civilizations and animal/plant species. Similar to the cosmic background and radiocarbon, countless other clues and pieces of evidence have been exploited in the discovery of nature. Science is only interested in exploiting these clues, but “Why do such clues exist?” is an important question standing on the stage. We can restate the question: What is the explanation for the presence of clues and evidence in the universe for its discoverability, despite our apparent weakness? Theism perceives this situation as a product of a conscious design and thereby presents a better explanation than materialist-atheism.

In summary, the discoverability of the universe is possible via the applicability of mathematics to the physical world (3.1), the assistance of certain utility laws (3.2), the existence of opportunities for building scientific equipment (3.3) and the existence of many clues and pieces of evidence in the universe (3.4). There is nothing unexpected regarding theism, which considers all those facts as part of a conscious creation. Many verses of the Quran beautifully exemplify why the discoverability of the universe is not only to be expected, but also aspired to. It is notable that when these verses were revealed, there was no established scientific culture that cherished the discovery of the universe. The following verse is an example of this point:

Do they not look at the sky above them - how We have built it and made it beautiful and free of all faults? And the earth - We have spread it wide, and set upon it mountains firm, and caused it to bring forth plants of all beautiful kinds.⁴⁰

Theism is preferable over materialist-atheism as it provides a better explanation for the discoverability of the universe, and hence for the possibility of doing science. The more we learn about the universe, the more we understand our weakness and how little we know. The argument presented in this chapter explains why this is not paradoxical. We are weak compared to the infinite power of God; yet, with His gift of the discoverable universe, we are able to make discoveries and comprehend it, despite our extreme smallness in this vast universe.

40 Surah Qaf, 50-6,7.

4. Argument from the Potentiality of the Universe

No matter how skilled you are, you can only produce an output allowed by the potentiality of the things you own. The potentiality of something refers to all of the possible states of that thing. Consider, for example, pieces of Lego blocks in a box; you can build a toy car, a house or a giraffe out of them. However, even if the most intelligent people on earth get together, they cannot create a real car or a live giraffe out of Lego blocks. The blocks do not have the potentiality to become a real car or giraffe. None of their numerous combinations correspond to a real car or giraffe. In a similar fashion, nothing beyond the potentiality of the universe can emerge in it.

Our senses of perception give us the ability to learn about the potentiality of the universe. If the stars, planets, water, millions of species of plants, species of fish, birds, bugs, cars, computers, genres of music, burgers, etc. were not within the potentiality of the universe, we would not be able to see, listen, taste or feel them. According to the picture set by physics, the universe is made of fundamental particles like quarks, and they can only make up less than 120 distinct kinds of elements (some of these elements can only be produced in a laboratory). Everything in the universe, from the stars to the genres of music, is made of these ingredients. These elements are the blocks in the Lego box and with processes like combination, separation, recombination, phase change, etc. everything we observe in the universe is formed. Even though this point has not received much attention, the question of “how the universe possesses such an immense potentiality” is a profound one. None of the things listed above would have appeared if the universe had not contained the potentiality for their existence.

We are faced with a pivotal question here: What is the explanation for the potentiality of the universe to contain such a vast variety of species, splendors, intellect, machines, etc.? I think that discussions on the potentiality of the universe can be very fruitful for understanding of and the argumentation about the existence of God. This argument is independent from any scientific finding. Our discussions here will be completely unaffected if the quantum theory, the theory of relativity, the theory of evolution, etc. are falsified or substantially modified. The arguments in this piece are totally philosophical, not scientific.

The presence of our earth, our tea or Mozart's music is not affected by the truth or falsehood of any theory. For example, even if the theory of relativity were falsified, we can still say that the universe has the potentiality for the existence of our tea or Mozart's music.

The impossibility of the emergence of anything beyond the potentiality of the universe is a requirement of logic. All the things we perceive with our senses show us the potentiality of the universe. Even if someone puts forward a queer claim that our perception is nothing but an illusion, there still remains the question of where the potentiality allowing our minds to make such a complicated imagination comes from. The aspect of this argument that makes it special is the following: even in an extreme fictitious situation where all the laws of nature are invalidated and the entire universe is a mere illusion, the argument here still remains valid. Now let us summarize this argument:

Our universe has the potentiality to allow emergence of living and inanimate things, products of technology and art.

This potentiality of the universe can be explained by either theism or materialist-atheism.

Theism better explains the potentiality of the universe because:

The presence of such a vast variety of things in the potentiality of the universe is expected in the theist view.

The presence of things that we perceive as "beautiful" and pieces of art in the potentiality of the universe is expected in the theist view.

The presence of a rational structure, together with human reason in the potentiality of the universe is expected in the theist view.

The presence of will and consciousness in the potentiality of the universe is expected in the theist view.

As a result, theism should be preferred over materialist-atheism.

The first item in this outline refers to our common observations. We all witness the presence of many inanimate objects such as minerals and mines; animate species such as animals and plants; electronic equipment and myriads of other technological products; and a diverse variety of arts, such as music. Theist or materialist-atheist, anyone would agree that if the universe did not possess the potentiality to bear them, these

things above would not exist. There is no dispute between theism and materialist-atheism on the first item.

The existence of this vast variety of things in the universe is an extraordinary fact. From the birds flying over us to the glass we hold, from the cell phone in our pocket to the melody of Bach, everything that we perceive is possible because they are within the potentiality of the universe. As with the previous arguments, only comprehensive approaches can explain this matter. Again, as before, we are faced with two opposing views: theism and materialist-atheism.

The item that a materialist-atheist would not accept is the third one. If this point is correct, it necessitates the preference of theism. Therefore, we will focus on this item and detail its four main theses (listed as 3.1, 3.2, 3.3 and 3.4) below.

The methodology used in this argument is a type of reasoning that we frequently use in daily life. In this approach, which view carries the most likely outcome supposing it were true in a given situation is indeed the most probably true. For instance, let us assume that Bob and John have entered in an important race and you have just arrived the area after the race finished. If Bob is cheering and John looks sad, you then reach the conclusion that Bob has most probably won even though you have not seen the actual score. It is the most predictable outcome that Bob would be happy and John would be sad should Bob wins. Likewise, you would expect that John would be happy and Bob would be sad should John wins. With that reasoning, you deduce that Bob won the race since Bob is happy and John is sad. The reasoning used in this chapter is similar to that example from daily life. It yields a proof that one view is true based on the fact that it is the most expected outcome in a given situation.

Evaluation of 3.1: There are a large number of galaxies and stars in the universe, as well as a couple of million species of living beings within our reach on the earth. The living beings exhibit a great variety of body structures and mechanisms. The technological products also exhibit a great variety, ranging from simple hand tools to sophisticated vehicles of transportation. Besides, we also witness a similar kind of diversity in art, ranging from painting to opera, from drama to music.

Let us imagine for a moment that we are not aware of these varieties and ask ourselves: Is our existence in a universe possessing

the potentiality for an immense diversity more expected in the theist or the materialist-atheist view? Whichever angle presents a possibility towards the universe, with which the diversity is more expected, is the preferable one. From a theist angle, God grants this potentiality to the universe. Since the universe is created purposefully, there is no surprise in observing its potentiality to possess such variety. This potentiality points to the might and art of God. The products of technology and art are given to mankind as part of God's gift and trial. On the opposing side, according to the materialist-atheist ontology of the universe, matter is purposeless and passive; there is no reason to expect a great diversity. Indeed, for this particular argument, it is not mandatory to expect that much potentiality of the universe in terms of diversity in materialist-atheism; it is, however, sufficient to show that this potentiality is expected in theism. Since diversity is a fundamental property of the universe and the expectation in theism regarding the potentiality of the universe is to contain such a variety, it is evident that this potentiality favors theism.

Evaluation of 3.2: The presence of so many things in the universe that we can call "beautiful" is an interesting phenomenon deserving of special attention. Things that we call "beautiful" range from colors to butterfly wings and pieces of human artistry. Notice that regarding our present argument, man-made pieces of art are no different from natural beauties. Neither the wings of a butterfly nor the notes of a Vivaldi composition would exist if the potentiality of the universe did not allow it. To better understand what we mean by "beautiful", we should focus on the things we call "beautiful" and consider their characteristics. A "beautiful entity" is something that appeals to us, that we regard as precious and appreciate its maker. The actual definition of "beautiful" is a complicated philosophical topic that we cannot delve into here. Yet, even though this concept is so elusive, we use it when selecting our spouse or our food, our dress or furniture...

Let us pose our question as follows: In which ontology, theist or materialist-atheist, is the emergence of so many things that we describe as "beautiful" more expected? Consider music, one of the most impressive forms of art. Can the compositions of Beethoven or Mozart be outcomes of a coincidence, with no input of intellectual or artistic concern? Every person who has some intuition about art would cry out "No!". Then, consider the existence of notes in the potentiality of the universe, and then the existence of potentiality of these notes

to emerge in countless compositions by Beethoven, Mozart and thousands of other composers; is this situation better explained in terms of a conscious creation proposed by theism or the coincidence view of materialist-atheism? Our intuition does not accept the attribution of a single Beethoven piece to coincidence; how can it attribute this to the potentiality of universe to allow the emergence of music and so many other wonders? In the theist view, it is possible to consider that God has given this potentiality to the universe for human to benefit from pleasures like music. More importantly, it is actually an expected situation that God has placed so many “beauties” in the universe (as well as the perception of “beauty” in human nature) so that individuals can appreciate and recognize their Creator. Remember that beauty is considered precious and prompts appreciation of its Creator. Yet there is no expectation of emergence of these various entities that we consider as beautiful in atheist-materialism.

Evaluation of 3.3: The universe has a suitable structure for comprehension by human reason, which has a capacity to produce marvelous devices. As seen before, comprehensible structure is provided by the presence of laws, and the presence of laws is provided by the potentiality of the universe. This point was discussed in detail in the chapter “argument from the existence of natural laws”. Here, we will recap this point as it is also relevant to the potentiality of the universe, the subject of the present chapter.

In addition, the existence of human reason and its potentiality to develop so many scientific theories and technological products are also manifestations of the potentiality of the universe. From theorems about prime numbers in mathematics to the quantum theory, from supercomputers to satellites sent to space, from construction technologies to medical devices, all products of human reason come into existence provided by the potentiality of the universe. Nothing can emerge without being within the potentiality of the universe; this includes neutron stars, butterflies, as well as theorems on prime numbers. We are often so focused on our inventions (according to our approach, what we call “invention” is actually a discovery of what is already in the potentiality) that we miss the remarkable point: these products are gifts from the potentiality of the universe, more so than products of our reason.

How does the universe contain such a potentiality for the capacity of human reason? We should establish the value of this extremely

important question. When we consider what human's intellect can produce, despite its' weakness, we can discern the incredible picture here. According to theism, since God is eternal and He is a being with reason, the reason is an eternal element. God has placed the potentiality in the universe where the capacity of the reason can emerge. So, there is nothing unexpected in the creating of human (who is also created from the raw materials of the universe) with intellectual capacity. In addition, since the intellectual capacity of human makes recognition of the might and art of God and the world of trial possible, the creation of the universe encompassing this potentiality is actually expected. (Please also refer to Part II of the book, the tenth piece, "argument from reason"). However, according to materialist-atheism, there is a great difficulty in explaining the existence of the potentiality for human reason in the universe, as the universe is only a passive entity. As a result, the suitability of the potentiality of the universe to contain human reason and the emergence of this reason from the potentiality of the universe, are better explained in theism than in materialist-atheism.

Evaluation of 3.4: Will and consciousness are critical properties that define us as humans. In the materialist-atheist view, there is a great difficulty in understanding how the potentiality of the universe enables the emergence of these properties; yet, no difficulty exists for a theist since both willpower and consciousness are eternal attributes of eternal God. This point will be detailed in Chapters 11 and 12, and will not be repeated here. It suffices to note that these properties are also related to the potentiality of the universe.

An important aspect of the present argument is that it considers the scientific, technological and artistic productions of human as elements of the argument for the existence of God, in addition to structures in nature, since these products are made possible thanks to their inclusion in the potentiality of the universe, the creation of the universe with this capacity. This perspective does not demean the works of scientists and artists; on the contrary, it enhances their values, since they contribute – willingly or unwillingly – to the discovery of the richness placed in the universe by God. God is the eternal owner of all designs. God is the Creator-designer; scientists and artists are inventor-designers.

In short, everything we witness in the universe exists thanks to its potentiality for existence. The marvelous diversity in the universe, every aspect of it - from scenes we call "beautiful" to products of

artwork, human reason with its capacity, will and consciousness - are all possible due to the potentiality of the universe. Such a potentiality is expected in the theist view, and unexpected in the materialist-atheist view. Consequently, we reach the conclusion that theism is preferable over materialist-atheism.

5. Argument from the Fine Tunings of the Physical Laws and Constants

With the design argument (also called the teleological argument, ‘inayah’ or ‘ihtirah’ argument in kalam literature), order, purpose and other elements in beings are used to reach the conclusion of the existence of a Designer, as well as the power, might, wisdom and other properties of this Designer. Many of the attributes of God are grounded upon the design argument. The magnificent universe we live in contains countless varieties of beings and phenomena, from galaxies to planets, from atmosphere to winds, from flowers to fish, from birds to bugs. Reaching arguments for God’s existence starting with these beings and phenomena is a very old method. For thousands of years throughout history, a considerable amount of philosophers and scientists supported this approach. There has also been opponents such as Epicurus and Lucretius in ancient times, and Hume and Kant in more recent times. Prominent supporters include Plato, Ibn-Rushd, Thomas Aquinas, Leibniz and Newton. Considering the hundreds of verses of the Quran encouraging reflections on the creation of God, comprehending them and obtaining messages, the design argument, based on various beings and phenomena in the universe to obtain grounds for the existence and attributes of God, was called “the argument from the Quran” by Ibn-Rushd.

With the rise of materialist-atheism, the design argument had lost its popularity; instead, the view claiming the invalidity of the design argument and that the universe being formed by coincidences gained a large mass of supporters. However, advances in physics, particularly in the 20th century, revived the design argument. With the findings of modern science, we understand that we owe the existence of life on earth to a “fine-tuned” universe. Armed with data provided by physics, the design argument now is not based merely on analogies; it can actually present arguments based on mathematical results, such as probability calculations. In this chapter, with emphasis on the fine tuning of the laws of nature and universal constants, “argument from the fine tunings of laws and constants” will be presented. Since the fine tuning is intrinsic to the universe and works the same way everywhere in the universe, the design of such a detailed balance also indicates the creation of the universe. We will present the argument as follows:

The existence of life in the universe depends on very fine tunings in the laws and constants of nature.

The existence of finely tuned laws and constants of nature can be explained by either theism or materialist-atheism.

Theism better explains the fine tuning in the laws and constants of nature.

As a result, theism should be preferred over materialist-atheism.

Let us first consider the first item; the existence of finely tuned balances in the laws and constants of nature. These finely tuned laws and constants were mostly discovered in the 20th century. Here, we will consider five examples:

Life would not have existed without the law of gravity. Also, if the gravitational attraction (or to be more specific, the gravitational constant G) were stronger, all stars would have collapsed together under gravitational attraction, forming black holes. If it were weaker, stars as well as many elements in the periodic table would not have formed. In either case, life would have been impossible.

The strong nuclear force glues the protons and neutrons together in atomic nuclei. If this force did not exist, life would not have been possible. If it were weaker, no element other than hydrogen would have been formed (again forbidding life). Likewise, if the magnitude of this force were stronger, critical processes for life could not have happened.

If the electromagnetic force were stronger or weaker, the formation of chemical bonds would be problematic. In either case, molecules and hence life would not have existed.

If the “weak force” were a bit larger in magnitude, processes that make life possible would have been hindered; if a bit smaller, the formation of heavier elements in stars would have been hindered. In either case, life would have been impossible.

Two of the most critical elements for life are carbon and oxygen. If the ratio of the resonances of carbon and oxygen were smaller or larger, these atoms would not have formed in stars, and life would not have existed in the universe.⁴¹

41 For other examples of fine tuning, refer to John Barrow-Frank Tipler, *The Anthropic Cosmological Principle*, Oxford University Press, Oxford, 1996; Paul Davies, *The Accidental Universe*, Cambridge University Press, Cambridge, 1982; John Leslie, *Universes*, Routledge, New York, 1989.

The laws of nature and physical constants stay unchanged in every part of the universe. In other words, they are intrinsic properties of the universe. The explanation for how these intrinsic properties exist can only be provided by comprehensive approaches explaining the existence of the universe. As with the earlier chapters, the opposing views in this argument are theism and materialist-atheism.

The objection of materialist-atheists would be about the third item above. If its correctness is shown, the conclusion “theism should be preferred over materialist-atheism” in item four directly follows from logic. In order to achieve this, it will suffice to understand that if theism is the truth, the observed fine tuning in the universe is expected and if materialist-atheism is the truth, there is no expectation of fine tuning. It is not even necessary to show that if materialist-atheism is correct, fine tuning should not have existed.

It will be valuable to go over how critical and sensitive the fine tuning is, to better appreciate this striking phenomenon. For example, a very minute change of one part in 10^{100} in the weak nuclear force would make elements critical for life impossible to form. Let us talk about the number 10^{100} . In a substance of roughly one cubic-centimeter volume, there are billions of atoms. In each atom, there are electrons, and quarks, which are fundamental particles to form protons and neutrons; just imagine how numerous these particles are in our earth. On the other hand, an average-sized star is many times larger than the earth, and there are hundreds of billions of stars in our galaxy with billions of planets in their orbits, and there are more than one hundred billion galaxies in the universe. Now imagine how many quarks and electrons there are in the universe. The factor of one part in 10^{100} in the fine tuning of the weak force is actually much smaller than a single particle among all particles in the universe. In fact, we can even add photons (quanta of light), which are much more numerous than fundamental particles, to the list, and the situation would not change. This is how “fine” of a tuning we are faced with. The probability of such a balance can be compared with the following example: Consider each and every one of the grains of sand on the earth (including those in all of the beaches, seas and oceans). If someone marks one grain and hides it in the sand, what would be the probability of randomly picking up a grain and finding the marked one? This probability is much larger than one part in 10^{100} . Even further, one part in 10^{100} is only one of the many cases of fine tuning. Pay attention to the fact that life is only possible with all of the fine tunings together;

modifying a single one of them is sufficient to forbid the emergence of life. Remember that in probability calculations, the overall probability in such cases (dependent events) is found by multiplication of individual probabilities.

One can ask the question of whether the fine tuning we describe here is the outcome of a physical necessity. Let us take the weak force again. As explained above, a minute change in the weak force makes life impossible. On the other side, one can imagine a universe governed by the same laws but different physical constants. The actual values of these constants are not mandatory as a physical necessity. However, even if they were necessitated, it would not be a reason to reject our argument. In this case, the determination of constants by physical necessities with values allowing the possibility of life, among the large set of distinct values, would be best explained by them being consciously designed that way.

Some opponents of the design argument claim that even if life were not possible in this world, it could have been on another planet; or there might actually be other forms of life in another part of the universe. It should be noted that such claims would not be valid arguments against our reasoning in this chapter. For example, when the fine tuning of gravity is destroyed, neither stars nor planets would have formed; since elements in the periodic table are formed via processes inside stars, chemistry would not have existed. Even simplest possible form of life imaginable must use energy and interact with its surroundings; even the most basic functions of life require molecules. Without elements and chemistry, molecules cannot exist, either. As a result, life is unimaginable in such a situation.

The existence of such extremely meticulous fine tunings (as detailed in this chapter and the next) making life possible is best explained by a conscious design. For a theist, there is nothing bizarre about this existence. God is the Creator of everything and a conscious designer; he has designed laws and constants to make life possible. For a materialist-atheist, however, the dependence of life on such fine tunings is astonishingly unexpected. If the universe itself does not have the purpose of creating life, the dependence of life on extremely small probabilities is truly astonishing. Consider for example a safe box, locked with a complicated pass code. Opening this safe with random trials is extremely unlikely. If someone dials a code and opens the

safe in one try, we decide that his trial was not random; it was rather a conscious try by someone who knows the pass code. We do not expect a random try to work, but will not be surprised if the owner of the safe (knowing the code) opens it, no matter how sophisticated the lock is. In other words, we know from experience that there is a conscious being who have chosen these small probabilities for a purpose. Ultimately, the logical approach in this argument is no different from reasoning in daily life.

The idea of fine tuning making life possible attracted the attention of scientists in 20th century, and initiated the development of the Anthropic Principle. First introduced by Brandon Carter in 1974, the Anthropic Principle has since been a controversial subject of philosophy and theology.⁴² Materialist-atheists interpret the Anthropic Principle differently than the design argument, to avoid outcomes of scientific findings in support of this argument. Such interpretations are sometimes called the Weak Anthropic Principle. According to this variation of the principle, our place in the universe is necessarily privileged and we, observers, consider our own existence along with this privileged position. When interpreted against the design argument, this principle tells that we can only observe conditions that created us; hence we should not be surprised at these conditions and associate meanings (e.g. design) to them. John Leslie presents a nice counter-example against this interpretation:⁴³ Imagine that you are sentenced to death by a firing squad. The squad consists of one hundred snipers. They all shoot several bullets from a close distance, but you do not die. In such an awkward situation, would you say “Nothing to be surprised about since I am alive; if I were dead, I would not be observing this”? Or rather, would you say “If one hundred snipers firing several times at a close distance cannot kill me, they probably do not fire with real bullets”? The probability of finely tuned constants to randomly allow life is much smaller than the probability of those hundred shooters missing their target. If you realize the absurdity of calling the missing of the squad a coincidence based on your being alive, you can easily grasp the nonsense in the

42 Brandon Carter, “Large Number Coincidences and the Anthropic Principle in Cosmology”, Ed: John Leslie, *Physical Cosmology and Philosophy*, Macmillan Publishing, New York, 1990.

43 The example is slightly modified from the original source: John Leslie, “Anthropic Principle, World Ensemble, Design”, *American Philosophical Quarterly*, No: 19, 1982, p. 141-151.

Weak Anthropic Principle, tying the fine tuning granting us our lives to coincidences.

In addition, the criteria we previously mentioned also work against this interpretation; we can only observe conditions that allow our existence, but this does not mean that we should expect extremely low probabilities (fine tuning) to take place. As noted previously, the theist view sees nothing surprising here whereas the materialist-atheist view sees no trace of expectation. Even further, our universe actually has an orderly structure to a degree much higher than what would be sufficient for our lives. This argument would lose its strength if we lived in a much smaller universe with a much fewer number of species. We should explain the fact that we observe an order much more than what is needed for our existence.

The logical flaw behind explaining fine tuning in the universe based on the observer status of human is a fallacy called “affirming the consequent”. In this fallacy, the antecedent in a conditional is claimed to be true because the consequent is true; in other words, the orders of cause and effect or explanation and explained are reversed. The following is an example: first, “When it rains, it wets the roads” is proposed. Then, from the proposition “Roads are wet”, the conclusion “It rained” is drawn. However, even if the first two propositions are true, the third one does not need to be: the roads could have been wetted by a burst water pipe or washed down by workers. This is affirming the consequent fallacy. Even if rain is a true explanation of the wetness of the roads, the claimer wrongfully assumes that the wetness of the roads is an explanation of the rain. The interpretation of observer status of man as an explanation of fine tuning suffers from the same fallacy. The suitability of the universe for life is an explanation of the existence of life. However, we cannot assume that the suitability of the universe for life is necessitated by the existence of life; and no other explanation is needed for this suitability.

In summary, the findings of the 20th century science, showing fine tuning in the laws of nature and physical constants that make life possible, allowed for the revitalization of the design argument (which itself is quite historical) in a mathematical format, supported by scientific data for establishing the existence of God. Attributing the dependence of life on such extremely fine-tuned laws and constants to coincidences or to our observational status or referring to multiple universes (discussed

in the next chapter) cannot demean the importance of this argument. There is no surprise in the theist perspective, since God has fine-tuned the universe to create life therein. On the contrary, the situation is totally unexpected from a materialist-atheist angle. This fact by itself provides ample reason to prefer theism over materialist-atheism.

6. Argument from the Fine Tuning of Physical Phenomena

In the previous chapter, we examined the fine tunings in the laws and constants of nature that make life possible. These laws and constants are intrinsic to the universe and they are always the same everywhere. There is actually another class of fine tunings which are not intrinsic to the universe, but still make life possible. These fine tunings have played critical roles from the beginning of the universe to the beginning of life, and indeed, caused the emergence of life. We can call them “fine tuning of physical phenomena”. For example, under the same exact physical laws, if the initial entropy of the universe were much larger, life would not have existed. Or, if Galactic Habitable Zones did not form, the emergence of life would have been impossible. Such conditions deserve a separate treatment since they are not intrinsic to matter. Nevertheless, in many ways, the argument from the fine tuning based on physical phenomena has a lot in common with arguments from the laws and constants.

Prominent figures of materialist-atheist frontiers like Richard Dawkins and Jacques Monod claim that the existence of life and everything else can be explained by a combination of physical “necessity” of the laws of nature, and “chance (coincidence)” factors, with the phenomena in the material world governed by these laws. In the previous chapter, it was shown, using the argument from fine tuning, that the intrinsic properties in the universe referred to as “necessary” are best explained by a conscious design. In this chapter, we will show that what Dawkins and Monod call “chance” is also best explained by the same conscious design. The argument from the fine tuning of physical phenomena is outlined as follows:

The emergence of life in the universe critically depends on fine tuning in certain physical phenomena.

The existence of fine tuning in certain physical phenomena can be explained by either theism or materialist-atheism.

Theism better explains the fine tuning in these physical phenomena than materialist-atheism.

As a result, theism should be preferred over materialist-atheism.

We will briefly list five examples of fine tuning in physical phenomena that make life possible.

If the density at the beginning of the universe were a bit lower than its critical value, all matter in the universe would have diffused apart. If the density were larger, matter would have collapsed. In either case, neither galaxies and stars nor habitable planets would have formed.

The homogeneous structure at the beginning of the universe is also a required condition for the creation of galaxies. If this homogeneity were slightly disturbed, black holes would have formed, instead of galaxies; hence we would not have existed.

The entropy in the universe is constantly increasing. Put in reverse, this means that the initial entropy of the universe was very small. If the initial entropy were not fine-tuned, life would not have existed.

Right after the Big Bang, protons and antiprotons, neutrons and antineutrons annihilated each other. For the existence of life, the numbers of protons and neutrons should have been larger than their corresponding antiparticles, and that was indeed the case.

The existence of life depends on the emergence of Galactic Habitable Zones, which provide the required conditions for life. Such zones did emerge in the universe.⁴⁴

The phenomena in these five examples are all mandatory conditions for the existence of life. The modification or lack of even one of them precludes life. There are actually many more examples of such phenomena; keep in mind that these five are just a small subset. As a result, in order to better estimate the probability of the emergence of life out of coincidence, the probabilities considered in the previous chapter about the fine tuning of laws and constants (all of them, including the ones not discussed there) allowing life must be multiplied by the probabilities for physical phenomena we discuss here. I would like to illustrate the mind-boggling fine tuning in physical phenomena by

⁴⁴ For more examples, you can see; Michael J. Denton, *Nature's Destiny*, The Free Press, New York, 1998; John Barrow-Frank Tipler, *The Anthropic Cosmological Principle*; John Leslie, *Universes*; Paul Davies, *The Accidental Universe*, Paul Davies, *God and the New Physics*, Simon and Schuster, New York, 1984.

focusing on a particular example: the initial entropy of the universe. According to the entropy law, the total entropy (measure of disorder) in the universe increases constantly, uni-directionally and irreversibly. This law means that entropy must be less when we go backwards in time. The initial low entropy of the universe is a mandatory condition for the existence of galaxies, our solar system and life. The existence of the entropy law is totally independent from the initial low entropy of the universe. The former is the design of the law, the latter is the design of the initial conditions (a physical situation); both are mandatory conditions for life.⁴⁵

Roger Penrose of Oxford, one of the most famous mathematicians and astrophysicists of modern times, states that no other finding in physical sciences can approach the mathematical description of the fine tuning of the initial entropy (calculated by Penrose himself). The fine tuning in the initial entropy of the universe is calculated based on the entropy of a possible ending scenario of the universe. In fact, the universe could have had this final entropy at its beginning. In that case, you would not be reading this book. In Penrose's words: "*This now tells how precise the Creator's aim must have been, namely to an accuracy of one part in 10 to the 10^{123rd} power. This is an extraordinary figure. One could not possibly even write the number down in full in the regular denary notation: it would be 1 followed by 10¹²³ successive 0's.*" Even if we were to write a 0 on every single proton and neutron in the entire universe and we could throw in all other particles, we would fall far short of writing down the figure needed."⁴⁶ In order to be able to write down 10¹²³ successive 0's with particles, we would need one million times one trillion more universes like ours. If we consider the impossibility of even writing down the initial fine tuning by 0's after 1, we can better comprehend the inconceivability of claiming the initial entropy to be a "result of happy coincidence". This extraordinary setup about the initial entropy is by itself a sufficient example to demonstrate the fine tuning needed for life. For those not regarding the universe as the work of a conscious and mighty God, the expectation should be a chaotic universe without any order, whereas the observed phenomena point to not even an ordinary order; they indicate an extremely intricate setup shown by mathematical certainty.

45 Caner Taslamam, "Din Felsefesi Açısından Entropi Yasası," *Marmara Üniversitesi İlahiyat Fakültesi Dergisi*, Sayı: 30, İstanbul, 2006.

46 Roger Penrose, *The Emperor's New Mind*, 1989

Observation of probabilistically low (or complex) and specific (matching an “independent model”) events indicate conscious design; this is called “specified complexity”.⁴⁷ In our case, fine tunings with extremely low probabilities result in a “specific event” (emergence of life), and hence the criteria are satisfied. For a better understanding of deduction of design from this criterion, consider the following example: The conscious writing (design) of the book you hold can be explained by understanding the impossibility of its formation by random ordering of letters or careless spill of ink, and its matching with the existent English grammar and vocabulary (which are rules independent from this book). It is impossible to obtain so many words and sentences, corresponding to English grammar and vocabulary, out of a random spill of ink or a random selection of letters in a printing press. English grammar and vocabulary exist independently from this book; hence there is a specific independent target, and a random collection of letters reaching this target is of extremely low probability. Since the words and sentences in this book reach the target, we can comfortably say that it was not written coincidentally. As a result, what you are reading right now is an example of why the key concept, “specific event”, and the extremely low probability event (i.e., specified complexity) combined together supports the design argument.

Atheist philosophers developed the scenarios of infinite universes or multiple universes (abbreviated as “multiverse”) after they realized they cannot reject the design argument by claiming that observers can only observe the conditions which created them (as shown in Chapter 5). They have attempted to resolve the problem of extremely low probability by including infinite (or very large) sets of choices. Briefly stated, if there are multiple universes, we should not be surprised about the fine tuning in one of them since it is likely to get such an arrangement out of a very large selection. In Richard Swinburne’s own words: “To postulate a trillion trillion other universes, rather than one God in order to explain the orderliness of our universe, seems the pinnacle of irrationality”.⁴⁸ This approach also means the escape of atheism from the design argument, by paying the price of divorcing its long-time partner: naturalism. This is because the purpose of naturalist philosophy is to explain nature (the

47 William A. Dembski, *No Free Lunch*, Rowman and Littlefield Publishers, Lanham, 2002.

48 Richard Swinburne, *Is There a God?* Oxford University Press (2010)

universe we live in) using only things inside the universe, disregarding metaphysical beings or hypotheses; whereas the multiverse hypothesis does not rely on any observation, experiment or the slightest piece of scientific evidence. What is meant by a multiverse is actually similar to saying “If you do not want to accept the existence of God as designer of this universe, you have to accept the existence of infinitely many universes, since that is the only way to avoid the design argument and demean the exceedingly low probability therein”. This is ironic. In order to escape from a God-centered ontology, atheists have to resort to “metaphysical ontology, based on multiple universe scenarios” as the sole possible option. While initially trying to explain the emergence of life based only on what is inside the earth, then using the entire universe and expanded probabilities, and finally using quadrillions of universes for the same purpose shows the dramatic picture of the fall of atheism.

The general tendency of some atheists who favor multiverse hypothesis is to try to avoid conclusions of fine tuning pointing to the existence of a “designer of the universe”. In doing this, to escape the problem of fine-tuned constants in this universe, the probability of the production of infinite universes (by the same “universe-producing mechanism”) is brought forward. The number of required universes to obtain fine-tuned constants is extremely large and they would require a similarly large amount of energy. There is no answer to where this energy comes from. Moreover, in order to obtain these constants by a large repetition of random trials, there should be a mechanism that modifies them. What is that mechanism? If it really existed, should it not also be fine-tuned? The consequences of fine tuning cannot be escaped via fictitious multiverse scenarios.

The following example is about making up multiverse scenarios against arguments of fine tuning. Imagine yourself in a casino containing thousands of roulette tables. I tell you that all tables are loaded (outcomes previously designed) and to prove my claim, I tell you all the outcomes of thousands of future games. When you observe that my outcomes actually come true, you are convinced that they are indeed known (designed). Now, you tell this story to a friend. To your surprise, your friend responds by telling you that this can happen entirely by coincidence; if a great many people in that casino all make guesses, one of them can surely correctly predict the outcomes. When you argue that this is an impossibly low probability, your friend argues by raising the hypotheses that there could be infinitely many planets with infinitely

many casinos and gamblers in them; so the claimer of loaded tables is a liar. What would be your reaction to this fellow? Assume for a moment that you bought the infinite casinos argument. Would you still explain my successful “guess” of thousands of roulette outcomes as coincidence?⁴⁹

Furthermore, it is worth mentioning that for a believer in God, there is no problem in accepting the existence of multiple universes. If God created this universe, he could have created another. Nevertheless, the multiverse hypothesis cannot be an escape from the striking manifestations of design in this universe.

In summary, fine tuning in physical phenomena, observed in light of the findings of modern science, shows that the processes from the beginning of the universe to the emergence of life are results of a conscious design by a supreme power. The responses to these arguments are based mainly on coincidence, observation of conditions that make our existence, and reference to multiple universes. As shown in this chapter and the previous, all these attempts are failures. Such fine tuning in physical phenomena is expected from a theist angle, but completely surprising and unexpected from a materialist-atheist angle. Therefore, this forms additional evidence for preferring theism over materialist-atheism.

49 *Caner Taslaman, Evrenden Allah'a, p. 136-137.*

7. Argument from Life's Design

My academic career, from master's degree to professorship, is almost entirely focused on science-philosophy-religion interrelations. My PhD dissertation was about the theory of evolution. Based on all my experience, I can assure you that by far most controversial subject of science-religion relations is evolution. When the discussion is raised about whether life is the outcome of a design or not, the theory of evolution immediately comes into play and is often claimed to show that life is not designed, or even further that there is no God. My short answer to the question "Does the theory of evolution support atheism?" is "Absolutely not!"

Evidence for the theory of evolution and its truth are subjects of other studies. For our purposes, let us assume for a moment that the theory is true, and consider whether it conflicts with belief in God. The theory of evolution teaches that all present forms of life on the earth started from a single-celled organism, with changes in its offspring transferred to new generations via heritage. Phenomena like natural selection, mutation and sexual selection play critical roles in evolution.⁵⁰ However, whether these processes take place with God's planning or coincidentally is not the subject of biology. The goal of biology is to describe the observed properties of life and its formation. When we ask "Is this process an outcome of a conscious design?" we make the transition from the realm of biology to that of philosophy; notwithstanding the profession of the questioner, be it biologist, anthropologist or paleontologist. In short, the interpretation of the theory of evolution as a supporter of materialist-atheism is not a biological, but a philosophical one, and more importantly, a wrong one! Many prominent biologists, as supporters of the theory, clearly manifested their opinion that there is no conflict with evolution and belief in God. These figures include Harvard Botanist Asa Gray, who introduced the theory to the Americans; Theodosius Dobzhansky, one of the founders of Neo-Darwinism; Francis Collins, the long-time leader of the Human Genome Project, perhaps the most important biological-genetics projects of recent times; and Simon Conway Morris, a contemporary prominent paleontologist. Renowned

⁵⁰ *The primary resource of the theory of evolution is: Charles Darwin, **The Origin of Species**, Penguin Classics, London, 1985.*

atheist, and philosopher of science and biology, Michael Ruse, stated that there is no conflict in believing in God and accepting the theory of evolution. No one can question the expertise of these figures about the theory and they all favor harmony between the theory and religious belief, making it obvious that the link between atheism and the theory does not stem from the content of the theory itself. On the other hand, another prominent atheist and evolutionary biologist Richard Dawkins used the theory as an instrument to support his atheist views.⁵¹ All these figures are in consensus about the paleontological, geological genetic and biological implications of the theory. The divergence in their views stems from philosophical interpretations of the scientific results.

The main flaw in the assumption of the link between the theory of evolution and atheism stems from “God of the gaps” arguments. These arguments are quite critical in the philosophy of religion and they are the source of many misconceptions and speculations. The advocates of “God of the gaps” type of arguments, claim that the strongest argument for the existence of God is the unknowns about the universe and the life, and that these gaps should be filled by God. Hence, if there are no gaps left, there is no reason to believe in God! Indeed, some theists express claims along the lines of: “We do not perfectly understand how the eye works, so it must be created by God” or “We do not know how frogs were formed, so God created them”. However, almost none of the theist philosophers and theologians of our time adopt the “God of the gaps” as a supporting argument for the existence of God. Instead, they are of the opinion that knowledge (not ignorance) we gain about the eye or frogs makes us better witness of the art of God. The modern interpretations of cosmological and design arguments (including those we discuss in this book) are grounded on the findings of modern science; not on our ignorance.

Therefore, those who claim that the results of the theory of evolution fill a gap and the need for existence of God is eliminated (or reduced) exhibit a common flaw known in the literature of logic as a “straw man fallacy”. The subjects of a straw man fallacy ignore the main arguments of the opposing opinion; instead, they present counter arguments against an ill-posed or exaggerated example of their rivals –as if those examples were the real position taken. Committers of straw man fallacy include

51 Richard Dawkins, *Climbing Mount Improbable*, W. W. Norton, New York, 1997.

famous evolutionary biologists like Dawkins. It is important to note that not all statements of physicists and biologists are about physics and biology; they sometimes cross into the domains of philosophy and theology. However, their audience (often misguided by academic titles) sometimes do not distinguish between the scientific and experimental results and personal philosophical interpretations.

In the scriptures of monotheist religions, God is not only presented as the power of extraordinary (miraculous) creations. On the contrary, situations like the beginning of the universe, certain extraordinary events (“miracles”) about the prophets, and others outside of mainstream phenomena are all minority cases in the creation of God.⁵² The majority of creations are always manifested through causality and continuous natural processes. For example, in these scriptures, God creates the rain, makes the seed sprout, feeds man and creates every person. In addition, it is also agreed that rain is formed by the evaporation of water and dispersion of clouds, man is created by a meeting of mother and father and the consequent processes in the womb of the mother. In other words, monotheistic religions readily accept that “God creates through processes” or “creates using causal tools”. Since God is the sole Creator of all processes, He can easily refer to the outcomes of His creations, sometimes skipping the processes themselves. When a painter says “I made this painting” he seldom talks explicitly about his initial mental planning, choice of colors, trial sketches, etc.; yet we do not doubt that he is the painter of that painting (despite the fact that the painter is not the “creator” of the paint, the canvas or his mind). As the sole Creator of all stages of every process, God can naturally talk about the outcomes of His creation, not always referring to intermediate stages. As a matter of fact, the creation of every being in the universe is fundamentally dependent on the Big Bang and consequent processes, yielding the formation of sub-atomic particles and then atoms. If it were necessary to explain every process from the beginning, we would have to answer the questions “How is this book printed?” or “How is that table made?” starting from the Big Bang. It is clear that when we say something is made (either by man or by God), we typically omit many details of the process. In fact, it would even be impossible to describe all those details. Anyone who thanks God for his/her food and regards Him as creator inherently adapts the idea of “creation through

52 For more on this topic, see: Caner Taslamam, *The Quantum Theory, Philosophy, and God* İstanbul Yayınevi, İstanbul, 2020.

processes”. Then, how can the theory of evolution, as a description of the processes taking place during the formation of species, conflict with belief in God? The belief in creation by God does not mean that no other process was involved in this creation. Clearly, the theory of evolution as a description of the development of life, as well as the Big Bang Theory as a description of the beginning of the universe, has no conflict with the belief that God is the Creator of the universe and life.⁵³

There is another critical question regarding the subject of this book: Does the theory of evolution form a threat against arguments supporting the existence of God? Actually, the previous chapters of the book form an answer to this question. The arguments listed previously are related to prerequisites for the emergence of life. For example, in the first chapter, we dealt with the finite past of the universe; in Chapter 5 we have seen that fine tuning in certain intrinsic processes of the universe is best described with the existence of God. These arguments hold valid, regardless of the opinion about the beginning of the life (evolution or independent creation). Likewise, the five arguments that we will describe in Part II (arguments from human nature) do not require the rejection of evolution as a prerequisite, and hence evolution poses no threat to them. Therefore, it would be wrong to claim that the theory of evolution forms a threat against the arguments presented in this book.

There is still another related question: Even though evolution does not form a threat to other arguments about the existence of God, does it pose a threat against arguments based on the existence of life? The answer is that there would be a threat only if the argument from life were grounded upon the (unnecessary) presumption that each species of life is formed independently. It is quite possible to develop arguments supporting the existence of God, based on life-related phenomena,

53 *On this subject, one can claim that the theory of evolution does not conflict with the existence of God but conflicts with some statements in Holy Scriptures. I described the falsehood of this claim regarding the Quran in my book: Caner Taslaman, **Can a Muslim Be an Evolutionist**, İstanbul Yayinevi, İstanbul, 2020. There, I thoroughly explained that nothing in the billions of years of the history of the universe conflicts with anything in the content of the Quran; creation from clay refers to the raw materials and to this end all livings are created from clay; there is no implication of “immediate creation” in the Quran; the inconsistency (and contrast with the Quran) in not regarding any problem in kinship with enemies of God but seeing kinship with animals problematic; Adam was created in a garden (cennet) on earth; and many other related arguments.*

without making such a presumption. The argument I present in the current chapter is an example. Here is an outline:

We observe tremendous diversity and very interesting properties in life on the earth; which manifest in both the micro and macro world, in body structures and in behaviors.

The existence of this diversity and these properties can be explained by either theism or materialist-atheism.

Theism better explains this diversity and these properties than materialist-atheism, because;

It better explains the existence of the potentiality, which makes their emergence possible.

It better explains the complexity in the micro world.

It better explains the convergence (the re-emergence of very complicated properties over and over) in the macro world.

As a result, theism should be preferred over materialist-atheism.

The first point in this outline is directly accepted by anyone (theist or materialist-atheist) who follows advances in modern science. Carl von Linnaeus, regarded as the father of taxonomy (the methodology and system of grouping living things) knew approximately 6,000 species of plants (in the year 1753) and estimated the total to be about 10,000. In 1758, he listed 4,000 animal species and again estimated the total as 10,000.⁵⁴ This classification became exceedingly harder to proceed with new discoveries about the world of bugs and microscopic organisms. Today, the number of known species reaches a couple of million. From their micro-world to macroscopic body structures, these millions of species exhibit an enormous variety and complexity. Zoologists and botanists have discovered many interesting properties in behaviors such as feeding, hunting, protecting, cooperation, and mating. The marvels of modern science and technology such as microscopes and micro-cameras facilitated these discoveries.

⁵⁴ Ernst Mayr, *The Growth of Biological Thought*, The Belknap Press of Harvard University Press, Cambridge, 1982, p. 172.

The diversity in living things, from animals to plants, has always been an important focus of interest. Throughout the history of biology, the formation of life on earth was explained by processes like spontaneous generation and evolution.⁵⁵ Besides these approaches, the view of theism as life being a conscious creation by God, and the materialist-atheist view as the formation of life through coincidences in the framework of natural processes, also existed as two main alternative views in the history of thought. In short, as in item 2 above, for the explanation of the processes resulting in the formation of living beings, we witness theism and materialist-atheism as two mainstream opposing views.

The objection of a materialist-atheist will be on item 3 above, which is critical in our argumentation. Therefore, we will treat individual points (3.1, 3.2 and 3.3) below. Keep in mind that the treatment below can only be a brief summary regarding the breadth of life-related phenomena. When the validity of the 3rd item is established, the concluding point which is “theism should be preferred over materialist-atheism” will flow as a logical outcome.

Evaluation of 3.1: The argument from the “potentiality of the universe” previously presented and this current issue share a common essence. Nevertheless, the diversity and interesting properties we observe in the world of living beings is so great that the potentiality of the universe to allow the world of living can be developed as an argument by itself. As noted before, whatever emerges from the variation of being X, indicates the potentiality of X; if the being X had not contained this potentiality, the emergent thing would not have existed. Logically, nothing can emerge from something beyond its potentiality. No matter what the developments in science say, we can always assert that living beings would not have exhibited their diversity and properties if the universe had not contained that potentiality. The truth or falsehood of the theory of evolution, the acceptance of Lamarckian or Darwinist evolution, the modification of roles given to mutation and natural selection... All of these might change our understanding of how dolphins, ants or cacao plants appeared on the earth; yet they will not change the fact that dolphins, ants or cacao plants would not have existed if the universe did not carry that potentiality.

⁵⁵ For further discussions on spontaneous generation, see: *Caner Taslaman, Evrim Teorisi, Felsefe ve Tanrı*, p. 76-79.

We do not need modern scientific results to support point 3.1. The same assertion could have been made one thousand years ago based on the existing knowledge. Nevertheless, with the outcomes of modern science, the diversity and properties of life are understood better than ever, broadening our knowledge of the potentiality of the universe to unprecedented levels. Therefore, we have a better chance of understanding the value of the potentiality argument, much more so than any other time in history. Life, camouflage ability, light generation, radar systems, etc. all exist thanks to the potentiality of the universe. Whatever roles natural selection or sexual selection played in their emergence, they could not have emerged if the universe had not presented its gift from the very beginning. Let us consider for a moment properties of living beings such as camouflage, light generation and methods of migration and ask the following question: Is the existence of the potentiality that allows the generation of such a large diversity and such a broad range of merits an expected situation from a theist or a materialist-atheist perspective? For the existence of the potentiality that allows the emergence of millions of species with extraordinary properties, is it more reasonable to assert that this potentiality was consciously made to exist, as in the theist view, or to assume that it exists out of a happy coincidence as in the materialist-atheist view?

In the theist belief, God is mighty, all-powerful and all-knowing. His power does not diminish as He creates. The creation of the universe by God with the potentiality from which to emerge the diversity and interesting properties observed in living beings is not surprising at all, as He created this potentiality for human (or other conscious beings) to observe the outcomes. In the materialist-atheist view of the universe, matter is passive and unconscious, and hence cannot bear a purpose (since purpose requires consciousness). Therefore, everything in the world of living beings emerged coincidentally in the framework of laws governing matter; there is nothing to expect the universe to carry the potentiality to allow so much more rich properties for life. The observation of such an immense diversity and such an extensive range of solutions developed to survive is utterly surprising in materialist-atheism. Since this situation fits the theist paradigm, we have an objective reason to prefer theism over materialist-atheism. The “happy coincidence” explanation is not at all satisfying, while the theist paradigm provides a consistent picture; hence “theism should be preferred over materialist-atheism”.

Evaluation of 3.2: For thousands of years, man was unaware of the enormous gap between animate and inanimate things. An indication of this fact is the long-time belief in the creation of life through spontaneous generation. In this hypothesis, life can form out of the composition of lifeless substances, without the need for reproduction from parents. Some even pushed the idea to such an extent to prepare recipes for creating bees, flies or mice by admixing certain substances. There had been ideas about generation from waste, or from rotting carcasses of dead animals.⁵⁶ Aristotle believed that flies and plants were generated from rotten things.⁵⁷ With the invention of microscope in the 17th century, the discussions on spontaneous generation reached a new dimension. It became almost impossible to defend ideas like spontaneous generation of bees or flies, also paving the way to the realization of the immense gap between animate and inanimate things. Surprisingly, the spontaneous generation notion was soon rejuvenated as an explanation of single-celled forms of life observed under microscope. The final nail in the coffin of spontaneous generation was hit in the 19th century with advances in microscopy, further widening the gap between animate and inanimate beings.⁵⁸

In the dawn of the 20th century, despite all understanding of the differences between animate and inanimate, the cell was still imagined as a “homogeneous globule of plasm”, consisting of simple chemical compounds. In other words, the complexity in the micro-world was not completely understood yet. In the 1950s, further developments in microscopy revolutionized cell biology. It was realized that cells are made out of complex molecules like proteins. Perhaps most importantly, the discovery of DNA significantly improved our knowledge of how the cell functions and reproduces itself. As we now understand it, the cell functions like a sophisticated factory. The DNA governs the processes like a supercomputer at the center of the cell; the RNA functions like the workers; the mitochondria produce the cell’s energy; proteins are machines performing various operations; the cell membrane is the border protection, allowing the passage of only what is needed inside.

56 Elizabeth Gasking, *Investigations into Generation*, Hutchinson and Co Publishers, London, 1967, p. 18.

57 Erik Nordenskiöld, *The History of Biology*, Trans: L. Bucknall Eyre, Tudor Publishing, New York, 1920, p. 430.

58 Catherine Wilson, *The Invisible World: Early Modern Philosophy and the Invention of the Microscope*, Princeton University Press, Princeton, 1995.

The picture of the cell drawn by modern science is a clear manifestation of the gap between animate and inanimate. This picture becomes even more fascinating when we consider the fact that in a few centimeters of a typical living body, there are thousands of cells. Now, is this picture more compatible with theist or materialist-atheist expectations? Prior to the developments in life sciences previously mentioned, for a long time in history, the materialist-atheist paradigm expected the closeness between animate and inanimate to become more apparent with new findings of science. The widening of the gap came as a complete surprise. From a theist angle, neither the proximity, nor the remoteness of animate and inanimate is problematic. God is the Creator of the micro and macro world; He is omnipotent; He can manifest his power through complex structures He creates in the micro world. The emergence of such magnificently complex structures through chemical evolutions – even though the processes are not completely understood yet – does not cast any shadow on the manifestation of God, and such an emergence does not change the matter: the complex picture of the cell is much more expected in theism than in materialist-atheism.

Let us try to dig further into the complexity of the cell through studying a protein. Even the simplest kinds of cells are made of hundreds of proteins. In order to function properly in the cell, the amino-acids (building blocks of proteins) must be correctly ordered in a protein. Even minute changes in the arrangement of amino-acids can cause a protein dysfunction. Evolutionary biologist and biochemist Steven Rose expresses some striking facts about the protein as follows:⁵⁹

“... for a relatively modest protein - with a molecular weight of 34 000, and with 288 amino acids, but made up of only 12 different amino acids out of the possible 20 - the number of isomers is 10^{300} . If only one molecule of each isomer were to exist, the total mass would be some 10^{280} grams. As the weight of the earth is only 10^{27} grams, it is very clear that only a tiny fraction of these isomers in fact exist.”

In another words, if we turned all of the matter in the universe into amino-acids and used them as raw materials, created a system that built up random combinations of them, created another system that filtered out certain proteins we need, the probability of obtaining the target protein would still be almost impossible.

59 Steven Rose, *Lifelines*, Oxford University Press, Oxford, 1998.

Protein synthesis is needed even for the simplest ancestor of cells. Even for a simple fictitious microscopic organism, hundreds of proteins and their meaningful organization would be needed. The minimum possible number of proteins needed for life is a controversial matter; according to one study, the simplest cell should contain at least 387 proteins (other figures are estimated in different studies. However, in all these works the estimated minimum is always greater than 200. This is a very large number, especially considering the complex structure of a single protein).⁶⁰ Natural selection cannot provide an explanation for the formation of these proteins. Natural selection comes into play as a result of competition in life and can act only for reproducing forms of life; the mechanism of natural selection is immaterial prior to the existence of life itself.

Some studies suggest RNA-based emergence of the first cells (the model is known as RNA-World).⁶¹ RNAs are rather complicated molecules and the processes behind the emergence of first have not been totally understood yet. Even if we suppose that these processes will be completely understood one day, we do not have to wait till that day to encounter the complex world of the cell and magnificent processes occurring inside, as the findings of modern science already provide pertinent data. Materialist-atheism regards nature as a stage of non-conscious, non-intentional events. In this perspective, the observation of numerous complicated molecules (whereas random combinations of raw materials in the universe yields exceedingly small probabilities even for a single such molecule) and the functioning of these molecules in certain ways, is something utterly unexpected (even if those observations resulted from processes intrinsic to nature). This observation does not pose any surprise in theism, and hence forms another reason to prefer theism over materialist-atheism.

Evaluation of 3.3: One quite peculiar fact in the world of living beings is the appearance of similar properties in species not coming from the same heritage. Such properties are called “convergent” in biology. A well-known example is the ability to fly, observed in birds, bugs, mammals (e.g. bats) and pterosaurs (now extinct). This ability is

60 Glass J. I. et al, “Essential Genes of a Minimal Bacterium”, *Proceedings of the National Academy of Sciences*, 103/2, 2006, p. 425-430.

61 Leslie Orgel, “Evolution of the Genetic Apparatus”, *J Mol. Biol*, 38/3, 1968, p. 381–393.

agreed to have emerged independently in these species. Convergence can be manifested in both animals and plants, but also in behavioral and molecular-level properties. There are hundreds of known examples of convergence in modern biology; in all those cases, properties are not inherited from a common ancestor.⁶² Some other examples of convergence are echolocation in dolphins and bats; light production of fireflies and certain species of deep-water fish; and navigation through the position of the sun by some bird and bug species.

As mentioned above, living beings exhibit a stunning level of complexity at a microscopic level. The convergence properties just mentioned are carried via the coordinated actions of many molecules at microscopic level. The critical question here is “How do such complicated convergent properties appear over and over?” If the pushing force behind the diversity is mutations in the genes, there is no law in nature telling mutations to act towards a certain goal. Thus no one should be expecting the appearance of structures (each having an extremely low probability to form) over and over and independently from each other. According to Stephen Jay Gould, if we were able to go back in time to the beginning of the earth, everything would occur differently.⁶³ On the opposing side, Simon Conway Morris uses convergence arguments and holds the opinion that life would be quite similar to what it is now. If many properties are developed independently, if the earth were to be started over from the beginning of time, life should develop rather similar properties. If we regard random mutations and natural selection (for choosing the outcomes of mutations) as the mechanism of diversity, Gould’s expectation would be more logical (we should expect a completely different scene of life, if the earth were to restart). However, if we take into account the observed properties of convergence (Gould was well-aware of them), since similar properties have independently emerged many times on the earth, it would be more rational to expect (as Morris does) the emergence of a quite similar scenario.

More importantly, we should note that random mutations and natural selection do not provide a satisfactory explanation for so many

62 *Simon Conway Morris, **Life’s Solution: Inevitable Humans in a Lonely Universe**, Cambridge University Press, Cambridge, 2005; Simon Conway Morris, **The Deep Structure of Biology**, Templeton Foundation Press, Pennsylvania, 2008.*

63 *Stephen Jay Gould, **Wonderful Life**, W. W. Norton and Company, New York, 2007.*

convergent properties. What would be the explanation for observing probabilistically highly-unlikely events over and over? Since we observe independent convergent evolutions, heritage from a common ancestor is not the answer here. Moreover, answers similar to those we previously discussed in the chapter on fine-tunings in physics, such as “Had these laws not existed, we would not be here to observe them; hence we should not be surprised about extremely low probabilities in fine tunings” would not be acceptable, either. We could have existed even without convergence. We would still be alive even if bats and dolphins had not shared echolocation (or even if these species had not existed at all). The emergence of such complicated behaviors over and over is probabilistically unexpected (remember the insufficiency of the raw materials in the universe to form even a single protein for a specific function).

All these problems arise from the materialist-atheist assumption of a completely random evolution process. If the processes in nature are regarded as outcomes of a conscious design, all these problems disappear. There is nothing surprising in the creation by God all-mighty and all-knowledgeable of processes given to living beings over and over (in a convergent way). To achieve this, God could have manipulated mutations as well as created other forms of intrinsic laws (not yet discovered) of nature to carry out convergent processes. In either case, the peculiar property of the convergence observed in life is better explained in theism than materialist-atheism.

In short, the theory of evolution does not pose any threat to theism. Yet the world of living beings exhibits a wealth of information to develop arguments favoring theism. There are many phenomena that can be considered as examples. For brevity, we considered only a few: the potentiality of the universe to form the extraordinary diversity in life (3.1), the enormous gap between animate and inanimate beings as progressively understood throughout the history of biology, the complex structures in the micro world causing this gap (3.2), and the convergence of properties with many examples discovered in modern biology (3.3) are all better explained by theism than materialist-atheism. These facts are much more expected in the theist paradigm, than the materialist-atheist one. Therefore, the examples from life noted in this chapter support previously stated arguments for preferring theism over materialist-atheism.

PART II
ARGUMENTS FROM HUMAN NATURE

8. Argument from Natural Desires

Some theist thinkers claim that in every human, there is an intrinsic desire towards God. Few of them, however, consider this desire as an argument for the existence of God, or present it as part of another argument. For example, according to Pascal, we have the intrinsic desire for God:

All men seek happiness. This is without exception... All complain, princes and subjects, noblemen and commoners, old and young, strong and weak, learned and ignorant, healthy and sick, of all countries, all times, all ages, and all conditions... which he in vain tries to fill from all his surroundings, seeking from things absent the help he does not obtain in things present? But these are all inadequate, because the infinite abyss can only be filled by an infinite and immutable object, that is to say, only by God Himself.⁶⁴

Even if there is such an emptiness (desire) in man's nature, a believer of God could say "I moved towards God, got rid of the emptiness inside me, my desires are now satisfied, hence the target of my unsatisfied desires were God". Nevertheless, it does not seem possible to turn such personal experiences into an objective argument- that can be used towards non-believers. In fact, many atheists and agnostics deny the existence of such desires in them. For example, John Beversluis criticizes the intrinsic desire claims above and states that the existence of such a desire cannot be proven.⁶⁵ The arguments from desire commonly discussed in the literature refer to such approaches.

The desire-related argument we will defend here is quite distinct from those above; it will be based on natural desires, commonly accepted to exist, even by atheists. Our natural desires are properties that define us, and that we witness through introspection. Desires from eating and drinking to living and happiness are our companions since birth. How these desires, intrinsic to us, came to existence is a question that is often

64 Blaise Pascal, *Pensées*, Tr. A.J. Krailsheimer; Penguin Classics, London, 1966.

65 John Beversluis, *C. S. Lewis and the Search for Rational Religion*, Prometheus Books, New York, 2007, p. 56-57.

missed or overlooked. We often do not realize the existence of these desires, like a fish not knowing it is in water; we regard their existence as a necessity, we say “How else could it be?” and turn a blind eye to them. Witnessing the same type of desires like living, quelling fears, searching for purpose and happiness etc. inside every man, from the most ignorant to the most knowledgeable, often prevents appreciation of the striking fact of the existence of these desires. Yet, witnessing these magnificent phenomena in every human does not demean their value, but elevates it. In order to grasp the extraordinariness, we need a powerful introspection, together with a comprehensive philosophical regard towards the universe. Why are such desires in us but not in trees, dirt, water, etc. which share the same atoms with us? Here, while trying to fill this important gap, we will reach arguments favoring theism. This argument will be presented as follows:

The following are our natural and basic desires:

Living

Quelling fears

Purpose

Happiness

Attaining doubtless knowledge

Esteem

These natural and fundamental desires, which cannot be reducible to one another even though they are related to each other, can only be satisfied by the existence of God.

There are two alternative views to explain how these desires were formed:

Through coincidence and necessity, as claimed by materialist-atheists.

Through creation of God, as claimed by theists.

Requiring all of the mentioned natural desires (listed under item 1) of the same ontology (listed under item 2); shows that the existence of God and His creation of these desires (3.2) are more rational than the alternative materialist-atheist view (3.1).

As a result, theism should be preferred over materialist-atheism.

To begin with, I find it essential to present my response to critics developed against the argument from desire in the form mentioned above, as similar criticisms might also be attempted here. These critics say that they desire to own a Ferrari but they do not have one; they desire to go to the world of Oz in the tales, but they cannot.⁶⁶ With this, they mean to point out the impossibility of reaching the existence of the objects of desires from the existence of the desires themselves. Peter Kreeft responds to these critics by dividing desires under “natural” and “artificial” classes. Natural desires are intrinsic, while artificial ones stem from outside effects such as society, advertisements and fiction. The distinction can also be seen through the comparison of being unable to go to the world of Oz and being unable to sleep. The main distinction is that natural desires are common to all of us, whereas artificial ones vary from person to person.⁶⁷ One reason why I put the keywords “natural” and “basic” at the top of my list is to shut such arguments down right at the beginning.

Most atheists and agnostics would comfortably agree upon the existence, in every man, of the six desires listed above. Furthermore, some renowned atheists in history stated that satisfaction of these desires necessitate the existence of God, but also attempted to argue that this necessity caused man to make up the existence of God. One of the critical elements of this argument is on this point: acceptance of the starting point of those renowned materialist-atheists, but demonstrating that it is in fact more rational to reach exactly the opposite of their conclusion. I will first focus on three of these desires (living, quelling fears, and purpose) and demonstrate (by referring to some famous atheist thinkers) how they necessitate the existence of God.⁶⁸

Evaluation of the desire for living: “Desire for living” is one of the most basic natural desires in every physiologically and psychologically healthy person. It is so basic that many other natural desires can be sacrificed for it. Imagine for a moment people on a beach being led towards water by thirst, towards food by hunger and towards their mates by sexual desires. If these people were informed that a tsunami

66 John Beversluis, *C. S. Lewis and the Search for Rational Religion*, p. 47.

67 Peter J. Kreeft and Ronald K. Tacelli, *Pocket Handbook of Christian Apologetics*, InterVarsity Press, Downers Grove, IL, 2003, p. 26-27.

68 For a more detailed discussion on these six desires and more comprehensive evaluation of this argument, refer to my book: *Caner Taslamam, Fitrat Delilleri*, İstanbul Yayinevi, İstanbul, 2020.

would soon hit that beach, or if they actually saw the giant waves coming in, they would leave all these desires aside and run for their lives. Schopenhauer is one of the best known atheists who gave special emphasis to “desire for living”. In his view, this desire/will is more fundamental than anything else. Schopenhauer goes even further to claim that suicide is actually not a denial of desire/will for living; instead, it is a denial of pain and poor living conditions.⁶⁹

Unlike all other living species, the human mind can establish relations between a distant past and a far future. For a mind establishing a relation between the future and a desire for living, it is inevitable to obtain a desire towards a life in the Hereafter. I do not think that this worldly life alone can satisfy anyone who sincerely listens to his internal “desire to live”. The findings of modern science point to the inevitable ending of the entire universe via the “Big Crunch” or “Big Chill” – if not through another unknown mechanism.⁷⁰ As a consequence, the existence of the Hereafter as an object of our intrinsic desire necessitates the existence of: the One who is transcendental to the universe, but also intrinsic to a level to be aware of the desires of humans; who is powerful and knowledgeable to achieve this existence; hence the existence of God with attributes as said. It is not hard to understand that returning back to our lives from our rotten dead bodies is only made possible by a Being who is all-powerful and all-knowledgeable, and aware of our desires.

As can be easily observed, human a priori has the property of forming a mental relationship with the future and innate desire for life, and man is mortal in this world. These facts, intrinsic to our humanity, a priori show our need for the existence of a life to satisfy our desires, regardless of whether we are aware of it or not. This is similar to the equality of $(a+b)^2$ with $(a^2+2ab+b^2)$, without the need for any experimental or observational support, and without the need for our awareness. One may oppose the believers of the existence of a desire towards God (like Augustine), by stating that he/she does not feel such a desire. However, it should be noted that our starting point here is the “desire to live”, where no such opposition occurs. It is not so hard to see that such a desire can only be satisfied if God exists.

69 *Arthur Schopenhauer, The World as Will and Representation, Vol: 2, Trans: E. F. J. Payne, Harper and Row, New York, 1966, p. 8.*

70 *Paul Davies, The Last Three Minutes, Basic Books, New York, 1994, p. 67-81.*

Evaluation of the desire for quelling fears: The necessitation of the existence of God by the “desire for quelling fears” can be established via the fear of death, though it is not limited to this. Man can comprehend his smallness and inability by observing the vastness and greatness of the universe. This comprehension leads to fear. Such fears can be overcome by taking refuge in the existence of God as dominator of the universe. David Hume established an association between the sense of fear and the existence of religions.⁷¹ On the same subject, Freud, one of the most renowned and influential atheists of all times, regarded religions as “wish-fulfillment” and said:

“... *religious ideas have arisen from the same need as have all other achievements of civilization: from the necessity of defending oneself against the crushingly superior force of nature.*”⁷²

“... *belief in God is an illusion that derives from our childish need for protection and security...*”⁷³

It is possible to interpret the “necessity of defending oneself” and the “need for protection” arguments of Freud as satisfaction of the desire to “quelling fears” by religion (belief in God). The necessitation of the existence of God by the desire to overcome all basic fears is a fact that theists and atheists would comfortably agree upon. For our purposes, the actual matter is to determine whether this fact supports theism or atheism. When we combine the innate sense of fear in every man, and the “desire for quelling fears” with another innate talent of contemplating the universe and ourselves, we are directly faced with our possession of desires making us dependent on God.

Evaluation of the desire of purpose: Recent psychological studies indicate that preschool children have a tendency to understand and describe natural phenomena in purposeful ways, showing that we

71 David Hume, *Dialogues and Natural History of Religion*, Ed: J.A.C. Gaskin, Oxford University Press, Oxford, 1993, p. 176.

72 Sigmund Freud, *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol: XXI (1927-1931): The Future of an Illusion, Civilization and its Discontents, and Other Works*, The Hogarth Press and the Institute of Psychoanalysis, London, 1961, p. 21.

73 Sigmund Freud, *The Origins of Religion*, Penguin, London, 1991, p. 376.

possess such skills a priori.⁷⁴ In fact, Richard Dawkins, the famous contemporary atheist, regards this tendency in children about finding purposeful – teleological – explanations as rationale of most people behind their belief in God; thereby trying to support his atheist views:

*“The assignment of purpose to everything is called teleology. Children are native teleologists, and many never grow out of it... Even more obviously, childish teleology sets us up for religion. If everything has a purpose, whose purpose is it? God’s, of course.”*⁷⁵

When human evaluates existence purposefully, when they turn their face to the entire universe, or more importantly, to their own existence, they will desire to learn the purpose behind the universe and themselves. However, the universe and human can have a purpose only via the existence of a transcendental Being who created them purposefully and meaningfully. In the materialist-atheist view the universe exists by itself and human came to existence through coincidences and necessities. In this picture, without God, the universe and human cannot have a purpose; it is not possible to satisfy the intrinsic desire for purpose in human, and the logical outcome of this is “unavoidable despair”. The following quote from Bertrand Russell, the famous atheist philosopher of the 20th century, further elucidates this point:

*“... but even more purposeless, more void of meaning, is the world which Science presents for our belief. That Man is the product of causes that had no prevision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and his beliefs, are but the outcome of accidental collocations of atoms... Only within the scaffolding of these truths, only on the firm foundation of unyielding despair, can the soul’s habitation henceforth be safely built.”*⁷⁶

Since the twelve arguments in this book are discussed only briefly, the remaining three desires will not be detailed here. Feuerbach, who said “Theology is anthropology”, and many other atheists established

74 Deborah Kelemen, “Are Children ‘Intuitive Theists’? Reasoning about Purpose and Design in Nature”, *Psychological Science*, No: 15/5, 2004; Deborah Kelemen, “The Scope of Teleological Thinking in Preschool Children”, *Cognition*, No: 70, 1999, p. 241-272.

75 Richard Dawkins, *The God Delusion*, Black Swan, London, 2007, p. 210.

76 Bertrand Russell, *Mysticism and Logic and Other Essays: A Free Man’s Worship*, Longmans, London, 1918, p. 40.

that the desire for happiness (the fourth desire listed above) necessitates the Hereafter, and the Hereafter necessitates the existence of God; however, they interpreted these necessities as a reason why people made up the existence of God and the Hereafter.⁷⁷ The fifth desire, “attaining doubtless knowledge”, is closely related to the “argument from reason” discussed in Chapter 10; and the sixth, “esteem” is related to the “argument from innate morality” discussed in Chapter 9. The argument presented here about these three latter desires is that the existence of these innate desires cannot find rational grounds without the belief in God.

Up to this point, I have presented discussions on the first two items of the main argument. The third item should be the one attracting the least objection; most theists and atheists would agree upon item 3. If one looks at the history of philosophy, as well as modern philosophy, he/she would easily grasp that materialist-atheist and theist approaches are situated opposing each other, and the falsification of one is accepted as the verification of the other. Agnostic approaches claim that whichever one of the two above is true is unknowable, rather than presenting a third independent explanation.

The main opposition by atheists and agnostics to my discussion will be on item four (the acceptance of which necessitates the conclusion in the next item). Those who claim that the mentioned desires did not emerge out of conscious planning by God, but rather through mechanisms proposed by materialist-atheism, would claim that they emerged out of natural selection and as byproducts of evolution. We should establish right away that the desires in our discussions are all fundamental ones; no alternative list of natural and basic desires can be formed that would lead to a conclusion contrary to the one we obtain here. We also have additional desires such as eating, drinking, sex, sleeping etc. facilitating our survival; they do not oppose our conclusion, either. Just the opposite: the existence of objects to satisfy these desires (food for eating, water for drinking etc.) supports our point. We observe that all of our worldly desires have corresponding objects already existing. Therefore, the existence of natural and basic desires leading to a transcendental Being supports the belief in God.

77 Ludwig Feuerbach, *Lectures on the Essence of Religion*, 1851, (<http://www.marxists.org/reference/archive/feuerbach/works/lectures/lec30.htm>).

I will not touch upon evolution-related arguments here; nevertheless, I should point out that the conclusion will not be affected by the acceptance of the theory of evolution (this point was briefly discussed in Chapter 7).⁷⁸ If the emergence of these desires through evolution is accepted as a fact; would this not support the views which accept evolution as “a method of creation used by God” and natural selection as “a tool God uses for creation”? If our innate natural and basic desires necessitate the existence of a transcendental God, would this not mean that evolution and natural selection call attention to God? In this case, do we not find support for those from Pierre Teilhard de Chardin to Dobzhansky and Mohammad Iqbal – notwithstanding the differences in their interpretations – who saw evolution as a method of creation by God? The necessitation of the same ontology by all these independent desires cannot be satisfactorily explained through the coincidental process of natural selection, which establishes choices based upon survival and reproduction. When we look closely at our desires, we observe that they extend much further beyond our survival and reproduction in this world. I will expand this point in the framework of the three natural and basic desires detailed above.

Desire for Living: Just as its name implies, this desire provides the strongest support for our survival and reproduction in the world. However, the ability of the human mind to establish relations between the distant past and far future, and our desire to live much longer than our biological organisms would allow, has no relation to our survival and reproduction in this world.

Desire for quelling fears: Fear of a predator or of falling down a hill obviously contributes to our survival and reproduction. However, when the human mind comprehends the greatness of the universe and his smallness, he feels a certain kind of fear. His facing, out of this fear, towards an Being who can act upon all phenomena through His power, has nothing to do with our survival and reproduction in this world. Indeed, many other species may feel fear of others that might kill them; yet we do not observe their reflection upon the expanse of the universe and their inabilities, and facing towards a transcendental Being that could save them from the emerging fear.

⁷⁸ I present my comprehensive discussion on the theory of evolution in my book: *Evrım Teorisi, Felsefe ve Tanrı*.

Desire for purpose: The purposeful – teleological – thinking of human can provide advantages towards better comprehension of other species, thereby contributing to their survival and reproduction. However, the presence of desire for purpose/meaning towards understanding themselves and the universe has nothing to do with survival and reproduction in this world.

As previously mentioned, many atheists noted the presence of these desires and they accepted that their satisfaction is only possible via belief in God, essentially evaluating religion as “satisfaction of desires” (wish fulfilment). Such an approach would hold valid only if we assume – a priori – materialist-atheism as the true philosophy. If we leave this a priori assumption aside, we can realize that the “satisfaction of desires” claim by atheists is an example of “genetic fallacy”. The subject of “genetic fallacy” wrongly assumes that a conclusion is suggested based solely on something’s origin or source. The conclusion reached via genetic fallacy may or may not be correct; regardless, the logical methodology is wrong. For example, in the supposition “Alice learnt the shape of the world from her family, hence her knowledge about its shape is wrong”, regardless of the truth or falsehood of the conclusion, the logical method is fallacious; the used origin does not prove the conclusion. Likewise, as Freud and others claimed, for most people behind their faiths in God might be their desires; but, if the belief in God and religions is claimed to be fallacious, based on the origin of the faith, genetic fallacy will be manifested. Yet it might be argued that God guides people towards faith by placing these desires inside them; stated in Augustine’s words, “he has made us for Himself”.⁷⁹

One may inquire whether we also fall into genetic fallacy or not in the present argument. If we had claimed that our innate desires point towards God and hence we should believe in God, we would have fallen into this fallacy like Freud and others. In our argumentation, however, we first state that all these desires necessitate the existence of God, and then we inquire how these desires come to existence. As a result of the inquiry, we claim that the existence of these desires is best explained by theism. Our argument reaches the target from the best explanation of the existence of the desires, rather than directly following the desires (which would lead to genetic fallacy). When we ask the question “Why

⁷⁹ Steven Jon James Lovell, *Philosophical Themes from C. S. Lewis*, Department of Philosophy, University of Sheffield, PhD Thesis, August 2003, p. 95, 154.

do some of our desires guide us towards belief in God?”, the statement “Because they are all created by God” provides best answer, while the coincidence-based argumentation of materialist-atheism provides no satisfactory explanation. Since, in the theist ontology, God is the Creator of everything including desires, the guidance of different desires towards a common target is an outcome of God’s plan. As a result, there is no surprise in the guidance of different desires towards God. On the other hand, for someone who considers desires to be the outcome of coincidences, the guidance of these desires as products of the material universe towards a transcendental supreme Being, does not seem as a satisfactory explanation.

In short, famous atheists in history tried to show the necessitation of the existence of God by satisfaction of the desires in human as a reason for human’s forging of God’s existence. Here, I tried to show that the deep waters where atheist philosophers drown can be water for life. The best explanation for the necessitation of God’s existence by many of our independent and irreducible desires is God’s placement of them inside us. The emergence of many desires pointing to God’s existence cannot be explained by haphazard natural selection mechanisms (which make selections based solely on survival and reproduction) as proposed by materialist-atheists. The sole answer to the vital question “Why are many desires inside us in a way that points towards belief in the existence of God?” is provided by theism. The theist view of God’s planning of these desires in the way they are is preferable over the materialist-atheist view, which explains the necessitation of the same ontology by each of the different desires through coincidences.

9. Argument from Innate Morality

Even though morality has been a subject of focus for philosophy and religion for thousands of years, it was not until the 18th century that morality was used as an argument for the existence of God. One reason for this is fideism; most theists believe in God, without the need for arguments. Another is that those who prefer to support their faith with arguments often regard the cosmological, design, consciousness and similar arguments to be sufficient for the matter. Virtually unused prior to the 18th century, the morality argument has become a “forsaken land” of philosophy after the 20th century.⁸⁰ Nevertheless, we believe that there is still much to say on this subject and hence devote this chapter to it.

Morality is becoming an increasingly interdisciplinary subject; other than philosophy and religion, morality is taken into consideration in psychology, cognitive sciences, neurology, anthropology, evolutionary biology, child development etc.⁸¹ In order to bring new arguments about morality, these subjects should also be brought onto the stage. The relation between morality and our innate characteristics has been studied by many of the famous philosophers – despite the differences in their interpretation – including Gottfried Leibniz (1646-1716),⁸² Lord Shaftesbury (1671-1713),⁸³ Francis Hutcheson (1694-1746),⁸⁴ Thomas Reid (1710-1796)⁸⁵

80 Robert Adams, “Moral Arguments for Theistic Belief,” *Rationality and Religious Belief*, Ed: C. Delaney, University of Notre Dame Press, Notre Dame, 1979, p. 116.

81 Christopher Suhler and Patricia Churchland, “The Neurobiological Basis of Morality,” *The Oxford Handbook of Neuroethics*, Ed: Judy Illes and Barbara J. Sahakian, Oxford University Press, Oxford, 2011, p. 33.

82 G. W. Leibniz, *New Essays on Human Understanding*, Ed: Peter Remnant and Jonathan Bennett, Cambridge University Press, Cambridge, 1996.

83 Lord Shaftesbury, *Characteristics of Men, Manners, Opinions, Times*, Ed: Lawrence Klein, Cambridge University Press, Cambridge, 2001, p. 163-230.

84 Francis Hutcheson, *A System of Moral Philosophy*, Continuum International Publishing Group, New York, 2005.

85 Thomas Reid, *Inquiry and Essays*, Ed: R. E. Beanblossom and K. Lehrer, Hackett Publishing, Indianapolis, 1983.

and Adam Smith (1723-1790).⁸⁶ I share, with many theologians and philosophers of history, the opinion that man has innate moral values; my starting point in this chapter. The novelty in my approach will be the amalgamation of the historical arguments with the results from recent scientific studies, and thereby the formation of an argument for God's existence. I will present this as follows:

Humans have innate moral values.

We have two alternative views to explain these values:

The innate moral values emerged out of coincidences and necessities, as advocated by materialist-atheism.

The innate moral values are created by God, as advocated by theism.

The innate moral values are better explained by theism than materialist-atheism, because;

It better explains "moral awareness".

It better explains the situation that innate moral values have a rational basis only if God exists.

As a result, theism should be preferred over materialist-atheism.

The first item in this argumentation has always been a vibrant subject in the history of thought. Many theists and atheists have defended the idea that the human mind at birth is like a "blank slate" (tabula rasa). John Locke is one of the best known theist users of tabula rasa (he also popularized the concept). Locke opposed the idea of innate moral values and more generally the epistemological approach that individuals are born with built-in mental content.⁸⁷ The rejection of innate moral values is also common in atheism. The defenders of this position often claim that the moral structure in human is an outcome of socio-cultural factors. They regard sociological needs as the sole regulator of moral phenomena. Durkheim is one of the most notable representatives of this approach. He claimed that man does not have innate moral values

⁸⁶ Adam Smith, *The Theory of Moral Sentiments*, Liberty Classics, Indianapolis, 1976.

⁸⁷ John Locke, *An Essay Concerning Human Understanding*, Prometheus Books, New York, 1995. Parts 1 and 3.

and such natures are developed and shaped through social factors.⁸⁸ Likewise, several post-modern philosophical approaches of the 20th century also adopted a similar position, rejecting innate values (usually due to concerns about the potential for such innate properties to become a basis for the existence of universal/common moral values). As a result, many people, theists and atheists, still reject the idea of innate morality.⁸⁹

The fact that every healthy person can use concepts, which are actually very complex, such as “good-bad, right-wrong, just-unjust”, from an early age and with comfort shows that the ability to use these concepts is given from birth. In my opinion, this point can even be defended without making reference to any scientific study, yet it requires meticulous analysis of the extraordinariness of possessing fundamental moral values. Besides, many recent studies in psychology and cognitive sciences indicate that most moral-related properties start to emerge during infancy. As shown by Jonathan Haidt, moral judgments usually occur without mental reasoning, in a spontaneous, automatic manner.⁹⁰ The explanations for this are typically post hoc rationalization.

Let us now see some examples of these studies. Many independent studies examined newborns have shown that when infants are exposed to the cries of other infants, they also start crying, show stress-like facial expressions, and reduce sucking of their pacifiers, which suggest that the cry of another infant was detected as a novel stimulus. To determine whether such reactions were against the sound of the cry or just the noise, the newborns were also exposed to other sounds (of the same intensity), artificial crying sounds and also their own cries. In all these test cases, the babies did not show the same reaction as they did at the

88 Donald Black, “On the Origins of Morality,” *Evolutionary Origins of Morality: Cross-Disciplinary Perspectives*, Ed: Leonard Katz, Imprint Academic, Thorverton, 2000, p. 109.

89 To prevent misinterpretations, I should note that as I defend “the argument from innate morality” through moral properties we have since birth, I do not oppose the idea that environmental factors also have significant roles in forming moral backgrounds.

90 J. Haidt, “The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment”, *Psychological Review*, No: 108, 2001, p. 814-834.

original baby cry.⁹¹ We understand many feelings (anger, fear, sadness, joy, pain, lust, guilt, shame etc.) of others through empathy. Empathy is an important, complex and many-layered property and its lack means psychopathy.⁹² The observation of traces of empathy in infants shows that we possess empathy, a prerequisite of a moral system, from birth.

Other examples come from puppet experiments, which have several variants in different studies. In one experimental scenario, babies watch a show, where a puppet plays with a ball together with two other puppets, and then a fourth grabs the ball and runs away. When this naughty puppet is brought before the babies, they attempt to “apply justice”, i.e. they punish it by hitting its head, for example. In another experiment, 21-month-old toddlers were observed in a place with good and bad puppets. In the arrangement, toddlers could give something to the puppets as a “reward” or take something away from them as a “punishment”. When they were asked to take something, they took it from bad puppets and when they were asked to give, they gave it to good ones. In another setup, 8-month-old babies were observed to prefer those who reward a good puppet over those who punish it; more interestingly, they also preferred those who punish a bad puppet over those who reward it.⁹³ Awarding the good and punishing the bad has an important place in the concept of “justice”. These experiments performed on babies, who have not fully acquired language yet, indicate that they are born with a background ready to make use of, and evaluate, of moral concepts. John Rawls stated that the concepts, “just” and “unjust”, which are extremely complex and potentially unlimited, and as well as our moral judgments based on them, can be understood through an approach similar to Chomsky’s language theory (related to our innate capacities).⁹⁴

91 M.L. Simner, “Newborn’s Response to the Cry of Another Infant,” *Developmental Psychology*, No: 5, 1971, p. 136-150; M. Dondi, F. Simion and G. Caltran, “Can Newborns Discriminate Between Their Own Cry and the Cry of Another Newborn Infant,” *Developmental Psychology*, Vol: 35/2, 1999, p. 418-426.

92 Tania Singer, “The Neuronal Basis and Ontogeny of Empathy and Mind Reading: Review of Literature and Implications for Future Research,” *Neuroscience and Biobehavioral Reviews*, No: 30, 2006, p. 857-858.

93 Paul Bloom, “The Moral Life of Babies”, *The New York Times*, May 5th 2010.

94 John Rawls, *A Theory of Justice*, The Belknap Press of Harvard University Press, Massachusetts, 1999, p. 41.

These experiments show that man is born with capabilities allowing the development of a moral system; hence, this justifies the truth of the first item above (pay attention to the fact that we defend the existence of innate properties that allow the development of moral values, rather than the existence of innate moral values themselves). As for the second item in our argumentation: the explanation of the existence of this innate property in human can only be explained via a comprehensive approach that can explain human and his/her nature. As with previous arguments, the two opposing candidates for this explanation are theism and materialist-atheism. Most materialist-atheists will accept this even though they would also claim that their paradigm presents a better explanation.

If the reasons listed in item 3 successfully show that theism better explains the innate existence of the basis for morality, the result of the argument (item 4) “theism should be preferred over materialist-atheism” would follow logically. As a result, the critical item here is the third, and its two points will be evaluated below.

Evaluation of 3.1: First of all, I would like to point out that the opinion about the emergence of innate moral values through evolutionary processes is compatible with our argumentation (you can also refer to the previous chapter, on natural desires and Chapter 7, on life). Monotheistic beliefs, in general, agree upon the moral responsibility of humans, as a distinction from animals and plants. The moral awareness that humans exhibit during altruistic behaviors is also quite distinct from altruism in certain animal species (bees, ants etc.). For example, a bee can sacrifice her life for others, showing a climax of altruism. Even though humans also do the same, the mechanisms that push a bee and a human are entirely different. Behavioral methodology cannot penetrate the reasons behind the same apparent behaviors. The distinction between the mechanisms behind the behaviors of bees and humans can be understood by using hermeneutic and introspective approaches that witness moral awareness. When we consider the altruistic action of helping one’s own kind that is shared by bees and humans, whether such an action is taken with moral awareness or not becomes quite critical. In bees, the “altruistic” action of self-sacrifice happens via the “unaware” outcome of a genetic code, rather than a conscious choice and evaluation of right-and-wrong or good-and-bad (there is a consensus among entomologists on this).

As pointed out by John Hick, it is imaginable that a bee could have chosen “not to sacrifice its own life”, if it were able to make a conscious choice with “moral awareness”.⁹⁵ The innate moral values in human are not like automatic control mechanisms. Instead, they form a capacity to make moral choices with the awareness of “good-bad, right-wrong, just-unjust”. Richard Swinburne gives special emphasis to moral awareness:

“If humans are to make significant choices at all they must have the concepts of moral goodness and badness (in my sense of overall goodness and badness)... If God is to give us significant choices, he will ensure that we develop this kind of moral awareness. But if there is no God, how likely is it that embodied creatures with a mental life will progress to this stage? ... Such creatures may help each other spontaneously and naturally, as many groups of animals do. But having the understanding of these actions as morally good (even when we do not desire to do them) is something beyond mere altruistic behavior... So again, while God will give some creatures moral beliefs as features essential to their being humanly free agents, there is otherwise no particular reason why whatever processes give creatures beliefs should give them moral beliefs. This is shown by the fact that, as far as we can tell, there are many species of animals that are naturally inclined to help others of their species, and yet do not have moral beliefs—there is no reason to suppose that lions and tigers have moral beliefs, or could ever develop them...Moral choice requires moral awareness...”⁹⁶

The materialist-atheist’s claim which is the emergence of “moral awareness”, a complex, costly, and specific-to-man attribute, came about through coincidental processes, with no involvement of any sort of consciousness (in other words, attributing the observation of moral awareness solely in humans among all living beings), does not seem to be logical. On the other side, in the theist view, moral awareness can play special roles in God’s planning; hence there is ample reason to believe that these properties are consciously placed inside us.

Furthermore, theism is also more successful at explaining the existence of non-material concepts such as “good-bad”, which also

95 John Hick, *Arguments for the Existence of God*, Herder and Herder, New York, 1971, p. 63.

96 Richard Swinburne, *The Existence of God*, 2nd Ed, Clarendon Press, Oxford, 2004, p. 216-218.

make morality possible. While the moral awareness (obtained through our innate moral properties) is something expected if the view of God's creation man is correct; it is unexpected if atheism is correct. The question "Why do we have moral awareness, rather than lack of morality?" is answered much better from the theist angle than the materialist-atheist one.

Evaluation of 3.2: A moral and ethical system without belief in God can, of course, exist in practice (indeed, many atheists have strong moral values). However, a binding system of ethics, and one that often requires its subjects to sacrifice personal interests, cannot find rational grounds without faith in God. This point is established by many renowned atheist philosophers, including Nietzsche and Sartre. The following quote from Nietzsche is an example:

*"... By breaking one main concept out of it, the faith in God, one breaks the whole: nothing necessary remains... it has truth only if God is truth - it stands and falls with faith in God."*⁹⁷

We also see similar arguments in Sartre:

*"The existentialist, on the contrary, finds it extremely embarrassing that God does not exist, for there disappears with Him all the possibility of finding values in an intelligible heaven. There can no longer be any good a priori, since there is no infinite and perfect consciousness to think it. It is nowhere written that "the good" exists, that one must be honest or must not lie, since we are now upon the plane where there are only men. Dostoyevsky once wrote "If God did not exist, everything would be permitted"; and that, for existentialism, is the starting point. Everything is indeed permitted if God does not exist, and man is in consequence forlorn."*⁹⁸

The atheist perspective of interpreting innate moral and ethical values as an illusion is evident in the following words of Michael Ruse and Edward Wilson, both prominent contemporary materialist-atheists:

"To use phrasing made popular in this century by the Cambridge

97 Walter Kaufmann, *Portable Nietzsche*, The Viking Press, New York, 1954, p. 515-516.

98 Jean-Paul Sartre, *Basic Writings*, Ed: Stephen Priest, Routledge, London, 2001, p. 32.

philosopher G. E. Moore, evolutionary ethics commits “the naturalistic fallacy” by trying to translate is into ought... In an important sense, ethics as we understand it is an illusion fobbed off on us by our genes to get us to cooperate. It is without external grounding. Ethics is produced by evolution but not justified by it... Ethics does not have the objective foundation our biology leads us to think it has.”⁹⁹

When we think about our innate intuitions about “goodness-badness”, which also form the basis of moral judgment, we realize that “goodness-badness” has an ontological status above personal interests and desires; this point is fundamental in ethics. The consideration of moral laws as “orders of God” provides a rational basis, because, in theist ontology, God is all-powerful and we owe everything to Him and thus His orders (moral laws) are above any social expectations, personal interests and desires. On the other hand, in materialist-atheist ontology, intuitions about “goodness-badness” are nothing more than coincidentally-formed biochemical interactions, consisting of physical material properties such as attraction-repulsion, wave nature etc. If everything can be reduced to material properties, as claimed by materialist-atheism, we cannot find a rational basis for intuitions about “goodness-badness” as they must be above material interests and desires. Atheists like Ruse and Wilson, who realize this situation in materialist-atheism, prefer to call those intuitions (ethics) an “illusion”. Furthermore, since animals and humans are formed through the same combination of coincidences and natural processes, there is no rational basis in atheist ontology for the observed ethics in humans.

Imagine that someone loses a considerable sum of money and I find it (no one else knows I did). The money is so much that I can spend the rest of my life living off it. There is no social sanction preventing me from behaving that way; it is just ethics telling us what is “good-bad”. The “goodness” of returning the money can be defended based on the deontological ethics of Kant,¹⁰⁰ or the Mill’s utilitarianism.¹⁰¹ However, these approaches cannot explain why deontological rules

99 Michael Ruse and Edward O. Wilson, “The Evolution of Ethics,” *Philosophy of Biology*, Ed: Michael Ruse, Prentice Hall, New Jersey, 1989, p. 314-317.

100 Immanuel Kant, *Fundamental Principles of the Metaphysics of Morals*, Tr.: Thomas Kingsmill Abbott, Chicago, William Benton, 1971, p. 253-287; Immanuel Kant, *The Critique of Practical Reason*, Tr.: Thomas Kingsmill Abbott, Chicago, William Benton, 1971, p. 291-361.

101 John Stuart Mill, *Utilitarianism*, Hackett Publishing, Indianapolis, 2001.

or utilitarianism is supposed to be preferred. In other words, they are unable to build rational grounds for ethics without referring to God's commands.

"Good" is a standard above the self-interests of people. In the autonomous ethics system of Kant, people are supposed to reach a standard of ethics (categorical imperative) by considering the reasoning of everyone, and keeping it above self-interest; there does not seem to be a rational basis for this endeavor.¹⁰² Why is it better to comply with the categorical imperative derived by considering the minds of others, rather than following self-interests and becoming a "slave of the passions"? In the system of Kant, there is no answer to this fundamental question. Those who consider innate morality and rationality to be a product of coincidental natural processes, and consider ethics an illusion, should also consider the feelings of "necessity and binding" derived from common rationalities as an illusion. Why should we attribute goodness to produce the "greatest happiness of the greatest number", instead of our own happiness?

In short, the existence of innate moral properties in people is seen from the utilization of complex fundamental moral concepts from early ages, and from recent psychological and experimental studies in psychology and cognitive sciences. Humans develop "moral awareness" thanks to these innate properties. As materialist-atheist ontology does not differentiate humans from other living beings, the emergence of such complex and specific properties in only humans should be totally unexpected. The same phenomena are totally expected in theism as it attributes particular moral responsibilities to humans. Furthermore, even many atheists agree that moral laws can only find a rational basis only if God existed. As a result, the creation of innate moral properties by God is the best explanation. To say natural processes generate those innate moral properties means to say natural processes turn our regards towards God, and that is more coherent with the theist view that considers natural processes to be God's utilities. According to the point of view advocated in this chapter, the Creator of innate moral properties essentially "stamped" his name in human's nature by granting those properties to him/her from birth. As a result, our evaluations of innate moral properties show that theism is preferable over materialist-atheism.

102 *In my opinion, Kant's autonomous ethics contradict his mandatory postulation of belief in the existence of God, the Hereafter and free-will, for reaching "summum bonum". I will not discuss further such objections rejected by Kant.*

10. Argument from Reason

Making conversation about an unimportant event in the daily routine, contemplating future goals, doing science in a laboratory, developing sophisticated philosophical arguments... All these and many of our activities are only possible with our “reasoning” capability. We carry out these activities, simple or complex, often without particularly feeling our “reasoning” ability: something that makes us ourselves, which permeates so deeply in our lives and is perhaps one of the most important properties of our nature.

Our argument in this chapter is about the reasoning property, intrinsic and innate in every healthy person. Had the universe not possessed a rational structure, the mind would be unable to comprehend it (2nd chapter, argument from the existence of natural laws of the universe). On the other hand, regardless of the structure of the universe, had the mind not possessed pertinent capabilities, it would still be unable to comprehend it (argument from reason). The coherence between the outside world and the mind is a particularly noteworthy phenomenon. I also consider it important to note that the argument from reason is closely related to the next two pieces: “argument from will” and “argument from consciousness and self”, as those properties are tightly linked to the reasoning capability of the mind. Here is how the argument from reason will be presented:

In order to have the ability to reason, the mind should possess the following (along with others) properties:

Properties needed for will.

Properties needed for consciousness and self.

Possession of concepts of “right and wrong” and the ability to use them.

Possession of laws of logic and ability to use logical thinking.

There are two fundamental views to explain the emergence of these properties in the mind:

If materialist-atheism is true, these properties of mind should have been emerged through coincidental processes, via the laws of nature.

If God exists, as asserted by theists, these properties of the mind are created by God, who has absolute reason.

Theism better explains these properties allowing reason, because:

The properties needed for will is better explained in theism than materialist-atheism (to be detailed in Chapter 11).

The properties needed for consciousness and self is better explained in theism than materialist-atheism (to be detailed in Chapter 12).

The ability to use the concepts of “right and wrong” is better explained in theism than materialist-atheism.

The ability to use logic is better explained in theism than materialist-atheism.

As a result, theism should be preferred against materialist-atheism.

Anyone would agree that properties listed in item 1 above are indispensable for reasoning. If we reject will, all of our thoughts would be nothing but physical events, no different than the “blowing of a wind”; making reasoning impossible. Reasoning can take place if, and only if, there is will. Likewise, will is also impossible without reasoning (to be discussed in detail in Chapter 11). In addition, reasoning is also impossible without consciousness; it requires conscious awareness of what passes from the mind (to be discussed in detail in Chapter 12).

In this chapter, we will focus on the two points under item 1, which will not be discussed in the next two chapters. Let us consider a simple piece of reasoning: a pen is a tool used for writing. Such knowledge would not carry any meaning without the ability to make evaluations like “the pen being a tool for writing is right” and “the pen being something to eat is wrong”. Words gain meaning in our brains through evaluations in the framework of “right and wrong” (this is the property of human mind about the concepts of right and wrong). Likewise, we would be unable to reach the same knowledge if we were unable to evaluate the pen and writing through basic logic laws (such as identity and noncontradiction), and unable to conclude that the pen is for writing through numerous observations of pens in writing and making an induction (property of human mind about the use of logic). As a result, without much hesitation, we can claim that theist and materialist-atheists would be in consensus about these fundamental properties of

the mind (there are other prerequisites for reasoning, such as language and memory; those will not be included in our discussions).

The second item in our argument states that there are two fundamental approaches to the explanation of the phenomenon of reasoning. The first is materialist-atheism, which regards the material as eternal and considers the emergence of the mind as an outcome of coincidental processes taking part within the framework of natural laws. The second is theism, which considers the mind to be a creation of God, who is eternal, all-conscious, all-powerful and also has the ability to reason to a much higher, absolute level, than humans. Please pay attention that we used the term “fundamental” for these two approaches. We do this to exclude many non-mainstream opinions, receiving little attention in the scientific community and society in general. One example for such vies is panpsychism, which claims that every part of matter contains conscious (and other) properties of mind.¹⁰³ This claim contradicts our experience that consciousness does not penetrate everywhere, but rather has a certain concentration. As possessor of mind-will-consciousness, each of us has thoughts and actions; so does everyone else. Our mind-will-consciousness belongs only in ourselves, and our actions, governed by our thoughts, have certain limits; that means there is no apparent indication of panpsychism in our experiences. In addition, even in panpsychism the need for explaining the emergence of mindful-willful-conscious human does not disappear: meaning that even in such an eccentric view, the main structure of our argument still remains. It is also possible to derive other thoughts for understanding reason-will-consciousness, akin to panpsychism, out of theism and materialist-atheism. Leaving aside the fact that views attributing consciousness to matter do not attract many proponents, in my opinion these, and similar philosophies, can only be supported via a theism-like approach, where a rational-willful-conscious God places these properties in countless particles of matter. Therefore, such philosophies do not stand against theism, but they do stand against materialist-atheism. Nevertheless, they cannot be attributed a status of a “fundamental” alternative view.

The main objection from a materialist-atheist would come to the 3rd item in our argumentation. When the three points under item 3 are agreed on, the conclusion automatically surfaces. When the premises in the list

103 David Skrbina, *Panpsychism In The West*, MIT Press, Cambridge, Mass., 2005.

are proven to be correct, the result becomes a requirement of logic. No materialist-atheist should object to this, either. They would agree that the correctness of the three propositions necessitates the conclusion, but disagree that they are correct. Therefore, the critical item here is the 3rd, and we will elucidate it below. We will treat certain notable properties related to the human mind and scrutinize the explanations provided by theism and materialist-atheism.

Point 3.1, the better explanation of the will by theism, is the subject of the next chapter; and point 3.2, consciousness and self are the subjects of Chapter 12. Since will and consciousness are prerequisites for reasoning, the next two chapters are essentially an integral part of the current piece. Now, let us delve into the two remaining properties.

Evaluation of 3.3: The existence of the concepts of “right and wrong” is another prerequisite for reasoning; despite the fact that it is often overlooked due to its comfortable regular use by everyone. Most people spend their lives never contemplating this property, like a fish not knowing it is in water.

We reason through language, and the use of language requires knowing the meanings of words and sentences. Knowing the meaning requires understanding of whether a statement is “right or wrong”. Neither understanding nor reasoning is possible without the concepts of “right and wrong”. When we hear the word “chair”, the only way to imagine the actual object in question is to understand that it is “right” to call an object a chair if it is made to sit on; but it is “wrong” to call an object a chair if it is a round-shaped ball made to play with. Without such kind of distinctions, the concept “chair” cannot be understood. Even though we do not momentarily make such distinctions when we hear the word, the relevant processes about “right and wrong” are always running in the background of our minds. Concepts would not have any meaning without this awareness.

Looking at nature, we realize that there is no concrete counterpart of “right and wrong”; they are abstractions in our minds. Consider a botanist, set to determine the age of a tree; he/she is counting the rings in the trunk of the tree. If his/her estimation of the tree’s age is not equal to its actual age, we would say he/she is “wrong”. Now imagine for a moment that there is a fictitious bacterium that fades trees’ rings and causes wrong estimations. In such a situation, would it be possible to say that the “the tree is wrong”? Of course not! We might say that the

structure of the tree is misleading but it is not the tree that is wrong; it is the botanist. For nothing without a mind in nature, no technological production of human, not even the most advanced computers, is there “right”, “wrong” or “meaning”. The calculations carried out by a computer can be attributed “rightness” or “wrongness” only via the evaluation of the mind. The computer itself is not aware of these concepts. This is similar to our ideas written on a piece of paper. Before been read by a mind, the thing on the paper is simply a spread of ink. The statements on the paper can be evaluated as “right or wrong” only after evaluation by a mind.

Such fundamental and innate concepts cannot be reduced to physical, chemical and biological processes.¹⁰⁴ As stated by C.S. Lewis;

*“... it is nonsensical to say that one piece of matter is “about” another piece of matter. A tree is not about a rock, for example. Moreover, a piece of matter cannot be true or false; it simply is...”*¹⁰⁵

Materialist-atheist ontology faces grand difficulties in explaining these non-material, entirely mental concepts. Patricia and Paul Churchland (both materialist-atheists) stated this difficulty when they called for the need of readiness against the lack of concepts “right and wrong” in the brain. Referring to the claims of the Churchland couple, Victor Reppert stated that the price paid for eliminating the value of rightness is quite harsh, and that it is impossible to fill these concepts with any other alternative.¹⁰⁶ Most materialist-atheists, including the Churchland couple (one a neurologist and the other a philosopher), would find it hard to consistently accept the requisite of their philosophies; yet as correctly noted by the couple, it is impossible to find a place in the world of materialist-atheist ontology for the concepts “right and wrong”. It is nonsensical to think of rightness or wrongness as a biochemical

104 Dallas Willard, *“Knowledge and Naturalism”*, *Naturalism: A Critical Analysis*, Ed: William Lane Craig and James Moreland, Routledge, London, 2000, p. 26-48.

105 C. S. Lewis, *Christian Reflections*, William B. Eerdmans Publishing Company, Grand Rapids, 1995.

106 Paul M. Churchland, *“On the Ontological Status of Observables”*, *A Neuro-Computational Perspective: The Nature of Mind and the Structure of Science*, Bradford, Cambridge, Mass., 1990, p. 150-151, Patricia Churchland, *“Epistemology in the Age of Neuroscience”*, *Journal of Philosophy*, No: 84, Oct. 1987, p. 548; Victor Reppert, *C.S. Lewis’s Dangerous Idea*, IVP Academic, Downers Grove, p. 76-77.

reaction inside the brain (as in the example of the tree above). Therefore, the price to be paid for materialist-atheists to save their philosophies is to abandon the concepts of “right and wrong”, following a path the farthest possible distance away from commonsense.

The mental concepts of “right and wrong” are so fundamental that they cannot be reduced to or understood by material concepts. If you understand that the statement “People travel in cars” is right and “Everybody owns a car” is wrong, and if you think that the concepts “right and wrong” used here make sense, you essentially agree that concepts unexplainable in the materialist ontology have real counterparts. For theism, the existence of beings capable of reasoning is linked to God, who himself has reason; hence a theist faces no obstacle towards understanding the emergence of this fundamental property that is indispensable for reasoning capability. This property is explained more successfully in the theist paradigm, as compared to materialist-atheism.

Evaluation of 3.4: Another prerequisite for using our minds is the possessions of laws of logic and the ability to make logical derivations in the framework of these rules. It is this property of the mind that allows for the discovery of Higgs particle, all technological inventions or routine daily thinking. If the mind did not possess principles of identity and noncontradiction, statements like “this is a chair” would not carry any meaning. Had we not observed people sitting on chairs numerous times and thereby made an induction that chair is something used for sitting, we would not be able to reason that “a chair is for sitting”, and when we see a chair we would not be able to make a deduction to sit on it. As a result, reasoning is possible thanks to this property, along with others mentioned above.

Our minds are equipped with innate laws of logic. People from isolated tribes reason through the same laws of logic; the ability to use these laws starting from very young ages; the readiness for language acquisition from birth (use of language is impossible without reasoning in accordance with the laws of logic) etc. all point to this innate nature. As pointed out by Thomas Nagel, one who makes reference to reason finds a source of universal authority above himself and society. He also says even many educated people find it hard to use the particular way of reasoning “modus tollendo tollens”, yet this difficulty does not affect the binding universality of that law. This is one of the indications that

the laws of logic cannot be reduced to social norms or psychological situations.¹⁰⁷ We can feel this universal authority in our minds when we consider e.g. “ $3+2=5$ ” or other forms of mathematical or logical uses.

Laws of logic are non-physical, transcendental rules. Some thinkers reject the real existence of numbers, which have similar properties, since we cannot enter into causal interactions with them (numbers are abstract and abstract entities do not have causal interactions). Should a consistent materialist not claim the same for the laws of logic, as they are also irreducible to material processes and incapable of causal interactions (since they are abstract)? Indeed, he should; yet few materialists realize that this is the logical requirement of their belief. As noted by Aristotle more than a couple thousand years ago, the non-realism of laws of logic brings about several problems. Even to reject the laws of logic, one should first accept their truth.¹⁰⁸ The universe described by materialism does not seem to provide grounds for laws of logic. Consistent adoption of materialist philosophy requires considering these laws as an illusion. Ironically, if a materialist does this, he loses grounds to claim the truth of materialism!

We cannot reason without innate laws of logic. These laws, however, are different from physical laws: logically, it is possible to imagine a universe with a different set of physical laws (for example, one with no gravity or larger weak nuclear force). On the other hand, the laws of logic are considered to be transcendental, hence they remain exactly the same in any possible universe. “ $3+2=5$ ”; large can include small, but not vice versa, are statements that would hold true in any possible universe. Logic principles such as identity and noncontradiction would remain unchanged in a fictitious universe governed by a different set of physical laws. In the material universe, no law of physics, chemistry or biology shares this property with logic; it is fundamentally distinct. Let us consider biological molecules in the brain, consisting of atoms and described by physics-chemistry; no state of these molecules necessitates a universally-binding principle of logic. In materialist-atheism, all states of the mind are nothing but biochemical states and reactions (hence their different forms are possible); it seems impossible to make the transition to universal laws of logics from these states. What matters here is the difference in kind: not in degree. When observed from a materialist-

107 Thomas Nagel, *The Last Word*, Oxford University Press, 2001, Oxford.

108 Victor Reppert, *C.S. Lewis's Dangerous Idea*, p. 81.

atheist angle, it is quite problematic to explain such a difference and to understand the emergence of properties that do not exist in a material form. No combination of atoms, no combination of molecules, regardless of how complex they might be, can form foundations of universal laws of logic. In theism, on the other side, since God has reason and He is the root of everything, there is a significant advantage in understanding the emergence of such properties of the reason.

In short, in this chapter, we focused on reasoning, one of the properties that defines us. We scrutinized whether reasoning is better explained by theism or materialist-atheism. The concepts of “right and wrong” and the laws of logic that we discussed above cannot be understood through the structure of matter or biochemical reactions in the brain. Even though such material interactions are necessities for the ability of reasoning, they are unable to explain the true nature of reason. Conceptual investigations and reflections on prerequisites for reasoning reveal that the properties we considered are radically different from material structures and properties asserted by materialism. Evidently, materialist-atheist philosophy is unable to satisfactorily describe the emergence of properties needed for reasoning. This handicap disappears for theism where the eternal and rational God is considered to be the Creator. The ability of reasoning, observed in every healthy person, indicates that theism is preferable over materialist-atheism.

11. Argument from Will

Another critical innate property that defines us is our will. Will, has long been a focus of several branches of philosophy, as well as of religions, neurology, psychology and cognitive sciences. In this chapter, we will re-consider this issue and defend that the existence of will cannot be denied. Later, we will ask whether this property is better explained by the coincidental natural processes picture of materialist-atheism, or by the “creation of eternal-willful God” interpretation of theism.

We feel our wills in action when we decide what color T-shirt to wear, whether we should drive or cycle to work etc. Let us imagine we chose to wear a blue T-shirt and cycle to work; we consider that we could have chosen to wear red and to drive, but despite these possibilities, we made the choice the other way. Besides such routine daily choices, we also use our will to make more critical choices like what job to do, whom to marry and where to live. If you think that you could have not read this book but have freely chosen to read it, you are witnessing the existence of will. In other words, what is meant by will is to make certain choices among other possibilities.

Prior to presenting an argument based on will, it would be worthwhile to clarify whether the concept of will is an illusion or a real property that we use when making choices. I defend the second option. Physical theories and philosophical approaches supporting determinism or indeterminism in the universe are all far from showing there is no free will.¹⁰⁹ My argumentation for stating the impossibility of rejecting will is as follows:

A proposition (or principle) cannot be rejected based on a conclusion reached from the same proposition (or principle).

Performing scientific activity or proposing a philosophical argument stands on the tacit assumption that we have will.

Will cannot be rejected by any scientific work or philosophical argument.

¹⁰⁹ For more on this subject: Caner Taslaman, *The Quantum Theory, Philosophy, and God* İstanbul Yayınevi, İstanbul, 2020.

The first point of the argument should be quite clear. If you reach a conclusion based on an assumption, that assumption will always stand as an element of the conclusion; when the assumption disappears, so does the conclusion. For this reason, the conclusion can never be used to negate the assumption. Imagine that you negate the assumption using the conclusion: when the assumption becomes invalid; the conclusion itself disappears, making it impossible to be used against the assumption. In short, if a conclusion stands on an assumption, the assumption is always more fundamental than the conclusion (this argument should not be confused with showing internal inconsistency, in which case assumption is not rejected based on a conclusion derived from it). The grandfather paradox that is used to show the impossibility of travelling to the past uses a similar argument. We hold the opinion that today (conclusion) is determined by the events in the past; this means that the past is an integral part of today and we cannot change the events in the past (that determined today) based on today. For example, a grandson cannot go into the past and kill his own grandfather; otherwise, he would not have existed and could not have killed his grandfather.

I believe that the second item of the argumentation is also quite clear. The famous Libet experiments can be considered as an example here.¹¹⁰ Libet, his assistants and the participants could have chosen to perform other experiments or even chosen to play soccer instead of working on science. “Choosing” a certain experiment over another, deciding to do science instead of becoming a soccer player, means assuming the existence of will. The same holds for the philosophical arguments. A philosopher working on will might as well have chosen to become a gourmet to discover the tastes of the world or decided to consider nothing further than daily politics. Working on philosophy instead of becoming a gourmet, or reflecting on will instead of politics, means “making choices”, which is nothing but a manifestation of will. If philosophers and scientists do not pre-suppose the existence of will in their endeavor, they cannot claim any difference between their activities and rolling of a stone. As shown in the chapter on reason, we cannot even talk about “truth” or “falsehood” of such nature-related properties; just as it is nonsense to talk about the truth or falsehood of a stone rolling in a certain way. Will without the ability of reasoning is unthinkable.

110 Benjamin Libet et al., “Time of Conscious Intention to Act in Relation to Onset of Cerebral Activity (Readiness-Potential)”, *Brain*, No: 106-3, 1983, p. 623–642.

When the concepts of “truth” and “falsehood” are unthinkable, neither scientific work nor philosophy is possible. Every scientific work and philosophical argument inherently contains the assumption that will exists.

The conclusion stated in the third item of the argument emerges as a necessity after the proof of the first two. Since the first two are proven to be correct, we can state that no scientific work and no philosophical argument can disprove the existence of will.

This conclusion does not mean that a world with people seemingly working on science and developing philosophical arguments, while they do not even have wills (all those efforts are just an illusion), is impossible. Such a world is logically possible; yet, even in such a world, the will cannot be rejected with scientific or philosophical arguments. If everything were an illusion, it would have been impossible to “prove” something, as the attempt to prove contains the assumption that will exists. In short, defenders of will, against its rejecters are always ahead in the “best explanation”. The arguments of rejecters become invalid since they “object to the existence of will, by assuming its existence”, whereas there is no such argument for the defenders of will.

All these show that no argument can be developed against the existence of will. On the other side, to support the existence of will, we have more logical reasons than following our common sense. Let us take a brief look at the entire history of mankind and the educational past of man; when we reject human’s will, all events of the past and all educational processes lose their meanings. When you reject will, the orders given by Napoleon in a war or things you have learnt in Geography class become meaningless. Declaration of war and an educational process make sense only with making reference to human will. When you reject will, everything learnt loses meaning; they become indistinguishable from physical phenomena like a blow of wind. If we cannot make causal effects through will, the educational processes are meaningless, because the mind shaped by education does not cause any behavioral difference. In this case, all interactions in nature, including ours, are no different than the collision of two stones; will has no effect! If we do not have will, everything from the chair you are sitting on to TVs, from this book you are reading to computers, should be regarded as products of randomness (processes without will) in the universe!

Furthermore, if our will is just an illusion and does not cause

anything, it is also not possible to understand the coherence between events and the “sense of will that is actually an illusion”. This is because even if the events around us and our sense of will were incoherent (if, for example, our hand were lifted when we wished to move our legs, or we jumped up when we wished to sit on a chair), when our will does not cause anything in nature, we would not have observed any problems in our lives. In other words, even if there is no reason not to observe a body that constantly acts against our will, we observe coherence between our wills and actions. As a result, the coherence between our sense of will and the results we observe show that claiming non-reality for will is against logic, as well as common sense.¹¹¹

The arguments so far would suffice as answers to materialist-atheists (or theists) who reject will. (The discussions below on the inconsistency of epiphenomenalism would also contribute the same cause). Now I move on to my argument from will, as a response to materialist-atheists who do accept the reality and existence of will.

Human’s will exists with the following;

Reason.

Consciousness and self.

Existence of purposeful intentionality.

Ability to make causal effects.

There seems to be mainly two alternative views for explaining how these properties of will have emerged.

If the existence is merely that of matter, as claimed by materialist-atheism, these properties of will are formed through coincidental processes governed by the laws of nature.

If God exists, as defended by theists, these properties are created by God, who also has willpower.

These properties of will are better explained by theism, as compared to materialist-atheism, because;

¹¹¹ For more on the necessity of rejecting will in materialist atheism, you can read: Sam Harris, *Free Will*, Free Press, New York, 2012.

It better explains reason (discussed in Chapter 10).

It better explains consciousness and self (to be discussed in Chapter 12).

It better explains purposeful intentionality.

It better explains the ability to make causal effects.

As a result, theism should be preferred over materialist-atheism.

Now, let us move on to the step-by-step discussion of the argument from will. The validity of the first item in the argument is shown at the beginning of this chapter, by showing that will is more fundamental than all scientific and philosophical works, and listing other justifications for the existence of will. The elements listed are also mandatory requirements of will; any attempt to explain the emergence of will must cover all those properties. The concept of “will” states the choice-making of a healthy and conscious person and his causal effects via this choice. This definition might seem clear-cut to someone unaware of discussions in the philosophy of mind, whereas it is broad enough to cover all fundamental topics of discussion in the philosophy of mind. The properties of reason (discussed in the previous chapter) and consciousness and self (to be discussed in the next chapter) are also included in this definition, together with all requisites. These are requirements for the existence of will; the will needs these properties to exist, yet it is not about them alone. Will, as understood, is an property that ignites the hottest discussions in the philosophy of mind: reason, consciousness, self etc. Here, we will discuss two properties that are not covered in other chapters. The first one is the property of purpose (1.3 and 3.3) and the second is causal effects (1.4 and 3.4).

The verity of the second item in the list would easily be witnessed by anyone who examines the history of thought. Most renowned atheists of the past and contemporary atheists are materialist-atheists. They defend that living beings, as well as their properties such as seeing, hearing, reasoning will, consciousness etc. emerged through coincidental (without the involvement of a conscious will) processes governed by laws intrinsic to matter. Some materialist-atheists reject the existence of will; however, since we presented our discussions against them above, we will focus on accepters of the will here. The most notable rival of this approach has been theism, regarding the will and related properties as creations of God, all-knowledgeable, all-powerful and possessor of will.

The vital part of this argument is the third item; atheists who accept the existence of will object to this part. The properties needed for reason (3.1) are discussed in the previous chapter and consciousness and self (3.2) will be discussed in the next; since we show in those chapters that theism explains the corresponding properties better than materialist-atheism, they also constitute an integral part of the argument in the present chapter (we will not repeat arguments presented in those chapters). The properties of purposeful intentionality and ability to make causal effects are discussed below. When the third item is proven correct, the conclusion in the fourth, preference of theism over materialist-atheism, appears directly. Now, I move on to the elucidation of the vital part of the argument.

Evaluation of 3.3: The human mind can reason about things that exist, as well as things that do not exist.¹¹² The majority of our routine actions and most of our simple-looking wills happen thanks to the “purpose” feature of our minds. Let us consider, for example, preparing some coffee. For the “purpose” of drinking coffee that doesn’t yet exist, water is poured into the machine, coffee is added, and the beverage is poured in a cup and served. Before all these actions lays the purpose of drinking coffee; in other words, the effect is previously planned in the mind, and the causes needed for this purpose are then realized accordingly.

The universe as we understand it through natural sciences functions through mechanical laws. In the view of materialist-atheist philosophers and scientists, the universe and its laws are eternal and the laws governing events in the universe do not serve any purpose. In this view the universe consists of eternal matter and eternal mechanical (not purposeful) laws inherent to matter. According to theist philosophers and scientists, on the other hand, the universe and its laws are created by God through a purpose in His “mind”; the laws themselves, however, do not have a purpose. Therefore, it would be safe to assume that modern scientists have consensus on the non-purposefulness of the laws. Now let us go through the process of preparing coffee by solely considering

112 *In the chapter on the argument from consciousness and self, we will discuss the property of “aboutness”; the subject here is also related to aboutness, but we will solely focus on the “purposeful” orientation of the mind. The mind can still think “about” something without “purposeful” orientation. Aboutness is a broader property, covering purposeful orientation.*

the laws of nature, without referring to the mind. The preparation of the coffee takes place via the mechanical functioning of the laws, but the laws themselves do not have a purpose of preparing coffee. When the water is heated, the thermal energy generated in the heater is transferred to the molecules of water; the water and coffee mix via chemistry and the coffee is poured and served via gravity and other laws. In this kind of scientific explanation the causes take place first; the causes themselves take place mechanically without any purpose and the result emerges. The purpose formed by the wish and will of drinking coffee does not contradict with this explanation but the “purpose” explanation is radically different from the mechanical one.

Since the scientific revolution in the 17th century, pioneered by the prominent figures including Descartes, Galileo, Kepler, Newton (all these names supported the view that the universe and its laws are created by God with a purpose), the purposeful (teleological) causes are excluded in physics, leaving the mechanical laws alone to understand the universe.¹¹³ However, we constantly witness our purposeful actions that are radically different from the picture of the mechanical universe described by physics. If you do not have any doubts that you prepare the coffee for the purpose of drinking and you read this book for the purpose of learning, you are experiencing the importance of the purposeful actions in our will.

When we examine the passive material view of materialist-atheism, we do not witness any trace of transition from mechanical processes to purpose, neither in the laws of nature inherent to matter nor in the fundamental particles like electrons and quarks that form matter. A material object can approach another object or move away from it in the framework of motion determined by physical laws; it does not approach the object with the “purpose” of being close to it, whereas possessing will means performing purposeful actions that is a radically different property and not included in the material world described by Physics. When we approach a person with the “purpose” of being close to him, we perform a willful action distinct from mechanical motions in the material world.

113 *Newton's masterpiece "Principia" played a crucial role in this change: Isaac Newton, The Principia: Mathematical Principles of Natural Philosophy, The University of California Press, Berkeley, 1999.*

The purpose property of will seems impossible to understand in the framework of the materialist-atheist view of matter. The property of purpose is radically different from mechanical processes; this difference is not quantitative but qualitative. As with the issues about reason in the materialist-atheist view that we discussed in the previous chapter and about consciousness which will be discussed in the next chapter, the issue about will is also often overlooked or ignored by most materialist-atheists. Materialist-atheist scientists and philosophers who realize such problems regarding their view are supposed to reject the existence of will. This indicates the greatness of the price paid by a materialist-atheist against being consistent about will.

According to theism, even though the creation of the universe and life has taken place as a result of mechanical processes, these processes served the “purpose” of God and the mechanical functioning of the processes does not contradict with the purpose. In theism, “purpose” is an eternal property of God’s will; it is not gained in time. For this reason, in the theist paradigm, there is no problem in explaining this property needed for willful actions, whereas materialist-atheism faces an impasse in explaining the transition from the mechanical world to the purpose.

Evaluation of 3.4: When we take our bike and ride it with our will to go somewhere, the effect initiated by our will triggers motion in our bodies and the bike; “willful causal effects” cause observable changes in the universe and we constantly witness such changes in our daily lives. Indeed, subjects like anthropology, sociology, social sciences and history are all about investigating the results of “willful causal effects”. In the materialist perspective, causality happens only in the form of the action of one physical structure on another. It seems impossible to find a place for “human’s creation of causal effects with his will” within this philosophical view.¹¹⁴ Most materialists understand the principle of “physical closure” (also known as “completeness of the physical laws”) as excluding the causal effect of will. They do this as a requirement of their materialist view of matter.¹¹⁵ Moreover, if the physical situations in the causal effects are said to be performed with the person’s will, one could interpret the situations as more than one causes yielding a single

114 John Bishop, *Natural Agency*, Cambridge University Press, Cambridge, 1989, p. 40.

115 Jaegwon Kim, *Mind in a Physical World*, CMIT Press, Massachusetts, 1998.

observed effect (called “over-determination”); since over-determination is typically regarded as unacceptable, its advocates typically reject the existence of will. The arguments at the beginning of this chapter on the existence of will form a response to materialists who reject it. The proof of the existence of will also shows the causal effects of will and this indicates a flaw in the materialist-atheist regard of the matter.

For a materialist, in addition to the problem with the effect of mind on matter, another problem surfaces when we consider that a state of will in the mind (or state of mind) causes another state of mind. Let us consider our example again, where our will to ride a bike causes a state of mind about buying a bike. Here, when the first state in the mind determines the other, the reason comes to play as a requisite of will. When we consider reason, the rules of logic come to play, as seen in the previous chapter. However, structurally the rules of logic are fundamentally different from physical laws; logical determination cannot be reduced to physical determination. For example, from the propositions “All cats have four legs” and “Sable is a cat”, we reach the logical conclusion that “Sable has four legs”. Logic requires that in any possible universe, if the first two propositions are correct, so is the conclusion. On the contrary, the laws of physics are correct in this universe and another universe with a different set of physical laws is logically possible; there is a crucial ontological difference between physical and logical laws. In the end, for the causal effect of the will to happen, reasoning is needed when a state of mind determines another, but when we reduce all states of mind solely to states of brain formed by biological structures, we are faced with the absurdity of reducing the logic to biological and physical events. In the materialist view, no matter how complicated, biological structures in the cell are in essence no different than colliding billiard balls. The collision of billiard balls cannot be imagined to yield rules of logic like deduction or yield a structure like the meaning of a statement. It seems logically impossible to say that a certain way of reasoning comes out of physical structures in the brain, rather than its logical content (this difficulty, also noted in the argument from reason, resurfaces in the subject of will, since the causal effect of will requires reasoning).

As we have just seen, apart from the effect of will on the material world, the materialist view also has difficulty about states of mind bringing about other states of mind: another requisite of will. Many materialist-atheists who realize this problem reject the causal effect of will

(hence the will itself); this perspective is called epiphenomenalism.¹¹⁶ In epiphenomenalism, consciousness is regarded as a byproduct of material processes in the brain. However, if matter generates an effect to bring about consciousness, then how can we claim that the consciousness cannot affect the matter or willful actions cannot happen (despite our profound witnessing)?

Those who defend the non-reality of will are forced to regard consciousness as an epiphenomenon or a byproduct unable to create causal effects in the process. They would also defend that consciousness emerged through coincidental evolution processes. However, according to the theory of evolution, in the course of natural selection, properties that provide benefits to the living are selected and those that do not are eliminated. If the will does not exist, a conscious person cannot create a causal effect in nature, and then we cannot claim that consciousness is favored by natural selection (since the existence of consciousness which cannot create any causal effect does not provide any benefit). In addition, one may claim that consciousness is not favored by natural selection but instead emerged as a byproduct of evolution. However, using a theory that explains even the simplest properties of human, by resorting to natural selection to describe the most sophisticated possible property of human as a “byproduct”, appears to be a profound absurdity.

Epiphenomenalism is a position hard to keep due to several other reasons: accepting this position means regarding the ruling of a government, the compositions of Mozart, the production of smart phones in factories etc. as physical events like the rotation of the earth, with no involvement of human will. This is the highest price to be paid by the rejecters of willful causal effect. Moreover, it is also meaningless for the rejecters of will to condemn serial killers or the massacre in Srebrenica. What is there to condemn if we cannot distinguish a massacre from the collisions of billiard balls? (Based on my personal experience, I can say that the majority of the rejecters of willful causal effect do not realize the logical consequences of their opinion). Materialist-atheists do not adopt these counter-commonsense views voluntarily; instead, their ontology forces them towards these ideas.

With respect to theism, will is one of the most important properties

116 See, for example: Daniel Wegner, *The Illusion of Conscious Will*, MIT Press, Cambridge, Mass., 2002.

of God; He has created the universe and life through this eternal property and there is nothing unexpected in His granting of this property (actually, a much simpler copy of it) to human. From the materialist-atheist angle, things emerged by various combinations of matter are expected to exhibit properties similar to that of matter. The existence of will is not consistent at all with this expectation. From a theist angle, however, there is no such problem. Furthermore, since a theist believes that God has created the universe, and hence accepts the causal effect of God's will on matter, it is easier for him to accept a model where will affects matter. God might as well have created this ability in human by granting human a non-material substance (dualism) or by creating this property inherent to matter; thus, a theist can accept the action of will without believing in dualism (we will revisit this point in the chapter on consciousness and self). It is possible that a system is created whereby the intrinsic property of will emerges when matter comes to a certain form (emergence). Since theism regards matter as an entity that obeys the orders of God, it would not have any difficulty in explaining perspectives of matter presented with such surprises.

Briefly, will is an property that we constantly experience and which makes our humanness meaningful. In this chapter of the book, we first considered why we have to believe in the existence of will, then examined will from its roots, and finally asked the question whether theism or materialist-atheism, fierce opponents throughout thousands of years of history of philosophy, better explains these roots. In our investigation, it was put forward that for the existence of will (in addition to properties discussed in Chapters 10 and 12) "purposeful intentionality" and "causal effect" must exist, and these properties are much better explained in the paradigm of theism than that of materialist-atheism. Therefore, the correctness of the third item in the argumentation of this chapter is understood. The truth of this vital item then brings about the conclusion: "theism should be preferred over materialist-atheism".

12. Argument from Consciousness and Self

Consciousness and self are the most fundamental properties that define us; no person can be thought to exist without them. Many thinkers consider consciousness and self as the most important phenomena in the universe. Consciousness is formed by the awareness of perceptions, feelings, and everything related to thoughts in our minds, real or imaginary. All kinds of awareness (seeing, hearing, pain, feeling of cold, imagination etc.) witnessed between waking up and going back to sleep, as well as having a dream in sleep, are all among the states of consciousness. No state of consciousness can be thought to exist without belonging to a certain person (self). Our states of mind ten years ago, ten days ago, ten minutes ago, ten seconds ago or right at this moment will have a meaning only if they belong to an “I” (a self whose existence continues despite changing time and a changing material body) who possesses them. Actually, defining the “self” as an property should be considered merely a metaphor; “self” corresponds to “I” which contains all our properties. Consciousness and self can also be evaluated separately, but since self without consciousness - and consciousness which does not belong to a certain self - are impossible, we will consider them together as an integral part of our argument.

These elements, which form the basis of our existence and also make us able to understand all existence apart from ourselves, constitute hot topics of discussions in many disciplines, notably philosophy, theology, psychology, neurology and cognitive sciences. It is noteworthy that such fundamental properties, which make all of our experiences possible, are subjects of profound discussions. The fundamental properties of reason and will that we considered previously are also properties that can only exist with consciousness and self. For example, imagine that we have a sense of cold but not the ability to reason or will; in this fictitious situation, even though we cannot use reason or will, there is still a “conscious self” who feels cold. In other words, consciousness and self can be imagined without reason and will, but every state of reason and will requires a “conscious person”; no kind of reasoning or willful action is possible without being conscious of or belonging to someone. The consciousness and self that we devote this chapter to are prerequisites of the reasoning aspect discussed in Chapter 10 and the will aspect discussed in Chapter 11. As a result, the arguments presented

here are essentially also a part of those presented in the above-mentioned chapters. Consciousness and self are more fundamental than all the other innate properties of our nature we have previously discussed; consciousness and self can be thought of without them, but not vice versa.

As for other aspects listed in the “arguments from human nature” part of this book, despite their very fundamental role for us, most of us do not spare much time to reflect upon consciousness and self. Possessing these properties from birth does not demean their importance. To the contrary, possessing these most magnificent elements in the universe without any effort deserves a particular attention and reflection. The most basic question when we reflect upon these properties is “How do we possess them?” Here, we will defend an argument that our possession of these properties is best explained by theism. Here is the argument:

The consciousness and self in humans exist, encompassing the following properties:

Intentionality (aboutness)

Subjectivity and qualia

Unity

We witness two basic explanations for the consciousness and self:

According to materialist-atheists, consciousness and self are formed by coincidental processes governed by the laws of nature.

According to theists, consciousness and self are created by God, who possesses the same properties.

Theism explains consciousness and self better than materialist atheism because:

It better explains the property of intentionality (aboutness).

It better explains the properties of subjectivity and qualia.

It better explains the property of unity.

As a result, theism should be preferred over materialist-atheism.

Let us first consider the first item in the argument. Even though our

consciousness is quite evident to most of us, some materialist-atheists reject the existence of consciousness and self. Therefore, they would not agree on this item. These materialist-atheists hold that it is impossible to make a transition from the properties of matter to the radically different properties of mind (reason, will, consciousness, self-etc.) Others have even neglected or overlooked this problem. Those who do realize this problem attempt to resolve it by categorically rejecting (eliminating) all mentioned properties of the mind that cannot be described by the properties of matter; they are referred to as “eliminative materialists”.¹¹⁷ This situation shows the greatness of the price that a materialist-atheist has to pay to remain self-consistent. Pay attention to the fact that what is rejected here is the experience most evident to us; our consciousness is even more evident than propositions like “ $2+2=4$ ” and “All men have a heart”, since the truths of these propositions cannot be claimed without consciousness. If you have no doubt that you are thinking (a conscious act) “about” this book at the moment, it means that you have no doubts about the falsehood of eliminative materialism.

The main reason why materialist-atheist philosophers and scientists, such as Patricia and Paul Churchland, attempt to defend eliminative materialism is to struggle for establishing an ontology without losing their fidelity to the materialist paradigm.¹¹⁸ In this ontology, everything in the universe is formed by mechanical interactions of matter, and thus there is no place for consciousness and self, as they do not resemble the properties of matter. Yet our inner witnessing of these mental states is more evident than any other thing; even if we accept for a moment that when we think we are reading a book, we actually see an illusion; since illusion itself is a state of consciousness, its existence cannot be denied (eliminated). No matter what we do, we cannot deny the existence of consciousness. Our states of consciousness are more fundamental than any other thing in the universe; we know everything else in the universe thanks to our consciousness. Even the attempt of rejecting consciousness is possible if the rejecter is conscious (this situation is similar to the argument about the existence of will discussed in the previous chapter.

117 For more on eliminative materialism, see: Ramsey, William, “Eliminative Materialism”, *The Stanford Encyclopedia of Philosophy* (Summer 2013 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/sum2013/entries/materialism-eliminative/>>.

118 See, for example: Paul Churchland, *Matter and Consciousness*, MIT Press, Cambridge, Mass., 1999.

You can replace the word “will” in that argument with “consciousness”, and it would still hold valid). A person attempting to put forward a claim assumes a priori that he and his audience are conscious; otherwise, he would have to regard the words that come out of his mouth as outcomes of non-conscious mechanical motions no different than collisions of billiard balls. It is not possible to imagine non-conscious mechanical motions as a claim. Moreover, if the claimer does not consider himself and his audience as “persons” (selves), since the claim does not belong to “someone” and is not used against “someone”, the idea of “claim” becomes nonsense.

It is impossible to possess will without consciousness and self but it is possible to imagine a conscious person without will. For example, it is possible to imagine a person who can imagine only the color blue, but cannot produce any willful action; whereas it is impossible to consider that a person, who voluntarily reaches his/her tea cup to have a sip, does not have consciousness and self. Since the existence of any will shows the existence of consciousness and self in an absolute way, in addition to the previous argument (Chapter 11) favoring the existence of will, the discussions in that chapter about the falsity of epiphenomenalism are equally valid to show the falsehood of eliminative materialism. Remember that when the existence of will (and hence consciousness and self) is rejected, since the causal effect of human on nature becomes impossible, educational processes, historical teachings about human actions and the theoretical and technological developments of scientists all become nonsense. I can comfortably state that eliminative materialism is one of the biggest failures in the history of philosophy, since it rejects the most evident element possible, and brings about a high payload of inconsistencies. Such a dismal point materialist-atheism reaches with the concern of being consistent is indeed quite an eye-opener.

Concerning the second item in the argument, when we consider the history of philosophy, two main alternatives are seen as candidates to explain the emergence of consciousness and self. Only comprehensive philosophies that claim to cover the emergence of life can explain elements like consciousness and self. According to the first, materialist-atheism, after the emergence of life by the eternal laws of nature and a myriad of coincidental processes, the same processes in the framework of natural laws, likewise, form consciousness and self. According to theism, on the other hand, God is the Creator of the universe and life, He possesses eternal consciousness and self, and he granted these

properties of Himself to human (and to other beings). Even if these properties emerged through certain processes, they are not coincidental but outcomes of conscious planning of God.¹¹⁹ Agnostics, in general, prefer not to present a new argument in addition to the two; instead, they claim the truth is unknowable. Therefore, the proof of falsity of materialist-atheist philosophy would also be a response to agnosticism.

The vital part of the argument is the third item. Even if some materialist-atheists (e.g. eliminative materialists) can object to the claim of the first item, the actual focus of most materialist-atheists will be concentrated on the third. Therefore, we will elucidate each point of this item individually. In our discussion, we will also go through some of the most notable philosophical approaches to explain consciousness and self.

Evaluation of 3.1: A critical prerequisite to possess consciousness is to be able to think “about” something (aboutness), and be able to mentally orient towards that thing (intentionality). All men, from the most intelligent to the most ignorant, have this ability. How could we perform the action of reading this book if we cannot think “about” its statements and mentally “intend” to read it? The ability to think “about” something by “intending” is like the cement, bricks and tiles of outcomes of our consciousness (our reasoning, willful actions, imaginations etc.); these alone are not sufficient to build a house, but a house cannot be built without them.

When a gardener is using a lawnmower, he thinks about the lawn, but the machine does not; a janitor cleaning the dust off Deep Blue thinks about this supercomputer but this machine does not think about chess when it plays against Kasparov. It is possible to show how the mechanical setup of the lawnmower cuts the grass; likewise, even though much more complicated, it is also possible to show how the mechanical processes inside Deep Blue function to beat Kasparov without actually thinking about chess. We never encounter the property of thinking about something (thinking about the object and intending towards it) in anything other than the mind.

119 *The attribute of God in the Quran “al-Hayy” states his consciousness (Surah al-Baqarah, 2-255) and the statement “(God) Himself” (Surah al-An’am, 6-54) states His “self”.*

Speaking of computers reminds the philosophy of functionalism as one of the outstanding views in the history of thought. Functionalism handles the mind, not with the inherent properties of its building blocks, but in terms of its functions, or the role it plays in the system which it exists and in terms of its causal effects. Based on functionalist arguments, some philosophers claim that the mind is similar to a computer, and artificial intelligence can exhibit consciousness. Obviously, computers can reproduce part of human behavior; they may even perform some functions in much superior way, but this does not mean that computers have consciousness and self.

The famous “Chinese room” thought experiment of John Searle demonstrates this remark. Searle starts off his thought experiment by considering someone who does not know Chinese and is locked in a room. This person is then given a letter written in Chinese characters and he is given certain instructions to find counterparts of the characters of the letter inside a book in the room, also written in Chinese. Afterwards, he is to write down the characters he found and send the letter back outside. The letter actually contains some questions written in Chinese and the content of the book includes possible answers. By following the instructions, the person is able to find the answers and respond; yet, he still does not know Chinese. Unaware of the instructions, an outside observer would tend to believe that he both knows Chinese and the answers to the questions. In other words, the observer sees the person in the room realizing the same “functions” (answering the questions) as someone who knows Chinese. Notwithstanding the correctness of the answers, knowing Chinese or not makes a big difference (just as being conscious or not) that functionalism is unable to see. The functioning of computers can be considered to be similar. Computers unconsciously use the symbols given to them in accordance with the instructions (program).¹²⁰ Even when a computer performs exactly the same function as a human, there is a critical qualitative difference between the two. Computer can never think “about” something or “intend” to do an action; for this reason, it is impossible for artificial intelligence to realize the consciousness and self of humans. William Hasker once said: “*A computer, in other words, is merely an extension of the rationality of its designers and users, it is no more an independent source of rational insight than a*

120 John R. Searle, *Minds, Brains and Science*, Harvard University Press, Massachusetts, 1985.

*television set is an independent source of news and entertainment.”*¹²¹

It is worth mentioning “behaviorism” here as another philosophical approach used to describe consciousness and self. Today unpopular among materialist-atheists, this view had once been quite influential.¹²² The methodology of behaviorism ignores the subjective and only takes into account “the apparent manifestations of consciousness”. For example, apart from a smiling or reading person as seen from outside, the subjective feelings inside the mind (happiness, wishes etc.) and elements we witness inside us about the book (thinking “about” the book, “intending” to read etc.) are not taken into consideration. This is a matter of reduction of consciousness, not to the neural activities in the brain but to the body motions. However, we can cry without actual pain or smile without happiness.¹²³ Behavioral methodology can’t even distinguish between someone in pain and a mockup. This by itself would suffice to understand that this view is unable to properly evaluate the properties of the mind. Even worse, since behaviorism overlooks “aboutness” and “intentionality” of the mind, it not only wrongly evaluates the states of mind (as in the examples given above) but also confuses conscious and non-conscious. Imagine a human-shaped robot, loaded with various human sounds. When tickled, it produces a laughing sound, and when hit, it cries just like a human. A behaviorist would not distinguish the behavior of this robot from a human giving out the same reactions with the consciousness of been tickled and hit. This example shows that a human and a robot can exhibit totally identical apparent behaviors, but behaviorism cannot distinguish the radical difference (being conscious or not) between these behaviors. All these show that behaviorism is unable to properly understand the mind.

Let us focus and reflect on the view of matter presented by modern physics: there are fundamental particles like electrons and quarks, quarks form protons and neutrons, and they all form atoms. Protons always have the same charge and thus repel each other. Inside the nucleus, they

121 William Hasker, *Metaphysics*, InterVarsity Press, Downer’s Grove, 1983, p. 49.

122 The following book of Skinner, a prominent behaviorist, is a good resource about this perspective: B. F. Skinner, *About Behaviorism*, Vintage Books Edition, New York, 1976.

123 Ian Barbour, *Issues In Science And Religion*, Harper And Row Publishers, New York, 1971, p. 353-354.

are glued together by the strong nuclear force. Combinations of protons and neutrons in different numbers form the periodic table of elements and hence the chemistry. Various combinations of atoms then form seas, chairs, computers, organic molecules such as DNA and proteins... As a result, phenomena in the universe are formed via fundamental particles and forces. All these interactions take place in the framework of mechanical laws and we do not see any trace of “aboutness”. It is not possible to understand the emergence of aboutness, no matter how complicated a structure the atoms form.

Against the non-intellectual, non-willful, non-conscious matter of materialist atheism, theism has intellectual, willful, conscious God as the Creator of the universe. God considers “about” his creatures and realizes whatever He “intends” towards His purpose. In the theist paradigm, these properties are eternal (they existed even before the universe did) and the creation of the universe is possible through them. There is no difficulty in understanding that God, as possessor of absolute levels of these properties, granted – lower-level versions of – them to His creatures. As a result, the emergence of “aboutness” (intentionality) that make consciousness (as well as reason and will) possible is inexplicable in materialist-atheism, while theism presents an ontology allowing their explanation.

Evaluation of 3.2: Subjectivity is another property of the states of mind; it describes possession of the state of consciousness by a “self” and special access of the “self” to the states of consciousness. Qualia, on the other hand, are subjective experiences of consciousness encountered by the self. No material existence in the universe experiences “subjectivity” and “qualia”, other than conscious persons (humans and possibly other beings). A conscious reader of this book perceives its meaning in his/her “subjective” world and the perception-feelings, from the perceived image of the book to the excitement given by it, are described by “qualia”. Among the critical properties of consciousness that distinguish it from the material universe (atoms, stars, computers, hammers, books...) is the “subjectivity” of consciousness, our witnessing of the states of consciousness as “I” through introspection, and our perception of qualia with the states of mind. Yet there is no clue to think about the existence of “I” (self) in atoms, stars, computers and books, to witness their subjectivity. This is why we do not think we destroy a “person” when we dump a computer.

Had the materialist-atheists not known about the present findings and evaluations, which one of the philosophical approaches they would find best match their approach to explain consciousness and self? I would comfortably assert that would be “reductive materialism”.¹²⁴ This view is also known as “identity theory”. Accordingly, subjective states of consciousness can be reduced to certain states in the brain and eventually all the way down to subatomic particles; consciousness and self are nothing other than these particles. In this regard, if a materialist-atheist were able to explain the emergence of matter and non-conscious beings (if he/she were able to refute the arguments from the universe presented in the first seven chapters), the explanation of reason, will, consciousness and self, which seem to have completely different properties to matter, would not have posed an additional problem. However, like others properties related to consciousness and self, neither subjectivity nor qualia can be reduced to a state of brain, or described by sub-atomic particles.

When we examine the anatomy and physiology of the brain in the light of modern scientific findings, we learn that we use the left lobe when we speak and frontal lobe when we decide; we also learn what neural cells look like, what the chemical structures of neurons are etc. However, all these are fundamentally distinct from “subjectivity” and “qualia”. Imagine you enjoy swimming. We might be able to determine your joy by detecting a certain structure in the brain or a certain hormone secreted by it. However, observing the neurons or hormones is entirely different from “the joy I get from swimming, as a first person”. Realization of the sense of joy through some neurons and hormones does not change this fact.

Let us delve further into this issue with a thought experiment I call “Meliha’s goggles”. Imagine that Meliha, and everybody she knows, wears specially-designed, irremovable goggles from birth. In this experiment, the glasses of Meliha’s goggles are replaced without removing the frame. Let us also imagine that Meliha is unaware of her eyes and brain, but knows all the details and changes about her goggles. As the diopters and colors of her glasses are constantly changed, so do the shapes and colors of the objects around her. In other words, objects change identically with the glasses. With the change of glass, the objects

124 Jaegwon Kim, *Mind in a Physical World: An Essay on the Mind-Body Problem and Mental Causation*, MIT Press, Cambridge, Mass., 1998.

become larger or fuzzier; their color becomes pinkish or greenish. When the glasses are blackened, the objects become invisible... Should the change of Meliha's vision identically with the change of glasses make her believe that her vision is provided by the structure and changes of her goggles? In my opinion, Meliha should be able to compile her experience, examine the structure of her goggles and carefully think about her own "subjective" seeing experiences (qualia), and thereby realize that even though there is a correlation between changes in glasses and perception (as required by the identity theory), it cannot be claimed that seeing is realized by (seeing cannot be reduced to) the goggles. After examining the structures of the glasses and changes on them, and studying through introspection the perception of vision she witness as a first person, and then comparing the two, she can understand the profound difference between them. If put in Meliha's shoes, those who defend that "subjectivity and qualia" can be reduced to chemical reactions and neurons in the brain would have claimed that vision should be reduced to the goggles. The chemicals and neurons in the brain are similar to the goggles: not similar to our "subjectivity and qualia". Just like goggles, they do not exhibit any property to have special access to states of minds through subjectivity. They are part of mechanical processes, just like goggles. They are formed by complex combinations of the attraction-repulsion etc. of atoms.

To demonstrate the irreducibility of qualia to physical matter, I will present another thought experiment I name "Meliha and the fig". Meliha is world's leading expert on food and on processes that take place (including those in the brain) after food is eaten. Accordingly, Meliha knows absolutely all the details of the fig, from subatomic to molecular and cellular levels, as well as the digestive processes after a fig is eaten and chemical processes in the brain when its molecules reach there. Now let us imagine that one day Mary eats a fig (the physical-chemical-biological structure of which she perfectly knows) for the first time in her life. Does Meliha learn anything new about the fig when she eats it? Even though Meliha knew all about the fig and the processes it goes through in the body, she will still learn something new when she eats a fig: the taste it leaves on her subjective experience, as a new "quale" (singular of qualia). If there were nothing left to know after knowing all material processes, in other words, if our subjective perceptions could be reduced to material processes and be completely understood, Meliha would not have learnt anything new. Since she obtains new knowledge by learning the taste of fig, we conclude that reductive theories fail

to explain “subjectivity and qualia”.¹²⁵ Objective explanations about physical processes, by their nature, cannot encompass the subjectivity of consciousness. This means the experiences (qualia) in the subjectivity of consciousness cannot be reduced to material processes; philosophical views such as reductive materialism, reductive physicalism and identity theory are wrong.

As we have seen, nothing in the structure of matter resembles “subjectivity and qualia”. Since matter is the sole entity that exists in the materialist-atheist ontology, there is an immense difficulty in explaining the emergence of such properties that do not belong to matter. In theism, however, God is conscious and looks at processes from His angle. Even in the absence of any other entity, God subjectively know His own existence; the consciousness of God has the property of subjectivity. Subjectivity is eternal in the theist view and in this ontology, the eternal Owner of this property grants it to those creatures He wishes. God, with the property of subjectivity, can easily grant this property to anyone, whereas the matter described by materialist-atheism cannot provide subjectivity or any other similar property.

Evaluation of 3.3: Another important property of a conscious person is awareness of all of distinct perceptions, feelings and thoughts in unity. The reader of the book, the feeler of the hardness of its cover, the listener of the music in the background, excited by the book, thinking about the book, etc. is a single “unique person”. He/she does not first feel the hardness, then hear the music, and finally feel the excitement. The awareness of all these comes at once in “unison”. Even though senses come from different parts of the body and they are processed in different parts of the brain, they are all perceived in an integral manner, in unity and inside the subjectivity of a single person. It is also important that this unity is both synchronic and diachronic (retained at different times). In the philosophy of mind, this matter is studied under “the unity of consciousness” and “the binding problem”. Many famous philosophers, from Descartes to Locke, from Leibniz to Kant, had interest in the unity of consciousness.¹²⁶

125 For a similar thought experiment called “Mary’s Room” see the article: Frank Jackson, “Epiphenomenal Qualia”, *Philosophical Quarterly*, No: 32, 1982, p. 127–136.

126 Immanuel Kant, *The Critique of Practical Reason*, Tr.: Thomas Kingsmill Abbott, William Benton, Chicago, 1971.

Let us concentrate on the processes making up our consciousness of perceptions like touching, seeing and hearing. When we touch the book cover, we receive the sense of hardness through the signals transmitted from the nerves on our fingertips to our brain. When the image of the book is formed inside our eyes by light, we see the book by the signals sent from the nerves in the eye to the brain. Likewise, we hear the music in the background through signals going from our ears to our brain. These processes take place before our awareness of them in unity. In all these perceptions, the neurons in our brain (we have about a hundred billion of them) play critical roles. Even though no single neuron by itself corresponds to properties of consciousness such as subjectivity and unity, many people believe that their collaborative motion bears such properties. When we look inside the brain we see neurons functioning in the framework of a defined system, yet, it does not seem plausible to describe how these neurons collaborate and bear “consciousness that perceives in unity and in its subjectivity”.

The famous “Chinese Nation” thought experiment of philosophy of mind can shed more light onto the problem with the emergence of “consciousness in subjectivity and unity” through the collaborative work of many neurons. Let us assume that every person living in China is wired to each other, in a way that imitates the neural networks in the brain. They can get in touch with other people (neuron mockups) using special instructions provided.¹²⁷ Now let us imagine that the Chinese Nation tries to imitate the feeling of excitement. To do this, people corresponding to the actual neurons in the brain, which govern the feeling, start to communicate with each other through the wires. Likewise, let us imagine that all other processes that take place in the brain while reading are also similarly imitated. In such a scenario, can we consider that “Chinese Consciousness” emerges out of Chinese people and the Chinese Nation feels all the senses we get from reading a book, “in the subjectivity of China’s consciousness and in unity”? Such a claim would be nonsense, of course. The claim of emergence of “consciousness perceiving in unity and in its subjectivity” by a collaborative motion of neurons is quite alike the claim in the Chinese Nation experiment. The perception in unity inside the subjective world is a radically different matter than the coherent function of neurons as parts of a defined system.

¹²⁷ Ned Block, “Troubles with Functionalism”, *Minnesota Studies in The Philosophy of Science*, No: 9, 1978, p. 261–325.

In the world described by physics, the electrons and protons forming the atom exhibit their nature in behaviors like attraction-repulsion and corresponding motion. The world of Chemistry comes out of the motion of atoms in compounds. In biology, the functioning of certain molecules as enzymes and combinations of molecules or behaviors like DNA replication are all products of the motion of atoms in essence (to a more complicated degree). Behaviors studied in neuroscience, such as neural correlates, communication among neurons, activity of the electrical and chemical synapses etc., can all be reduced to some kind of motion. However, “conscious perception of a person” is qualitatively different from those behaviors with essence of motion. Even though it is a fact that “entanglement”, one of the interesting phenomena of quantum mechanics, uncovered a surprising unity in the atomic level, and even though the nucleotides of DNA are members of this particular DNA structure, “the unity property of consciousness” is entirely distinct from such cases of acting in unison and collaboration. In all other cases, the unity is formed by a combination of passive, independent particles with essence of motion. In the essence of consciousness, there are properties of aboutness, subjectivity and indivisible unity. As with the previously discussed properties of consciousness and self, the emergence of unity is inexplicable in the materialist-atheist view of matter. However, there is no difficulty in explaining this property in theism, which regards consciousness and self as eternal properties of God.

It should now be clear that the properties of mind such as reason, will, consciousness and self cannot be explained by the known properties of matter. Consequently, the reason, will, consciousness and self properties of mind cannot be reduced to matter. It can be concluded that they are related to a substance completely different from matter. Since the materialist-atheist philosophy does not accept the existence of any substance other than matter, our discussion shows the falsity of materialist-atheist philosophy. According to the second alternative, on the other hand, it can be said that even though the mentioned properties of mind cannot be reduced to matter, they emerge when the material structure reaches a certain form. According to the emergence, the whole is more than the combination of pieces; properties emerging when matter comes to a certain form cannot be understood by looking into individual pieces of the form.¹²⁸ In this regard, there is no substance other than

128 *Ian Barbour, Issues in Science and Religion, p. 326.*

matter, yet, the matter has such a structure that when it reaches a certain form, certain properties appear and they cannot be explained using the building blocks of matter and their interaction.¹²⁹ From the perspective of a consistent materialist-atheist (as accepted by some thinkers of this view) neither the “substance dualism” (the opinion that matter and mind/soul with the mentioned elements are two distinct substances) nor the “property dualism” (the opinion that matter and mind/soul with the mentioned elements are two distinct properties) are acceptable opinions. The view of emergence means accepting the property dualism.¹³⁰

The following remark is worth the while: from the theist angle, it is not mandatory to defend that the emergence of properties of reason, will, consciousness and self happens via the creation of a “mind/soul” as a substance discrete from matter. Emergence without resorting to a non-material substance, or explaining those properties solely in terms of matter, is also an acceptable approach. It can also be defended that matter is created with the ability to allow the emergence of these properties when it reaches a certain form and after it gains this form, matter is provided with “mind/soul”. According to dualism, the properties of mind are formed when matter is met with another kind of being, whereas in emergence, these properties of mind come to existence thanks to potentiality placed in matter. In fact, there are many Judaist, Christian and Muslim theologians and philosophers in each of the two ontologies. They also defend that the monotheist visions of human self and re-creation in the Hereafter is coherent with both of the “mind/soul” approaches.¹³¹

Materialist-atheists have always remained distant from dualist views. On the other side, while the emergence is also something unexpected in materialist-atheism, it can be satisfactorily explained in

129 For more on the emergence see: Philip Clayton, “Neuroscience, The Person And God: An Emergentist Account”, Ed: Robert John Russell et al., *Neuroscience And The Person*, Vatican Observatory Publications, Vatican, 2002, p. 181-214.

130 Frank Jackson, *From Metaphysics to Ethics: A Defence of Conceptual Analysis*, Clarendon Press, Oxford, 1998.

131 I defend this point in the framework of Islam in my following book: Caner Taslaman, *Modern Bilim, Felsefe ve Tanrı*, İstanbul Yayınevi, İstanbul, 2008, p. 107-148. For perspectives related to the Old and New Testaments, see: Joel B. Green, “Restoring The Human Person: New Testament Voices For A Holistic And Social Anthropology”, Ed: Robert John Russell et al., *Neuroscience And The Person*, Vatican Observatory Publications, Vatican, 2002, p. 4-5.

theism, as also noted by Howard Van Till.¹³² The appearance of the emergence of such properties is expected in the theist perspective where matter is regarded as created with certain purposes. An intelligent, willful, conscious, all-powerful God has created matter and this Creator might as well have placed such “surprises” inside the matter. However, as I have kept mentioning throughout this book, in the materialist-atheist regard of matter, it is a non-intelligent, non-willful, non-conscious, not-designed (hence closed to surprises) substance, functioning in the framework of mechanical laws. There is no rational reason to expect surprises in this ontology of matter. The compound formed by fundamental particles of matter should exhibit the same properties; therefore, all versions of substance dualism and property dualism should be rejected. As understood from these arguments, in the materialist-atheist paradigm, there is no reason to expect the emergence of the attributes of reason, will, consciousness and self that we have been discussing in the last three chapters. To the contrary, in this paradigm, these attributes, radically different from matter, are expected not to emerge. From the theist perspective of the creation of matter by an intelligent, willful, conscious and all-powerful God, there is nothing unexpected at all in the emergence of these attributes.

In short, consciousness and self are among the fundamental properties that define humans. Even though the extremely vital question of how these properties came to existence is overlooked and ignored by many; its importance is evident towards answering questions like “who we are?”, “why are we here?” etc. In this chapter, we have seen the failures of several materialist-atheist views, including elective materialism, reductive materialism (identity theory), functionalism and behaviorism. We also concluded that two of the remaining explanations of consciousness and self, dualism and emergence, are more compatible with theism. In the materialist-atheist framework of matter, the aboutness, intentionality (3.1), subjectivity, qualia (3.2) and unity (3.3) properties are impossible to explain. In theism, however, one of the most important attributes of the eternal God is Him being a conscious Being. This also brings about that consciousness and self are eternal and it is quite possible that God has granted these properties to some of his creatures. Since

¹³² Howard Van Till, “Basil and Augustine Revised: The Survival of Functional Integrity”, *Origins and Design*, No: 19, 1998, p. 1-12.

consciousness and self are better explained in theism, it should be preferred over materialist-atheism.

Epilogue

Our judgment on whether God exists or not has a profound impact on our perception of our beloved ones, the earth, the entire universe, and ourselves. “Why do I exist?” “Where did it all come from?” “Why are we here?” “What will happen to us after we die?” These, and all similar questions, have answers linked to this judgment. The existence of God brings about conscious creation of mankind and all beings, meaning and purposefulness of existence, and the possibility of life after death if God wishes. While reading this book, always keep in mind that our main concern is this critical subject of the existence of God, as the basis of all ontological queries.

For someone who rejects the existence of God, religions are forged by mankind and with death we leave behind our lives and beloved ones: no alternative is plausible. For a believer of God, on the other hand, it is possible for God to tell us where we came from, why we are here, who we are, and what will happen to us and our beloved ones after death: by revealing through religions. In addition, for someone who has faith in God, it is easy for the Omnipotent to create the universe, our world, us and all other forms of life, and to resurrect us after death in the Hereafter. The arguments presented in this book also show why this is easy for Him. For someone who created this universe, life and conscious man with all his/her properties, it would not be difficult to accomplish another similar creation. What God has done indicates what He can do. The following verses of the Quran draw our attention to this point:

And [now] he [argues about Us, and] thinks of Us in terms of comparison, and is oblivious of how he himself was created! [And so] he says, “Who could give life to bones that have crumbled to dust?”

Say: “He who brought them into being in the first instance will give them life [once again], seeing that He has full knowledge of every act of creation.

Is, then, He who has created the heavens and the earth not able to create [anew] the like of those [who have died]? Yea, indeed - for He alone is the all-knowing Creator.¹³³

133 Surah Ya-Seen, 36-78, 79, 81

Our discussions throughout this book show that God did not leave the universe to itself after creation; He placed all future processes in an order and created life and the nature of human with properties like desires, morality, reason, will and consciousness. Therefore, the arguments presented here also refute “deism”, which considers God as passive and unaware of the universe.¹³⁴ God perfectly knows not only all the details of the entire universe, but also all the voices that come from the inner world of human and the properties of their nature. This view has an immense effect in ontological considerations, and enriches the regard of human towards everything around them. This also means that our all-mighty Creator knows us better than we know ourselves and He would understand us perfectly even if everybody, including us, misunderstood. This Creator is also powerful enough to resolve our vital problem of getting lost in the darkness of death and losing our beloved ones in the same darkness. What else would have a more value than realizing the existence of God who is aware of human’s internal clamors and prayers? When the content of this book is evaluated, it should be constantly kept in mind that the logical outcomes of our arguments are also closely linked to such vital existential discussions.

In this book, these vital questions, which can radically change our visions of the universe, life and death, are attempted to be answered. Does God exist? Is there hard evidence for belief in God? What is the basis of such a belief? To answer these questions, twelve arguments are presented. Seven of these are derived from the outer world and five are from properties of our innate nature. In all of these twelve arguments, the basic approach is to consider the phenomena in the universe or in our nature and ask whether they are best explained by theism or not. To do that, theist arguments were compared with materialist-atheism, which is the only real alternative to theism in the history of philosophy.

The arguments presented here, based on the phenomena in the universe, consist of the universe having a beginning (1), existence of laws in the universe (2), the discoverability of the universe, making scientific endeavor possible (3), the immense potentiality possessed by the universe (4), the fine tuning of the physical laws and constants in the universe (5), the fine tuning of the physical processes in the universe

¹³⁴ The term “Deism” is used both in the meaning given above and also in the meaning “a God who does not send down religions”. There have been variations of this concept throughout history.

(6) and the realm of life with all its diversity (7). In all these pieces, it was shown that theism is the best explanation on the subject matter. I emphasize in particular that the argument from life (Chapter 7) also includes discussions on why the theory of evolution does not pose a threat for theism.

In the five arguments based on human nature, the innate and defining properties of all humans are elucidated. These properties are natural desires (8), innate morality (9), reason (10), will (11) and consciousness and self (12). These five pieces also contribute to the arguments for preference of theism. I would like to draw particular attention to these last five pieces that I name “arguments from human nature”, inspired by Surah ar-Rum (30-30). Despite the fact that statements akin to “Islam is a religion of human nature (fitrat)”, “Human nature is vital for telling good from bad”, “Faith is innate to human nature” are used quite often, there is virtually no detailed study (to best of my knowledge) on how our nature establishes arguments supporting fundamental beliefs in Islam. It is my wish to contribute to filling this gap. In my opinion, the “arguments from human nature” as presented here, and in a more detailed way in my other works, is a form of exegesis for the 30th verse of Surah ar-Rum that draws attention to human nature, as well as of the verse 53 of Surah Fussilat and verse 21 of Surah adh-Dharyyat, which point to the existence of evidence in our selves (inner words). The 30th verse of Surah ar-Rum indicates that all men have common values in their nature; this nature has a structure that supports the fundamental teachings of religions, notwithstanding the fact that most people are unaware or ignorant of evidence in this nature.

So keep your face set enquiringly towards the [true] religion, God’s natural handiwork along which lines He has patterned mankind. There is no way to alter God’s creation. That is the correct religion, though most people do not realize it.¹³⁵

Claims of obsolescence for presenting arguments for the existence God, or that these arguments now belong to the dusty shelves of history, stemming from teachings of Hume, Kant or Marxist philosophies, from positivism, postmodern approaches and atheist ontologies, are naïve, or worse, ignorantly stated, and they do not stand on any consistent basis. I present details of my contention organized into twelve arguments.

135 *Surah ar-Rum, 30-30.*

Some of these arguments are also presented in further depth in my other works. Naturally, some pieces would seem more convincing than others, depending on the reader. It is imperative to pay attention to the fact that each of the arguments presented here individually supports and reaches the same conclusion, thereby forming an integral, powerful and convincing overall argument.

