

Evolution and Critique of Ancient Greek ontology: An exploration of thought from the philosophical Pioneer to the Classical Period

Haonan Qiu

Baoji University of arts and sciences, Baoji 721000, Shaanxi, China

Abstract: *Ancient Greek philosophy was born in the Greek city-state slaveholders and free people under the system, the ancient Greek philosophers with their own rich imagination, deep thinking and debate, opened up the tradition of natural philosophy and metaphysics (ontology), for the future Western philosophy, provides a driving force for development, laid a solid foundation, shaped the initial theoretical form of Western philosophy. Ancient Greek philosophy was born out of mythology, but at the same time broke through mythology, ancient Greek philosophers began to look at the problem with a new perspective, began to think about the origin of the universe and the origin of all things, and this is the problem of ontology. The ontological problem is the central problem of the study of ancient Greek philosophy, and the elaboration of ontology has a development process in ancient Greece. This article mainly discusses the evolution and criticism process of the ancient Greek ontology, and makes a brief comment on the problem of the ancient Greek ontology.*

Keywords: Ancient Greece; Ontology; review.

1. THE ORIGIN OF ANCIENT GREEK ONTOLOGY

1.1 Philosophical Pioneers: The Milesian School and the Birth of Natural Philosophy

Thales is one of the founders of western philosophy. The theory of "water primordium" put forward by him marks the origin of ancient Greek ontology. Thales believed that water is the origin of all things, all things are created from water, and then return to water. The theory of "water originality" not only pioneered natural philosophy, but also laid the foundation for later ontological exploration. In his view, water is not only the origin of the material world, but also the source of change and movement, he declared that the earth floats on water, and he believed that earthquakes are caused by the land on water. Thales's theory, oversimplified though it may seem to us, was at its time a profound insight and the first inquiry into the nature of the world. His view of natural philosophy, by presenting a unified material basis for explaining natural phenomena, provided later philosophers with a model for thinking about the nature of the world, that is, to find a concrete thing to act as the origin of everything in the world. This thought of Thales not only reflects the observation and thinking of nature, but also reflects the initial attempt of ancient Greek philosophers to explain the world ontology through rational thinking.

Anaximander followed the footsteps of Thales and continued to explore the "one" of "many". He rejected the "water" as a state substance and attributed the world to "infinity". Finding "infinity" in "finite" is the embodiment of the ontological thinking mode of ancient Greek philosophy to a more abstract and general way, "absolute essence is no longer a simple thing, but a negative thing, universality, a negation of the finite. ... Anaximander takes away the individuality of the element of water".

Anaximenes, the last representative of the Miletus school, proposed the original theory of "qi" and the concepts of "rarefaction" and "condensation", which are the result of the opposition and interaction between the cold and hot forces. The advantage of this formulation, according to Russell, is that "all distinctions between different substances can be reduced to differences of quantity, depending entirely on the degree of condensation."

The Miletus school's discussion on the origin of the world has established its important position in the history of the development of human ontology and has epoch-making significance. This rational grasp of the experiential world and the explanation and attempt to the problem of the "beginning basis" of all things are the first display of the philosophical thinking that human beings began to have.

1.2 Pythagorean School: the ontology of number and the order of the universe

The philosophical thought of the Pythagorean School is an important milestone in the evolution of ancient Greek ontology. The core of the Pythagorean school is that number is regarded as the origin of all things and the basis of the cosmic order. The Pythagorean emphasis on the primordality of number was based on the fact that "many characteristics are found in numbers, which have more in common with being and with things produced by natural processes than are found in fire, earth or water" [3]. The Pythagoreans believed that numbers not only constituted the essence of the physical world, but were the key to understanding the harmony and order of the universe. The connection between number and all things is far greater than that between any single element such as water, fire, earth, and air. According to this connection, number can be used to explain not only concrete things, but also abstract things, and number constitutes the definite and invariable thing common to all changeable things. They put forward the view that "everything is number", emphasizing the universality and abstractness of numbers, and holding that numbers are the basic elements constituting the world, while the order and beauty of the universe can be explained through mathematical proportions and relations. Numbers exist before things and are the basic units that make up things. All things have a geometric structure, which corresponds to numbers: 1 is a point, 2 is a line, 3 is a surface, and 4 is a body. The formation process of the world is from the point to produce lines, from the line to produce planes, from the plane to produce three-dimensional, from the body to produce water, fire, earth and air four elements, produce all objects.

This thought of the Pythagorean school had a profound influence on later Western philosophy, and their emphasis on logarithm heralded the precursor of mathematical forms in Plato's world of ideas. In addition, the Pythagorean view of the universe also influenced Aristotle's metaphysics. Although Aristotle's ontology of logarithms was critical, his exploration of the order of the universe was undoubtedly inspired by the Pythagorean school.

2. THE ONTOLOGICAL VIEW OF THE PRE-SOCRATIC PHILOSOPHERS

2.1 Heraclitus' ontology of Fire and change

Heraclitus's ontological thought, especially his theory of fire and change, injected a profound dynamic concept into the evolution of ancient Greek philosophy. According to Heraclitus, fire is the origin of all things, and through its constant burning and extinguishing, it embodies the eternal change and the law of unity of opposites in the universe. Heraclitus defined the origin of all things as fire, and fire transformed into all things, and all things returned to fire. Fire becomes air by densification, which in turn becomes water and earth, which in turn becomes water by densification, which in turn becomes air and fire, which is the "way up." And "the way up and the way down are one and the same way", they both show the process of mutual transformation between fire and all things. He made the famous statement "PantaRhei," emphasizing that everything is in constant change and that change itself is a fundamental feature of the universe. There is also a scale to change, an amorphous fire that shapes itself as it burns. Fire is fickle, and the first winter is in the process of constant transformation, but its "measure" is eternal and unchanging, and it is the universal law followed by all things in the world. This eternal and unchanging universal law was expressed as "Logos" by Heraclitus. This is a milestone in the history of western philosophy and marks the emergence of linguistic spirit. But Heraclitus did not regard Logos as a different primordium from fire. Logos and fire were two sides of the same primordium. Logos is not external to fire, but inherent in fire itself, which regulates and restricts the transformation between fire and all things, and fire in turn reveals the eternal immutability of Logos.

Although Heraclitus' ontological thought was not widely accepted at that time, its emphasis on change and insight into the unity of opposites provided a new perspective for understanding the world. His theory played a bridging role in the evolution of ancient Greek philosophy, providing rich ground for the thinking of philosophers such as Socrates and Plato. Heraclitus's ontology of fire and change not only played an important role in ancient Greek philosophy, but also had a lasting impact on the development of later Western philosophy, becoming an indispensable part of understanding the world and existence.

2.2 Parmenides' ontology and the concept of "being"

Parmenides' ontology is a milestone in the evolution of ancient Greek ontology, and its core idea is that "being" is unchanging, eternal, and the only real thing. Through logical reasoning and philosophical speculation, he challenged the early natural philosophers' views of change and diversity. Parmenides argued that all change in the world of the senses is an illusion, and that true "being" is indivisible, uncreated and indestructible. Existence is the source of the world, the highest abstraction of the most universal affirmation of the objective world. Corresponding to this non-being in flux, existence actually refers to the god of Xenophanes, the logos behind the phenomena, and

the essence of things, while non-existence refers to the complicated phenomenal world of birth and death. The being exists, it cannot not exist, and the non-being does not exist, he cannot exist.

His theory had a profound influence on later philosophers, such as Plato and Aristotle. Plato's distinction between the world of ideas and the world of senses, and Aristotle's discussion of "substance" versus "essence", can be seen as a response to and development of Parmenides' ontology. Parmenides' theory not only held an important position in ancient Greek philosophy, but also laid the foundation for ontological discussions in Western philosophy, and his profound insight into "being" is still widely cited and discussed by the philosophical community today.

3. ONTOLOGICAL THOUGHT OF SOCRATES AND PLATO

3.1 Socrates' "form" and theory of knowledge

Socrates' concept of "form" is a milestone in the ontological thought of ancient Greece, which not only laid the foundation for Plato's idea world, but also profoundly influenced the development of Western philosophy. According to Socrates, true knowledge is not the accumulation of sensory experience, but the knowledge of universal "forms" or "ideas". Through dialogue and questioning, he guided people to abstract universal morals and concepts, such as justice, bravery and goodness, from concrete things. This idea of Socrates can be seen as a kind of epistemological revolution, which emphasizes the dominant role of rational thought in understanding the world. For example, in the *Phaedo*, Plato makes the argument for the immortality of the soul through the mouth of Socrates, which not only reflects Socrates' pursuit of form, but also demonstrates his profound insight into knowledge. This epistemology of Socrates had a profound influence on later philosophers such as Aristotle, who further developed the concepts of substance and essence in his metaphysics, thereby building a more complex ontological system.

3.2 The distinction between Plato's world of ideas and the world of senses

Plato's distinction between the world of ideas and the world of senses is one of the most representative theories of ancient Greek ontological thought, which has profoundly influenced the development trajectory of Western philosophy. The idea is the universal of things, the basis of existence, the prototype to be imitated, the goal to be pursued. The idea is the universal universal formed by the abstraction of concrete things, that is, the essence of things. An individual thing is what it is because it has an idea in it; without an idea there is no thing. The prototype of imitation, the concrete thing becomes the thing because it imitates its idea. The aim of the pursuit, the idea is the essence of the thing, and the purpose of the existence of the thing is to realize its essence. Plato saw the difference between ideas and concrete things, and recognized the importance of the common relative knowledge of universals and its significance for philosophy. But he was limited to the danger of separating the idea from the sensible and treating it as absolutely independent. Plato believed that the world of the senses is constantly changing and deceptive, while the world of ideas is eternal and real. "The independent kingdom of ideas soars above reality (the realm beyond which is the philosopher's own subjectivity) and is vaguely reflected in reality." [4] He illustrated this idea through his famous "cave metaphor", in which people are confined in a cave and can only see shadows, which are projections of objects in the sensory world. Plato believed that only a philosopher, through the effort of reason, could "turn around" and see real forms in the world of ideas. This theory not only reveals the process of acquiring knowledge and truth, but also embodies Plato's profound insight into ontology.

The perceptible world is the realm of opinion and non-knowledge, while the knowable world is the realm of reason and the realm of truth and knowledge. The perceptible world corresponds to the prisoner, the perceptible world is the free man, the perceptible world is the object of opinion, that is, neither the yes nor the right and the wrong, the perceptible world is the world of the Yes. The perceptible world is represented by images and statues, while the perceptible world is represented by the world outside the sun cave. The types of knowledge in the sensible world correspond to illusions and beliefs, while the types of knowledge in the knowable world are the low level of mathematical knowledge and the high level of rational knowledge, namely philosophy. In a sense, Plato's two worlds are a synthesis of the philosophies of Heraclitus and Parmenides. On the one hand, like Heraclitus, Plato holds that all things are in the process of birth and death; on the other hand, like Parmenides, he holds that there must be an absolute, eternal and stable world outside the phenomena of immutability as the basis of the phenomenal world. The knowable world.

Plato's ontological thought has epoch-making significance in the history of western philosophy. It not only laid the foundation for later metaphysics and epistemology, but also exerted a lasting influence on modern philosophy. For

example, Kant's transcendental philosophy can be seen to some extent as a response and critique of Plato's idealism, in which Kant tried to find a balance between transcendental conditions and the empirical world. Plato's distinction between the world of ideas and the world of senses remains an integral part of philosophical inquiry to this day, and it has inspired countless philosophers to think deeply about truth, knowledge and existence.

4. ARISTOTLE'S ONTOLOGY AND METAPHYSICS

4.1 Aristotle's "Substance" and "Essence"

Aristotle "flourished in Ancient Greek philosophy, the natural and social sciences" Aristotle "built upon the prosperity of ancient Greek philosophy, the natural and social sciences, through careful and independent study of many fields of knowledge, the largest body of knowledge in the history of ancient Greek thought"[5], and he has been praised as "one of the greatest figures in the history of thought, A learned genius "[6]. Following in Plato's footsteps, Aristotle developed his own "ontological" philosophical system based on his "theory of ideas". Aristotle described "entity" in this way: "Being at the bottom, merely subject to various effects and changes on the surface, people say that this is the element and origin of things that exist. ... For a certain nature or nature persists for ever, or one, or more than one, from which all other things are produced, and nature endures unchanging." [7] Substance has the following characteristics: first of all, it is a concrete and individual thing; Second, an entity is different from an attribute. It has nothing contrary to it; Third, there is no degree of difference in substance, that is, no substance is more substance than another; and finally, substance is invariable in change. Of course, Aristotle does not deny that entities themselves also change in birth and death, but this change is different from the change of attributes, and it is the same for every entity. In essence, "ontology" is "ontology", and the thought context of the ontology contained in it is not consistent, it shows the characteristics of phased changes.

In his work *Metaphysics*, Aristotle made an in-depth discussion on "substance" and "essence", which made an important contribution to the development of ontology in ancient Greece. The inquiry of the first book of origin and cause is "the speculation or observation of substance, that is, the exploration of the origin and cause of various entities".[8] Aristotle believes that entity is the basis of existence, something that can exist independently, and essence is the internal attribute that determines the entity. This theory of Aristotle had a profound influence on later Western philosophy, especially in medieval philosophy, where his entism was used to explain the existence and nature of God. In addition, Aristotle's ontology has also influenced the taxonomic and ontological study of modern science, such as the classification of species in biology, which is based on the identification and definition of the essential characteristics of biological entities.

4.2 The combination of ontology and logic in metaphysics

In the evolution of ancient Greek philosophy, Aristotle's metaphysics marked the peak of the combination of ontology and logic. In his work *Metaphysics*, Aristotle put forward the concept of "ousia" (entity), believing that entity is the core of existence and the basis of all other attributes and changes. In contrast to the first entity, Aristotle also proposed the "second entity", whose concept is the logical concept of "species" and "genus". For example, a specific person is included in the genus "man", and the genus "man" is itself included in the species "animal". Whereas only the first entity has the two basic characteristics of "neither speaking of a subject nor dependent on a subject", the second entity only has the characteristic of "not relying on a subject", but can speak of a subject (of individual things), so that "the first entity is more of an entity than any other thing", "the first entity is an entity in the strictest sense". Aristotle's logic, especially his theory of syllogism, provides tools for understanding ontology. Through the rigorous reasoning of logic, Aristotle sought to reveal the nature of things and the necessity of their existence. For example, he explored the multiple meanings of the concept of "being" through logical analysis, and attempted to prove certain ontological propositions through logical necessity. Aristotle again states that "what is sought is the origin and cause of being, and this, obviously, is being." [9] Aristotle's method of combining logic and ontology had a profound influence on later western philosophy, and became an indispensable theoretical basis for the discussion of ontology in medieval Scholasticism and even modern philosophy.

5. ONTOLOGICAL DEVELOPMENT OF PHILOSOPHY IN THE LATER PERIOD OF ANCIENT GREECE

5.1 The Laws of Nature and ontology of Stoics

The natural laws and ontologies of the Stoics occupy a unique position in ancient Greek philosophy, and their ideas have profoundly influenced the development of Western philosophy in later generations. The Stoics believed that the universe was an ordered whole governed by the law of reason, known as the "Logos". The Logos is both the rational principle of the universe and the essence of all things, and it embodies the harmony and unity of nature. The passive principle of the perceptible world is the matter, and the active principle is the Logos. The two combine to form the moving object. Matter is nothing but a substance or being without any definite character, and only Logos can give it the ability to exist and move. This view of the Stoics was closely connected with the evolution of ontology in ancient Greece, especially in the understanding of "being", which emphasized the universality and necessity of natural laws. This reflected the Stoics' respect for the order of the universe and their deep insight into the role of man in it.

5.2 Epicurean atomism and the material world

The atomism of the Epicurean school was a major breakthrough in the understanding of the physical world in ancient Greek philosophy, which not only had a profound impact on the science and philosophy of the time, but also laid the foundation for the natural philosophy and physics of later generations. Epicurus inherited and developed Democritus' atomism, which held that the universe consisted of indivisible atoms and void. Atoms are the basic units of matter that move at different speeds and directions through the void, colliding and joining together to form everything. "He had long known atomic weight and atomic volume in his own way," commented Engels[10]. Epicurus's atomism, which emphasized the diversity and variability of the material world, was in contrast to Parmenides's ontology, which held that change was an illusion and that only an unchanging "being" was real.

The atomism of the Epicurean school, with its explanation of the physical world, offered a mechanistic view of the universe that differed from that of other philosophers in ancient Greece. Epicurean atomism also included an affirmation of free will, arguing that atoms move in the void with tiny deviations that provide space for human free will, thus competing with the determinist view.

The Epicurean school of atomism had an important influence on later Western philosophy, especially during the scientific Revolution, when the shadow of Epicurean atomism can be found in the theoretical construction of scientists such as Galileo and Newton. Newton's theory of mechanics, in which the motion of objects can be broken down into the action of fundamental forces, is similar to the motion of the Epicurean atom. In addition, the atomism of the Epicurean school has also provided rich material for the dialogue of modern philosophy, especially in the discussion of philosophical issues such as matter and consciousness, freedom and determinism, Epicurus' ideas are still enlightening.

6. A REVIEW AND INFLUENCE OF ANCIENT GREEK ONTOLOGY

6.1 The ontological influence on later Western philosophy

The explorations of ontology by ancient Greek philosophers laid a solid foundation for the development of later Western philosophy. Thales' natural philosophy thought that water is the origin of all things not only opened the precedent of Western philosophy, but also provided an early example for materialistic ontology. The Pythagorean view of number as the essence of the universe, and its connection to mathematics and the order of the universe, influenced Plato's conception of the world of ideas and later the importance of mathematics in science and philosophy. Heraclitus' ontology of fire and change, which emphasized the philosophical ideas of change and unity of opposites, had a profound influence on the formation of Hegelian dialectics. Parmenides' ontology provided the core concept of "being" for metaphysics, and its distinction between "being" and "non-being" became the starting point for later philosophers to explore the problem of reality and representation.

Socrates' concept of "form" and the pursuit of knowledge, through Plato's distinction between the world of ideas and the world of senses, further deepen the discussion of ontology. Plato's ideology not only had a profound impact on medieval philosophy, but also provided a theoretical basis for modern philosophical discussions about universality and particularity, essence and phenomenon. Aristotle's theory of "substance" and "essence", especially its combination of metaphysics and logic, provided analytical tools and theoretical models for later ontological studies. Aristotle's theory of four causes and entism had a significant influence on medieval scholastics such as Thomas Aquinas, and his exploration of the laws of nature also provided intellectual resources for the development of modern philosophy of science.

The ontological developments of later ancient Greek philosophy, such as the Stoic laws and ontologies of nature and the Epicurean atomism, also had an important influence on later generations. The Stoic ideas of universal reason and natural laws provided a source of thought for Enlightenment rationalist philosophers such as Leibniz and Spinoza. Epicurus' atomism provided philosophical precedents for modern physics' theories about the structure of matter. The ontological ideas of these ancient Greek philosophers, through constant criticism and dialogue, continue to influence the evolution of Western philosophy and become an important theoretical basis for understanding the nature of the world and existence.

6.2 The dialogue between the ontological criticism of Ancient Greece and modern philosophy

The dialogue between the critique of ancient Greek ontology and modern philosophy reveals the profound influence and limitations of the ideas of philosophers from Thales to Aristotle. Plato's distinction between the world of ideas and the world of senses, for example, provided rich fodder for later metaphysics, but at the same time was criticized by modern philosophers such as Kant. In addition, Aristotle's concepts of "substance" and "essence", while providing a framework for understanding the noumenon of things, have been called into question in the light of modern science. Quantum physicist Heisenberg's uncertainty principle, which states that the state of a particle is not fixed but influenced by the act of observation, stands in contrast to Aristotle's ontology. Modern philosophical dialogue is not limited to critique, but also involves the reinterpretation and application of ancient Greek ontologies, through which the richness and complexity of ancient Greek ontologies can be recreated in the context of modern philosophy.

REFERENCES

- [1] [de] Hegel. Lectures on the History of Philosophy (Vol. 1) [M]. He Lin, Wang Taiqing, Trans. Beijing: The Commercial Press, 2013:216
- [2] [E] Russell. History of Western Philosophy (Vol. 1) [M]. He Zhaowu, Joseph Needham, trans. Beijing: The Commercial Press, 2011:54
- [3] Foreign Philosophy Department, Department of Philosophy, Peking University. Selected Works of Western Philosophy, vol. 1, The Commercial Press, 1981:18-19
- [4] The Complete Works of Marx and Engels, Vol. 40, People's Publishing House, 1982:69
- [5] MAO Conghu, Wang Qintian, Zhang Qingrong. General History of European Philosophy (Vol. 1) [M]. Tianjin: Nankai University Press, 2012:130
- [6] [Mei] Tilly. History of Western Philosophy [M]. Ge Li, Trans. Beijing: The Commercial Press, 2012:67
- [7] [Ancient Greek] Aristotle. Metaphysics [M]. Miao Litian, trans. Beijing: China Renmin University Press, 2013:8
- [8] Aristotle. Metaphysics // The Complete Works of Aristotle: Volume 7. Miao Litian, Ed. Beijing: China Renmin University Press, 1993:268
- [9] Nie Minli. Being and Entity -- A Study on Volume Z of Aristotle's Metaphysics (Z1-9). Shanghai: East China Normal University Press, 2011:388.
- [10] Selected Works of Marx and Engels, Vol. 9, People's Publishing House, 2009:437