opción

Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía, Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 36, 2020, Especial N° 27

Revista de Ciencias Humanas y Sociales
ISSN 1012-1587/ ISSNe: 2477-9385
Depósito Legal pp 198402ZU45

Universidad del Zulia
Facultad Experimental de Ciencias
Departamento de Ciencias Humanas
Maracaibo - Venezuela

Opción, Año 36, Especial No.27(2020):1307-1323
ISSN 1012-1587/ISSNe: 2477-9385

The synergistic justification of the language system versus Aristotle's scientific picture

Abay K. Kairzhanov[1]
[1]Department of Turkology, L.N. Gumilyov Eurasian National University, 010000, 2 Satbayev Str., Astana, Republic of Kazakhstan
Kairzhanov@list.ru

Raikhan Tuxaitova[2]
[2]Department of Kazakh and Russian Lang
Saken Seifullin Kazakh Agrotehnical University
Republic of Kazakhstan
Raichan-59@mail.ru

Karlygash Sarekenova[3]
[3]Department of the Kazakh Language
L.N. Gumilyov Eurasian National University
010000, 2 Satbayev Str., Astana, Republic of Kazakhstan
Sareke.kk@list.ru

Alfiya F. Galimullina[4]
[4]Department of Russian and foreign literature
Kazan Federal University Russian Federation
420008, 78 Kremlyovskaya Str. Russian Federation
alfiya_gali1000@mail.ru

Raisa E. Kussainova[5]
[5]Department of Foreign Languages
L.N. Gumilyov Eurasian National University
010000, 2 Satpayev str., Nur-Sultan, Republic of Kazakhstan
Kre79@mail.ru

Abstract

The article is devoted to the study of the scientific picture of the world against the backdrop of ancient times. To analyze the language system, we used the methodology of cognitive science and synergetic. The work reveals that the language system, undergoing synergy (according to Aristotle, the movement is subject to certain obstacles and the thing finds its natural place on its movement), is a process of

Recibido: 20-12-2019 •Aceptado: 20-02-2020

interaction of two interconnected and contradictory principles - generation and dissipation. In conclusion, to describe the scientific (linguistic) picture of the world, it is necessary to use a convergent approach in an attempt.

Keywords: Scientific, Linguistic, Synergy, Generation, Dissipation.

La justificación sinérgica del sistema del lenguaje versus la imagen científica de Aristóteles

Resumen

El artículo está dedicado al estudio de la imagen científica del mundo en el contexto de los tiempos antiguos. Para analizar el sistema del lenguaje, utilizamos la metodología de la ciencia cognitiva y sinérgica. El trabajo revela que el sistema del lenguaje, que experimenta sinergia (según Aristóteles, el movimiento está sujeto a ciertos obstáculos y la cosa encuentra su lugar natural en su movimiento), es un proceso de interacción de dos principios interconectados y contradictorios: la generación y la disipación. En conclusión, para describir la imagen científica (lingüística) del mundo, es necesario utilizar un enfoque convergente en un intento.

Palabras clave: Científica, Lingüística, Sinergia, Generación, Disipación.

1. INTRODUCTION

The problem of studying the scientific picture of the world worried many philosophers of antiquity, and this problem was further developed in the era of the Italian Renaissance (rethinking the ancient heritage, the prerogative of the natural science understanding of the world), and then in the works of scientists of modern and recent times. However, there is no scientist of previous and subsequent periods is

possible to compare and contrast with Aristotle's philosophical studies on this issue, the conceptual ideas that are still relevant for our time. Let us try to compare the ideas developed by Aristotle on this issue, with those scientists who announced that the concept of Aristotle is outdated. If we start from the basic ideas of Aristotle, the natural science and rhetoric (the art) – are very close fields. It is known that the teachings of Aristotle have been studied for many centuries, moreover, from various directly opposite positions.

So, for example, Christian philosophers (Cyprian of Carthage, Savellius, Origen of Alexandria, etc.), starting from the 3rd century AD, moved away from the monotheism of Aristotle and began to develop the teaching of Christianity, relying on some postulates of Neoplatonism (the teaching of Plotinus) and Gnosticism, which allowed this religious movement to assert the subordinism of the three hypostases of faith. The philosophers of the East AL-FARABI () in the structure of the philosophical school of falsafa criticized the Neoplatonism of Christianity, and affirmed the monotheism of Islam, relying on the basic natural ideas of Aristotle. This is only one aspect of his teaching, and what legacy did he leave on the problem of studying the scientific picture of the world? Note that some of the views and ideas of Aristotle on this issue anticipated modern approaches to the study of the linguistic picture of the world. The views of Aristotle and his students were explicated not only within the walls of the Academy but also on the sites of the Orphic Mysteries.

Our research aims to determine the contribution of Aristotle in the description of the scientific picture of the world and, based on his conceptual ideas, we are trying to describe the language system. The

scientific novelty of the study is determined by the following points: firstly, the scientific picture of the world of Aristotle is a conceptual justification of the harmony of man and nature, the Cosmos. Secondly, in his conception, the doctrine of place occupies a special position. Everything in its contradictory movement strives for itself and tries to take its natural place, overcoming various obstacles in its path. Thirdly, the movement takes place in an anisotropic space, which is structured as follows: the center and periphery, the absolute center occupies the United, in which a priori there is root because that generates the prime movers. Fourth, we are trying to give a theoretical justification for the language system.

The linguistic picture of the world is formed only in the structure of the linguistic system, which has interconnected opposing properties: the presence of dynamic components of the system: discreteness, openness, and non-linearity of the linguistic system. Information is generated by subordinating linguistic means to the internal laws of a normative language. There is dissipation, which manifests itself only in the speech element when any information is exposed at the beginning of diffusion, and then dispersion in the recipient language. Ultimately, there is either the assimilation of a particular language unit by a functioning language, or it is rejection from the codified structure of the language, replenishing the passive supply of the language. For our research, we use the methodology of philosophy and special synergetic methods to describe the language system. Let us try to present these very complex questions in more detail.

2. METHODOLOGY

Let us consider the basic thesis of Aristotle that science and art share many similar traits. The development of this position of Aristotle is found in the writings of scientists who considered the teachings of Aristotle as a phenomenology. We find such an approach in the works of the outstanding philosophers Edmund Husserl and Martin Heidegger. It must be borne in mind that Aristotle attributed the physical world to sacred science, in the sense that the concept of the United (Existing) appears in the center of his concept. Phenomenology considers the intention of consciousness on an object, that is, there is no object without a subject. So, for example, Ukhtomsky, studying the works of Aristotle, once put forward this paradoxical thesis: there is no subject without an object, just as there is no object without a subject (GRISHKO, 1989). The scientific picture of the world, formed in the Renaissance, picked up and developed by Galileo, Descartes, Newton, is a material, singular and causal understanding of the world, and what came before them was rejected by them as an unscientific picture of the world.

Thus, such a scientific picture of the world became the basis for the appearance of materialism in a new round of its development, when knowledge was derived only from experience and the causality of a physical phenomenon was studied. Compare how Pushkin wrote in Eugene Onegin about this phenomenon: (...) and experience, the son of difficult mistakes, and genius, a friend of paradoxes, and chance, god inventor. Based on the teachings of the traditionalists HUSSERL

(1911), they in their studies reject this approach in understanding the scientific picture of the world. The scientific picture of the world transcendence (previous experience of the existence of anything), for example, God (Single, Being) is not considered. Scientists who developed the idea of a scientific picture of the world began to deny the main points and ideas of Aristotle, and thus in their teachings in the early XX century, plunged science into the embrace of modernism and postmodernism.

Thus, Rudolf Pannwitz in his work Crisis of European culture, published in 1917, first introduced with the term modernism notion of postmodernism, and in 1947, Arnold Toynbee in his History Study gives philosophical significance to the new direction: postmodernism symbolizes the collapse of European religion and culture. Aristotle argues that there is no and there is no void (ἡ κενότης), while his critics, on the contrary, argue that there is a void, and denote the term vacuum. Aristotle points out that such denial leads to a false understanding: the place of Mere and anything or phenomenon is denied. Aristotle's doctrine of place occupies a central position in his concept. Every phenomenon, everything (πράγμα) has its place (ὁ τόπος) in nature. And the place of a thing or phenomenon is the goal (ὁ σιοπὸς). Any phenomenon or thing is in motion and this movement (ἡ κίνησις) is not equally directed, it can occur and, as it seems to us, can occur in a synergistic aspect. As a result, this movement brings the thing to its place, which means each thing takes its specific place.

Various types of obstacles arise in the way of this movement: it can also be attractor phenomena when a phenomenon as a process in the result of overheating and system fluctuations can be restructured

and rise to another level of development, or annihilated as a result of the system entropy. This is a measure of the internal disorder of the system, that is, CHAÒS, but not jumble (ARISTOTLE, 1975). But in any case, this phenomenon will take its place. And this place is the goal of this phenomenon or thing, and this place is not random, it is fundamentally important in the teachings of Aristotle.

However, it is necessary to realize that a place is not some kind of abstract territory or region since it is also a thing at the same time. Compare, the butterfly flies, but it flies to itself, strives for itself to survive and leave offspring, that is its goal. Modern scientists reject the principle that Aristotle: the movement takes place in anisotropic space (non-uniformity of the physical properties of the body), which is structured: that is the center and the periphery, and there is an absolute center - a place every single thing, every phenomenon (BELOUSOV, 2008).

They consider that there is only an isotropic phenomenon (similarities in properties of physical objects), there is a void, that is, a vacuum. They claim that the movement has a cause (causality), but they cannot answer: for the sake of what all this moves, thus a paradox arises - the meaninglessness of studying the motion of a phenomenon or some other thing. Only the causality of a phenomenon or thing is undergoing investigation. Such is the modern scientific picture of the world as represented by representatives of the Renaissance, and in the writings of modern scholars, we observe the same approach. Aristotle asserts spontaneity (χάος), denying atomicity, and only Existing

(United) is in one place, which is the prime mover, and all other things tend to find their place. He points out that time (χρόνος) is a measure (μέτρο), and a measure is a movement (κίνηση) to itself. And the place is determined by space.

Therefore, Aristotle believes that movement, namely in movement, the real and passive abilities of the phenomenon, things coincide with each other, that tend to take their places. He points out that matter has neither a property nor a form, and at the same time it has a certain property and a certain form. In this lies the infinite possibility of matter, and this exact possibility lies in its potential energy, leading to the movement of things or phenomena to itself and their purpose to find their place (DMITRIEV, 1999).

And only this United has the potential in itself and potentially to itself. If, for example, a person has separate thinking and will, then in the United (Existing) they are harmoniously combined and allow the forces of nature to function in a certain way, that is how the harmony of the Cosmos is maintained. Exactly in this aspect, the teachings of Aristotle coincide with the principles of the Orphic mystery: in search of Cosmos harmony. Such a principle and movement understanding of Aristotle anticipated the discoveries of astrophysicists of the 20th century. Compare, for example, the achievements of modern science show that there is a center of galaxies (black holes) around which the myriad circles of stellar systems are cut by the forces of gravity of this center.

Thus, Aristotle considers physics and its laws sacred science, and its denial in his opinion, profane physics that means physical objects cannot be identified with a logical object. For Aristotle, logic and mathematics are some dogmas of theology, only physics is understood by him as sacred science (since he introduces the concept of the United (Existing), that is, only in this sense is the term sacredness understood by him). This science can be known and described using the methodology of rhetoric, that is, art. As for the soul, Aristotle claims that the soul is an attribute of all living beings and that everything depends on nature itself, which is in a particular organism. He identifies the following types of souls: the vital, that is vegetative soul, which cannot move to something else, but strive for itself and thereby tries to preserve itself, gaining its natural place. There is another type of soul - this is an effective, sensual soul. This type of soul has potential and moves to something else, and has a certain will. Here we observe a certain process of expanding the structure of the soul, leading to the actualization of its rational part, which leads to the rational and emotional synthesis in the structure of the effective type of soul (REVONSUO, 2013).

And finally, the highest level of the soul is the thinking soul, which is peculiar, first of all, to the Cosmos and this quality to a certain extent, depending on nature, is endowed a person not only thinking, but also a reflecting soul. Moreover, the thinking soul may possess its active part to a greater or less extent. Aristotle understands that the soul cannot be an idea (Eidos), but is only a form with an ideal beginning (it is a form that has certainty and activity), or seems to be a

principle for the organization of matter (body, thing, organism), and this matter is indefinite and passive. Besides, he realizes that the soul and matter (body) are ontologically interconnected and inseparable, at the same time he claims that they are not similar since the soul in its pure form cannot have an anatomical form. He puts forward the idea that the soul and body (matter) also differ in meaning, but they are interconnected by being, as they strive for their natural place, find and determine their place as a goal. For example, clay and a print on it or the matter of something and for what it serves as matter.

So, the conceptual ideas of Aristotle on the study the scientific picture of the world have not lost their relevance for modern times, and his views formed the basis of such a science as psychology. However, these views can be useful in studying not only certain laws of certain physical processes of nature but also in studying linguistic phenomena, for example, in defining and describing a naive linguistic picture of the world.

3. RESULT

The surrounding reality and manmade culture along with the language as an integral part of it constitute a comprehensive dynamic system, and the elements of it are in an isomorphic relationship and form its unity. Such an understanding of the language system is found, for example, in the works of (BURAGO, 2007). Compare, his thesis: to give a dynamic character to the whole concept of the world stays in

the dynamics of constant development and outside this dynamic essence of both man and the world, the activity of consciousness is impossible, as, indeed, is any kind of activity.

The methodological principles of synergetics began to be developed in natural sciences by I.R GADAMER (1988), in philology (ALEFIRENKO, 2002). We consider that the main provisions of synergetics apply to the description of the language system, as presented in the indicated philological works. According to the ideas of synergetics, any system (natural as well as the humanitarian field) appears in the form of an unstable (nonequilibrium), open, dynamic (non-linear) self-organizing system. So, BURAGO (2007) writes: Considering that the basic dialectic law of the unity of opposites in a static picture of the world is impossible, dynamics is time embodied in reality, taking into account also one circumstance at that time itself is given in sense contemplation. Therefore, we have no choice but to come to the only possible conclusion: dialectical thinking itself is based on the synthetic, rational-sensual nature of the human I and does not exist outside rationally sensual unity.

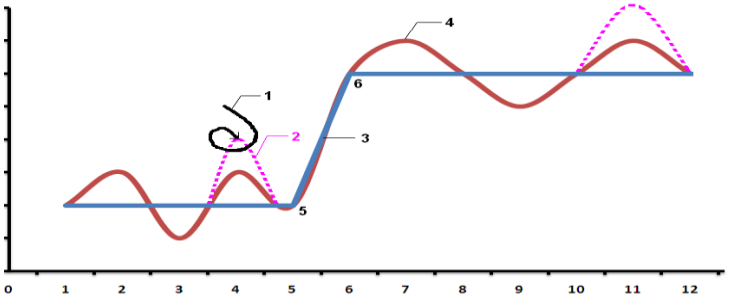
The main property of language development is the synergy of its system, which manifests in the interaction process of generation (transformation) and dissipation, which are structured in a special way. Linguistic space appears, on the one hand, - as a stackable power (generation) on the other, as scatter (dissipation). Both the generation and dissipation of the language system deal with information that can also occur in a diglossia situation. DMITRIEV (1999) believes that

information is random and remembered choice of one option from several possible and equal. This is the thought of BURAGO (2007) figuratively determined that there is an internal living connection of individual thoughts that has (...) a magnetic character (HUMBOLDT, 1984).

In the description and study of linguistic units of different language levels, information may not be random, but prompted, especially in a certain discourse. In this case, we can talk about the reception of information. Such information is a choice made based on the information that the addressee receives during the discourse, that is, perceives. A memorized choice of information must be understood as fixing one of the options during dissipation in the speech element, the choice is macro information that can and should be attributed to any scientific discipline. Speaking about the openness of the language system, we note that it has not rigidity with signs of asymmetry. Exactly these qualities of language differ from other semiotic systems. The asymmetry of the system is a consequence and the result of the mixing layer of the system, that is, its instability caused by the internal contradictory forces of the system itself. This occurs during the overheating (bifurcation) of the system, and the choice of option is determined by the fluctuation process, that is, by chance.

The instability of the system at the moment of bifurcation occurs when the initial homogeneity of the system is violated and under these conditions a structure is formed. Nonlinear units of different levels of the system are captured by isomorphism, which

leads to the stabilization of the structure. Such a structure remains harmonic with a certain amplitude of oscillation, that is, the stability of the system is formed at a new point of the attractor, due to fluctuations. If the new dissipative structure (D2) is larger than the initial (D1), then step structures are formed, that is, we are dealing with a new (harmonic amplitude) level of system development. However, new information is not generated in this case, since it is possible only with the formation of spike structures. Under these conditions, new information is generated in the system. This occurs in the structure of the mixing layer.



Picture 1: The formation of stepped and spike structures

The formation of a mixing layer during the peak amplitude of oscillation at a certain point in the evolution of the tongue. 2. Spike amplitude of system instability. 3. The trend of structural restructuring during fluctuations. 4. The harmonic amplitude of the sustainable development of the system. 5. Bifurcation or overheating of the

system. 6. The attractor point, where the restructuring of the system begins in the new conditions.

4. CONCLUSION

The scientific picture of the world against the backdrop of the ancient era is the concept of Aristotle, which became the scientific forerunner for further searches in the writings of the representatives of the Italian Renaissance. It was Aristotle and his students who explicated this theory not only within the walls of the Academy but also on the sites of the Orphic mysteries to conceptually substantiate harmony with nature and the Cosmos. The teachings of Aristotle to understand and comprehend to modern man is extremely difficult and difficult. We believe that the doctrine of PLACE occupies a dominant position in its concept. He argues that everything in its movement strives for itself and tries to find its natural place, but many obstacles arise in the way of this movement. Therefore, overcoming them, the thing finds its place and this place and is at the same time its goal. Movement arises and flows in an anisotropic space, and this space is always subject to structuring: both the center and the periphery appear, and the absolute center is occupied by the One (Being), in which there is a priori the root cause creating the prime mover.

And then, following a geometric progression during movement, the following reasons appear, which in turn give rise to new engines, and this process of transformation can continue indefinitely. The

movement, overcoming obstacles in its path, is not equally directed, it is subject to synergy. A newfound place is both a goal and at the same time a thing itself. Besides, the movement is associated with time, and it is a measure, and measure - this is a movement, moreover, tending to itself. And such a place is determined by space. Aristotle's physics is a sacred science in the sense that he introduces the concept of One (Being), and he refers to those who deny this approach to profane physics. The use of Aristotelian physics will be successful if, as Aristotle pointed out, we use the methodology of rhetoric, that is, art that allows us to describe the scientific picture of the world.

We believe that to describe the scientific (linguistic) picture of the world, it is necessary to use a convergent approach in an attempt to solve, for example, the complex cognitive problems of science: when revealing, for example, a naive linguistic picture of the world. Cognitive science is like convergent knowledge: it is necessary to use not only traditional symbolism, but also connectionism to model cognitive systems, and this is possible if we use an imitation of artificial neural networks, that is, we determine the connections of psychology and neurobiology and use the achievements of other sciences. This will allow empirically connecting mental phenomena with the physiology of the brain. Besides, to describe the linguistic picture of the world, it is necessary to use the methodology of synergetics. In the study of mental phenomena, it is necessary to use the achievements of psychology. In this case, the forefront is the problem of studying consciousness, the human soul.

Aristotle's natural-science views on this subject contain discoveries hidden behind individual paragraphs and keywords, and

they are important for future discoveries, for example, for some laws of consciousness, the human soul. So far, these views of Aristotle have not been fully disclosed in modern science. Therefore, we put forward the prospect of research that if and only if we use the methodology for understanding the synergetic understanding of the language system, then, in this case, there is an opportunity to describe the linguistic picture of the world in different structural languages in a synchronous diachronic aspect.

Besides, there are views of Aristotle on the phenomena of syncretism and anthropomorphism of public mythological consciousness. The consequences of this phenomenon are the processes of a mythologization of the world; myths are created. But when a person, overcoming the appropriating type of economy, becomes involved in the producing type, then, in this case, the person, firstly, has free time for reflection. Secondly, this would allow a person to subject the world to criticality, which would allow him to go beyond the limits of mythological consciousness and learn to conduct full-fledged scientific research in various areas of human activity. These problems of consciousness and the human soul are promising studies and are beyond the scope of this article.

REFERENCES

ALEFIRENKO, N. 2002. **Poetic energy of the word: language synergetic, consciousness and culture.** Alma-Ata: Science. P. 496. Kazakhstan.

AL-FARABI, B. 1987. **Natural science treatises / tr. from the Arabic language.** Alma-Ata: Science. P. 496. Kazakhstan.

ARISTOTLE, J. 1975. **Works in four volumes (Philosophical Heritage series)**. Psychology of Consciousness. pp. 89-90. Russia.

BELOUSOV, K. 2008. **Synergetics of the text: from structure to form**. Alma-Ata: Science. P. 496. Kazakhstan.

BURAGO, S. 2007. "Collected Works in 3 volumes". Kiev: Publishing house of Dmitry Burago. **The melody of the verse (World. Man. Language. Poetry)**. Vol. 2, p. 432. Ukraine.

DMITRIEV, I. 1999. **Unknown Newton: silhouette against the backdrop of the era.** Logos. P. 784. Russia.

GADAMER, H. 1988. **Truth and method: the foundations of philosophical hermeneutics**. Kiev: Publishing house of Dmitry Burago. Pp. 317- 548. Ukraine.

GRISHKO, E. 1989. "Two books Galileo Galilei". **Historical and astronomical researches.** N^{o} 21: 144-154. Russia.

HUMBOLDT, V. 1984. **On distinguishing the structure of human languages and its influence on the spiritual development of mankind.** Humboldt V. von. Selected works on linguistics. M.: Progress. Russia.

HUSSERL, E. 1911. **"Philosophy as a rigorous science".** Logos. Moscow. Russia.

REVONSUO, A. 2013. **"Historical Foundations of the Science of Consciousness".** Psychology of Consciousness. pp. 89-90. Russia.

UNIVERSIDAD DEL ZULIA

opción
Revista de Ciencias Humanas y Sociales

Año 36, Especial N° 27 (2020)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.
Maracaibo - Venezuela

www.luz.edu.ve

www.serbi.luz.edu.ve

produccioncientifica.luz.edu.ve