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## Understanding the Language of God with the Language of the Universe: A Physico-Theological Approach \*

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Research Article

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**Abstract:** When we say that we understand the language of God with the language of the universe, we mean that we can understand the language of God with the language of the universe and in other ways as well. Therefore, what we really want to say is that when we look at the event from our own point of view, that is, from our own factuality, we must necessarily understand the universe in order to understand the language of God, and for us to understand it can only be possible by understanding the language of the universe. We will present this with some examples. At the same time, we will talk about some styles of understanding in the history of philosophy. Since understanding the language of God is also understanding the language of religion, we will try to briefly show how the language of God or the language of the universe is understood through the language of religion, how this is wrong in Judaism, Christianity, especially in the idea of medieval Christian priests and a number of styles of understanding in the Islamic world.

**Keywords:** Language of God, language of the universe, religious language, religion, science, philosophy, understanding.

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First of all, we would like to start by explaining what the title of this article means. The title actually reflects the summary of what we want to say. Here we aim to reveal the meaning of the expression “understanding the language of God with the language of the universe”. First, we want to start by saying what this expression does not mean.<sup>1</sup> Now we need to avoid the first misunderstanding by specifically stating that we do not mean the saying “the language of God is equal to the language of the universe”. What we want to say here is that it is not implied that the language of God and the language of the universe, or rather the language marked by the phenomenon of the universe within our boundaries of knowledge and perception, are the same things. Because it is impossible for us to talk about the possibility of seeing God and the universe in the same factual way unless we can fully draw the boundaries of this universe and clarify the aspects that are closed to us.<sup>2</sup> Secondly, we are also not establishing a proposition such as “Let us understand the language of God with the language of the universe”, which would be an incomplete statement. Because, as we mentioned, we are saying that the real language of God is the language of the universe. In other words, a person who cannot understand the universe cannot understand the language of God.<sup>3</sup>

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<sup>1</sup> The doctrine of showing what something does not mean first, and then determining what is true is the dialectical method of Socrates. So, we started our discourse by taking an example the Socratic dialectical method as a principle. This method is put forward in *Theaetetus* in the best manner. Here, Socrates performs the job of giving birth to knowledge about what the right information is in the end by refuting the definitions of knowledge of those he is facing one by one through negation. See Plato, *Theaetetus*, trans. Benjamin Jowett, *The Dialogues of Plato*, vol. IV (London: Oxford University Press, 1892).

<sup>2</sup> Xenophanes was the first philosopher to see God and the universe or nature in the same factual way. Hermann Diels and Walther Kranz, *Die Fregmente der Versokratier: Griechisch und Deutsch* (Berlin: Weidmann'sche Verlagsbuchhandlung, 1954), B26-9.

<sup>3</sup> Here we need to refer to Spinoza because he expresses that God and nature represent the same things, that nature is nothing but the appearances of God. According to Spinoza, God has an infinite number of attributes, but he has given us only two of them, the power to perceive the mind and the matter. Therefore, man can understand and interpret only these two of the infinite qualities of

In particular, we are not reducing the scope of the language of religion here to only the heavenly religions in the sense that we understand, that is, the language of religion here refers to the formation of a language that arises with a religious reference. Especially in Greece, where philosophy originated, there is an understanding of mythology that arose, for example, just before a philosophy. When we look at the history of religions, in this and similar understandings of mythology, again, especially in the primitive times of people, such things appear more as animalism. Primitive understandings of religion, which are assumed to have arisen as a result of attributing events to certain spirits, also have significance from the point of view of the language of religion. Again, in the mythological period, people tried to question the causes of certain events in the universe, and therefore they came up with religion in the classical sense. The primitive understanding of religion evolved into polytheistic religions over time, and when people completed their mental evolution, they switched to monotheistic religion.<sup>4</sup> The heavenly religions are more authoritarian and have attempted to explain the causes of events to people with a reference that speaks from above or takes its source from beyond nature.<sup>5</sup>

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God, so that he can understand only the side of God's language about us. Since the other qualities of God are qualities that fall outside the limits of our perception, we do not have the ability to understand and comprehend them. See Benedict Spinoza, *Ethic Demonstrated in Geometrical Order*, trans. William Hale White (New York: Macmillan & Co., 1883), I.

<sup>4</sup> Here, of course, we strongly disagree with Dawkins' idea that the result of the religious evolution, the transition from primitive religions to polytheistic beliefs and from there to the monotheistic religion, is to arrive at atheism by reducing one more God. Because the author is not talking about the rational process of completion of human minds, but about the involvement of man in the positivist process with biological completion. Richard Dawkins, *The God Delusion* (London: Bantam Press, 2006), II.

<sup>5</sup> Of course, in order for the language of religion to be understood well, it must first be well known what the concept of God means. Then we will have to refer to an objective being marked by the concept of God. However, since the God of religions is transcendent to the world, he will not find a place for himself in the world. If we say it like Wittgenstein, "God does not reveal himself in the world". Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. Charles Kay Ogden (London & New York: Routledge, 2000), 6.432.

The emergence of philosophy arose in a way opposed to mythology, that is, the understanding of religion at that time, while the later understanding of the universe or the way of reading the universe was always based on understanding how God created the universe. In the early periods, despite the attempt of mythology to describe events in a purely religious language by expressing supernatural forces,<sup>6</sup> the first natural philosophers were interested in how the universe came into existence, especially the problem of *arche*, that is, what is the main source of the universe, and opposed to mythology, which was seen as a religious formation before them. They have adopted an understanding of God through the movement of the universe and how the universe came into existence.<sup>7</sup> They adopted an *arche* concept and called this *arche* as God. In other words, the universe is a way of reading that can occur with the existence of a single principle. From here, for example, based on Thales' statement that everything is made of water and everywhere is full of spirits, when we read the connection between the two, we can understand that the whole universe consists of the same things, that is, the principle that creates the whole universe is the same principle.<sup>8</sup> We can do such a religious language reading, but when we look at the later periods, we see that

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<sup>6</sup> Hesiod's *Theogony* stands as a work that aims not to give a theological situation, namely a philosophical explanation of the world based on one or more natural things, but to give a religious explanation based on certain people. Hesiod, *Theogony*, trans. Alexander William Mair, *The Poems and Fragments* (Oxford: Clarendon Press, 1908), 114-6.

<sup>7</sup> Seneca, based on ancient Greek philosophy, states that it is possible to find out how nature studies enlighten people and what kind of personal nature is thanks to these studies. He says that religion destroys the darkness inside a person and brings him to light, while philosophy and science correct misconceptions in people. Lucius Annaeus Seneca, *Natural Questions*, trans. Harry M. Hine (Chicago: The University of Chicago Press, 2010), I.2.

<sup>8</sup> The first philosophical formation that Thales brought science to the face of mythological explanations about the universe deserves to be called natural philosophy. Although the idea that the first principle of the universe is water and that it represents the soul seems to be the effect of mythology, it should be referred to as a primitive experiment of the fact that God is in the same factual structure as the universe. The idea of Thales that every place is full of spirits implies that we can recognize God for natural reasons all over the universe. For

people gradually began to read and understand the way they read the universe as science.

And then, for example, Judaism and later Christianity as a follower of it emerged,<sup>9</sup> especially the Christian's approach to science and the universal realities revealed by scientists created a religion-science or science-philosophy conflict. In particular, when we look at the medieval Christian world, there was a Platonist reading, a Ptolemaic universe and cosmology reading in the Scholastic and earlier Patristic period.<sup>10</sup> Since the members of religion do not have a certain cosmology of their own, they felt the need to perceive the scientific theories given and put forward by this cosmology as religion and consolidate religion with them and present them to people.<sup>11</sup> It should be noted here that we cannot perceive the universe through religion. In other words, we believe that the universe can never be perceived through religion because through religion we can only know the main examples in the universe that are transmitted by religion for certain modeling purposes. What the language of religion is trying to imply to us

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Thales, see Aristotle, *De Anima*, trans. John Alexander Smith, *The Works of Aristotle*, vol. III, ed. W. David Ross (Oxford: Clarendon Press, 1931), I.5.

<sup>9</sup> For a good assessment of the theological understanding of the Jewish, Christian, and Islamic religions, see Harry Austryn Wolfson, *The Philosophy of the Kalam* (Cambridge: Harvard University Press, 1976). Again, for Maimonides (Mūsā ibn Maimūn), one of the most important philosophers of Jewish thought, the problem of how the holy books should be understood is not only grammatical but also theological character. Moses Maimonides, *The Guide for the Perplexed*, trans. Shlomo Pines (Chicago: The University of Chicago Press, 1963), I.

<sup>10</sup> Ptolemy's understanding of the universe took its origin from Aristotle's views on physics. Therefore, Aristotle even stands at the center of the fixed worldview. As the greatest commentator of Aristotle, Averroes does not only claim that the world is motionless based on Aristotle, but also bases it on the verses of the Qur'an. Averroes, *al-Kashf an Manāhij al-Adilla fi Aqāid al-Milla*, ed. Muḥammad 'Ābid al-Jābirī (Beirut: Markaz Dirāsa al-Waḥda al-'Arabiyya, 1998), V.

<sup>11</sup> Plato's famous dialogue about the coming of the universe, *Timaeus*, deeply influenced both Ancient and Medieval thought. Members of the heavenly religions treated this work as a holy bible because they found traces of expressions similar to the creation narrative in their religion in this work. Plato, *Timaeus*, trans. Benjamin Jowett, *The Dialogues of Plato*, vol. III. For the importance of this work of Plato in the Islamic world and also for the comparison of the Arabic and French translations of the work. see Fahrettin Olguner, *Batı ve İslam Dünyasında Eflâtun'un Timaios'u* (Konya: Selçuk Üniversitesi Yayınları, 1990).

through these examples is that we, as intelligent people, take lessons from events. Otherwise, religious discourses do not aspire to become a scientific language. Therefore, there is no need for the language of religion to understand the language of God, even the language of religion is not the language of God, but the language of meaning that symbolizes Divine discourse.<sup>12</sup>

When we read the universe through these examples, if the language of the universe and the language of God are the same, then we are reading the language of God incorrectly. If we read a verse about how the first man came into existence, and then perceive an example hundreds of thousands of years later as if it were an event that happened at the same time, in the same place and time, we would be completely misreading the language of God here. Therefore, we need to read the universe first, and then read God as a result of the universe.<sup>13</sup> How should we understand the

<sup>12</sup> The idea that the language of religion is not the language of reality, but a symbolic style of expression, is one of the main arguments of the Islamic philosophical tradition. From the point of view of al-Fārābī, the language of religion is the language in which people are told about reality by symbolizing it. The language of reality is the language of the intellect, that is, metaphysics, which gives the universe the principle. The being that is at the highest limit of the whole universe and is superior in degree, the First Heaven, is activated by the influence of this Absolute Mind. See al-Fārābī, *Risāla fī al-'Aql*, ed. Maurice Bouyges (Beirut: Dār al-Mashriq, 1983), 35-6. Again, Averroes argues that the things described in religion are expressed only in rhetorical language and that the language of reality is the demonstration, that is, logic. In this context, Averroes expresses that verses that do not seem reasonable should be interpreted. Averroes, *Faṣl al-Maāl fī Mā bayn al-Ḥikma wa ash-Sharī'a min al-Ittiṣāl*, ed. Muḥammad 'Ammāra (Cairo: Dār al-Ma'ārif, 1983), II.

<sup>13</sup> Here, it is seen that there is a deep gap between the dominant understanding of the divine religions regarding the *ex nihilo*, that is, the creation of existence out of nothing, and the evolutionist understanding of the view that existence comes into existence gradually and continuously. The idea of creating out of nothing is a problem that concerns not only people but the entire world of existence. Today, evolutionary biology research and, accordingly, developments in science such as anthropology and paleontology explain the formation stages of living things to us. Although the idea of evolution in existence has been defended since ancient times, studies on the theory of evolution in the Islamic world have come a long way. In this sense, we should mention al-Nazzām, al-Jāḥiẓ, Ibn Miskwaih, Ibn al-Haytham and Ibn Khaldūn. As an example of the impact of environmental factors on the species, al-Jāḥiẓ mentions biological and psycho-

expression in the Qur'an such as "Travel in the land and see how He originated creation"? If we understand how the universe came into being, what things it consists of, and how it was formed by doing some research on it, and we evaluate the universe as a sign of God, we understand the language of God.<sup>14</sup> If we cannot understand the universe and decipher the language of the universe, then we will never be able to decipher creation. Religion gives us only a certain part of our creation as an example and leaves the rest to us. If we assume that everything is made of water or living things are made of earth, based only on this example, when we assume that people exist from the ground, we try to perceive Adam as a tree that ends in a garden.<sup>15</sup> Because the earth or water

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logical factors such as food, climate, shelter, etc. For him, these factors also influenced the species' difficult struggle to survive. In a changing environment, some of the characteristics of these vital values are also changing. In the process of changing successive generations, organisms adapt better to the environment. Their life is in the way that their characters are passed down through the generations and have the change in reproduction. Thus, al-Jāhīz based his theory on the idea of changing used and unused organs on the adaptation of animals to environmental factors. al-Jāhīz, *Kitāb al-Ḥayawān*, ed. 'Abd al-Salām Muḥammad Hārūn (Beirut: Dār al-Jīl, 1996), IV, 1. Ibn Khaldūn identified five categories of beings as inanimate, plant, animal, human and angel. He says that each category contains various levels within itself, so an entity at the top level of a subcategory can turn into an entity at the bottom level of the category above it. He argues that the ape, the highest being in the category of animals, could evolve into a primitive man. Ibn Khaldūn, *Muqaddimah Ibn Khaldūn*, ed. Étienne Marc Quatremère (Beirut: Maktabat Lubnān, 1992), I, 1.6.

<sup>14</sup> Studies on the universe constitute one of the oldest problem areas of science and philosophy. The classical understanding of the final universe was replaced by the causal universe understanding with Newton's discovery of the gravitational laws, and then the current cosmic design became valid with the subatomic physics research after the splitting of the atom. It is an indisputable fact that quantum theory is a huge step forward in understanding the universe. With the work of physicists such as Maxwell, Planck, Einstein and Schrödinger, we stepped into the phenomenal side of the universe. On the development of quantum and relativity theory, see Albert Einstein & Leopold Infeld, *The Evolution of Physics, from Early Concepts to Relativity and Quanta* (New York: Simon & Schuster, 1960).

<sup>15</sup> The first studies on the formation of living beings belong to Anaximander and Empedocles. In particular, Anaximander claimed that land-dwelling creatures evolved from sea creatures and that the ancestors of humans were water-dwelling creatures. This view remains valid even today See Diels & Kranz, *Die Fragmente der Vorsokratier*, A30. Aristotle was the first person to establish the

is the element that is meant for existence. In other words, since it is assumed that existence occurs from elements such as earth, water, air, fire in the old world, we should know that it is meant to be explained to people that everything is made up of an element and that element is made up of other things as an example. For this reason, there have been many discussions on the language of the universe, whether it is mathematics or physics.

Now, the language of the universe is mathematics, especially the Pythagorean understanding of the universe<sup>16</sup> and later the Euclidean understanding,<sup>17</sup> da Vinci and Galileo's discourses that the

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science of biology and to classify living things by researching them for the first time. However, although Aristotle's approaches to reproduction foresee some changes, his acceptance of the existence of the vegetative soul in the entire universe and his placing the idea of teleology at the origin of existence created a barrier in front of the views of these two philosophers. See Aristotle, *Historia Animalium*, trans. D. Wentworth Thompson, *The Works of Aristotle*, vol. IV, ed. John Alexander Smith & W. David Ross (Oxford: Clarendon Press, 1910), VIII.1. Studies conducted in the modern period have settled on the thesis that man is descended from the same ancestor rather than descended from apes. It is possible that we can find the first step of this in Darwin's work. Evolutionary biology states that the human race has definitely evolved from a common ancestor with other living things to our time, and it proves this through the age of fossils. The transition from ape to human, which was specially mentioned in the Islamic world, left its place in the concept of common ancestor at this stage. As Aristotle predicted, species evolution or transition between species does not seem possible. See Charles Darwin, *The Origin of Species* (New York: P. F. Collier & Son, 1909).

<sup>16</sup> The Pythagoreans stated that the essence of everything in the universe is numbers, and therefore beings are represented by numbers, and they claimed that there is a mathematical harmony among beings and that this can be revealed with music. According to them, mathematics and music are the laws of divine harmony in the souls of beings. See Eduard Zeller, *Outlines of the History of Greek Philosophy*, trans. Sarah Frances Alleyne & Evelyn Abbott (London: Longmans, Green & Co., 1886), 50-1.

<sup>17</sup> The success of Euclid's *Elements* in mathematics made it possible to do science on this mathematics in the following periods. In this respect, Euclidean geometry is a very valid mathematical understanding even today. See Euclid, *The Thirteen Books of Euclid's Elements*, trans. Thomas Little Heath (Cambridge: Cambridge University Press, 1908), 3 vols. Many studies have been carried out in the West and East on the *Elements* of Euclid. The most important of these works is Tusi's explanation of both Euclid's and Ptolemy's mathematical works. See Naşîr al-Dîn al-Ṭûsî, *Tahrîr Uşûl al-Handasa wa al-Ḥisâb*, ed. İhsan Fazlîođlu (İstanbul: Türkiye Yazma Eserler Kurumu, 2012).



language of the universe is mathematics,<sup>18</sup> assumes that those who cannot comprehend mathematics cannot understand how the universe came into existence. Apart from these theses, there are also philosophers such as Bacon, who argue that physics is the language of the universe and that nothing can be understood without understanding physics.<sup>19</sup> But it should be seen as much more accurate that the language of the universe is mathematics. Because especially Galileo's studies show us that the physical laws in the universe, that is, the laws of nature and the laws of the human mind are born of the same thing and say the same things. Galileo thus solved one of the ancient problems of philosophy, the problem of being and becoming, on a mathematical plane. Galileo stated here that the laws of nature and the principles of mathematics coincide with each other and that nature can be understood mathematically. Therefore, a person can rationally identify the laws of nature and mathematical laws with each other. Thus, we can say that each law of nature is built on a mathematical harmony.

In this sense, we can see that the language of religion is advancing in a common direction with the language of the universe. However, we are faced with the following problem from the Mid-

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<sup>18</sup> Saying that the universe was written in a mathematical language, Galileo observed the universe by discovering the telescope, Galileo, when applying mathematics to experimental physics used the standard mathematical methods of his time. His solution and proofs were based on the *rate theory* found in the fifth book of Euclid's *Elements*. This theory was accepted until the death of Galileo, after which it left its place to the algebraic methods of Descartes. See Galileo Galilei, *Two New Sciences*, trans. Stillman Drake (Toronto: Wall & Emerson, 1989).

<sup>19</sup> Bacon focused on logic rather than mathematics and exhibited the first efforts to break with Scholastic thought and understanding of science. He said that Aristotle's logic is a product of imagination, so that man should turn his face to nature. Bacon sees the criterion of truth in knowledge only in utility. According to him, nature is a real force that can be managed and directed in accordance with human purpose. For this purpose, he defends the reconstruction of the previous knowledge on the grounds that it does not provide anything for progress. See Francis Bacon, *The New Organon*, ed. Lisa Jardine & Michael Silverthorne (Cambridge: Cambridge University Press, 2000).

dle Ages: Now, when we apply the current language of the universe, that is, the language of science, to religion, or rather to the interpretation of religion, will we be able to accept to change the realities that we accept upon the change of cosmology? Ptolemaic cosmology was active especially in the Ancient and Middle Ages, and Ptolemy had an understanding that the universe was geocentric and that the sun revolved around the earth along with other planets.<sup>20</sup> After this view gave its place to the heliocentric understanding with the works of Copernicus and Kepler,<sup>21</sup> scientists were exposed to fierce opposition from Christian priests who interpreted Christianity through this paradigm. Because when a person turns a cosmology reading into dogma and interprets religion with it, he will have to assume that he will never be able to change the language of religion by turning it into a dogma, and he will be completely out of reality, that is, scientific and universal. With the collapse of the Ptolemaic cosmology, which the church accepted as universal in the West, the church members, who saw that Christianity had no branch to hold, punished the philosophers and scientists who defended these views.

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<sup>20</sup> Ptolemy, who is an astronomer, mathematician and geographer, continued the Greek view that the earth was at the center of the universe and calculated the movements of the planets. Ptolemy presented a geocentric understanding of astronomy and cosmology in his *Almagest*. This understanding is widely accepted not only in the West but also in the East. The *Almagest* has been translated and annotated many times in the West and East. The work, which had a great impact on the Islamic world as well, became the main source of all Muslim scientists' astronomy studies. See Claudius Ptolemaeus, *Ptolemy's Almagest*, trans. Gerald James Toomer (London: Duckworth, 1984), I-II. Trying to make a further study of the *Almagest* in the Islamic world, al-Bīrūnī prepared celestial charts regarding the positions of celestial bodies and argued that the earth was not static but movable. See Abū Rayḥān al-Bīrūnī, *al-Qāmūs al-Mas'ūdī fī al-Hay'a wa an-Nujūm*, ed. Sayyid Ḥasan Bārānī (Hyderabad: Dāirat al-M'ārif al-Uthmāniyya, 1954-6), 3 vols.

<sup>21</sup> Copernicus made a great revolution in astronomy by replacing the geocentric cosmology concept before him with a heliocentric understanding. He rejected the view of his predecessors, that the earth is fixed and, in the center, and became the founder of modern astronomy with the new understanding he brought. See Nicolaus Copernicus, *On the Revolutions of Heavenly Spheres*, trans. Charles Glenn Wallis (New York: Prometheus Books, 1995).

Similar events are experienced in the Islamic world. For example, commentators have likewise adopted the understanding that the earth does not rotate, even that it is flat, and that the sun revolves around the earth.<sup>22</sup> When you make such a thing a basis of belief, that is, when you make the current scientific reality a dogma and interpret religion with it, your understanding of religion will have to remain constant when scientific reality changes, so that no validity of your religion will remain universal in the world. The sectarian debates and scientific debates, especially in the medieval Christian world, reveal this. Scholars who espouse these views, such as Copernicus and Newton, are priests. These scientists wanted to understand the universe and to understand the language of God based on the understanding of the universe.<sup>23</sup> Otherwise, it was out of the question for these people to have an enmity with the church. But because the results of the researches were against the church or the understanding of religion at that time, the clergy pushed these people out of religion and anathematized them. So, when you understand the language of the universe to understand the language of God, you perceive a certain part of the language of God. When that reality changes, you will have to begin to understand the language of God in another way, but this should be an understanding of universal reality rather than a blind understanding.

<sup>22</sup> Just as the interpretations of the Bible in the West were always made in accordance with the Ptolemaic astronomy, this understanding also played an important role in the interpretation of cosmological verses in the Islamic world. Almost all of the commentators agreed that the earth is a flat and immobile object, based on the verse about making the ground a bed. We would like to suffice here by giving only the example of al-Rāzī. See. Fakr al-Dīn al-Rāzī, *Mafātīḥ al-Ghayb* (Cairo: Maṭba'at al-Bahiyya, 1938), II, 102.

<sup>23</sup> Newton's discovery of the law of gravity is considered one of the most important discoveries of natural science. Newton explained his philosophy of nature by building on mathematical principles. See Isaac Newton, *The Mathematical Principles of Natural Philosophy*, trans. Andrew Motte (London: Benjamin Motte, 1729), 2 vols. Newton also never gave up his belief in mysterious beings, prophecies and the Bible throughout his life. He already has an attempt at commentary on the Bible. Newton, *Observations upon the Prophecies of Daniel and the Apocalypse of St. John*, (New York: Feather Trail Press, 2009).

As a result, we can say that it does not seem possible to design an understanding of the universe through religion itself. Because such an understanding will conclude that will leave the universe completely out. Because religion asks people to turn to the universe and make an effort to understand and make sense of it. Therefore, there is a necessary parallel between understanding the language of the universe and understanding the language of God.

## References

- Al-Bīrūnī, Abū Rayḥān. *al-Qāmūs al-Mas'ūdī fī al-Hay'a wa an-Nujūm*. Ed. Sayyid Ḥasan Bārānī. Hyderabad: Dāirat al-M'ārif al-Uthmāniyya, 1954-6.
- Al-Fārābī. *Risāla fī al-'Aql*. Ed. Maurice Bouyges. Beirut: Dār al-Mashriq, 1983.
- Al-Jāḥiẓ. *Kitāb al-Ḥayawān*. Ed. 'Abd al-Salām Muḥammad Hārūn. Beirut: Dār al-Jīl, 1996.
- Al-Rāzī, Fakr al-Dīn. *Mafātīḥ al-Ghayb*. Cairo: Maṭba'at al-Bahiyya, 1938.
- Al-Ṭūsī, Naṣīr al-Dīn. *Taḥrīr Uṣūl al-Handasa wa al-Ḥisāb*. Ed. İhsan Fazlıoğlu. İstanbul: Türkiye Yazma Eserler Kurumu, 2012.
- Aristotle. *De Anima*. Trans. John Alexander Smith. *The Works of Aristotle*, vol. III. Ed. W. David Ross. Oxford: Clarendon Press, 1931.
- Aristotle. *Historia Animalium*. Trans. D. Wentworth Thompson, *The Works of Aristotle*, vol. IV. Ed. John Alexander Smith & W. David Ross. Oxford: Clarendon Press, 1910.
- Averroes. *al-Kashf an Manāḥij al-Adilla fī Aqāid al-Milla*. Ed. Muḥammad 'Ābid al-Jābirī. Beirut: Markaz Dirāsa al-Waḥda al-'Arabiyya, 1998.
- Averroes. *Faṣl al-Maāl fī Mā bayn al-Ḥikma wa ash-Sharī'a min al-Ittişāl*. Ed. Muḥammad 'Ammāra. Cairo: Dār al-Ma'ārif, 1983.
- Bacon, Francis. *The New Organon*. Ed. Lisa Jardine & Michael Silverthorne. Cambridge: Cambridge University Press, 2000.
- Copernicus, Nicolaus. *On the Revolutions of Heavenly Spheres*. Trans. Charles Glenn Wallis. New York: Prometheus Books, 1995.

- Darwin, Charles. *The Origin of Species*. New York: P. F. Collier & Son, 1909.
- Dawkins, Richard. *The God Delusion*. London: Bantam Press, 2006.
- Einstein, Albert & Infeld, Leopold. *The Evolution of Physics, from Early Concepts to Relativity and Quanta*. New York: Simon & Schuster 1960.
- Euclid. *The Thirteen Books of Euclid's Elements*. Trans. Thomas Little Heath. Cambridge: Cambridge University Press, 1908.
- Galilei, Galileo. *Two New Sciences*. Trans. Stillman Drake. Toronto: Wall & Emerson, 1989.
- Hesiod. *Theogony*. Trans. Alexander William Mair. *The Poems and Fragments*. Oxford: Clarendon Press, 1908.
- Ibn Khaldūn. *Muqaddimah Ibn Khaldūn*. Ed. Étienne Marc Quatremère. Beirut: Maktabat Lubnān, 1992.
- Kranz, Walther. *Die Fragmente der Versokratier: Griechisch und Deutsch*. Berlin: Weidmann'sche Verlagsbuchhandlung, 1954.
- Maimonides, Moses. *The Guide for the Perplexed*. Trans. Shlomo Pines. Chicago: The University of Chicago Press, 1963.
- Newton, Isaac. *Observations upon the Prophecies of Daniel and the Apocalypse of St. John*. New York: Feather Trail Press, 2009.
- Newton, Isaac. *The Mathematical Principles of Natural Philosophy*. Trans. Andrew Motte. London: Benjamin Motte, 1729.
- Olguner, Fahrettin. *Batı ve İslam Dünyasında Eflâtun'un Timaios'u*. Konya: Selçuk Üniversitesi Yayınları, 1990.
- Plato. *Theaetetus*. Trans. Benjamin Jowett. *The Dialogues of Plato*, vol. IV. London: Oxford University Press, 1892.
- Plato. *Timaeus*. Trans. Benjamin Jowett, *The Dialogues of Plato*, vol. III. London: Oxford University Press, 1892.
- Ptolemaeus, Claudius. *Ptolemy's Almagest*. Trans. Gerald James Toomer. London: Duckworth, 1984.
- Seneca, Lucius Annaeus. *Natural Questions*. Trans. Harry M. Hine. Chicago: The University of Chicago Press, 2010.
- Spinoza, Benedict. *Ethic Demonstrated in Geometrical Order*. Trans. William Hale White. New York: Macmillan & Co., 1883.

Wittgenstein, Ludwig. *Tractatus Logico-Philosophicus*. Trans. Charles Kay Ogden. London & New York: Routledge, 2000.

Wolfson, Harry Austryn. *The Philosophy of the Kalam*. Cambridge: Harvard University Press, 1976.

Zeller, Eduard. *Outlines of the History of Greek Philosophy*. Trans. Sarah Frances Alleyne & Evelyn Abbott. London: Longmans, Green & Co., 1886.