



ATOMISTIC DOCTRINE AND NUCLEAR-PERIPHERY IN LANGUAGE

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Annotation

This article provides a concept of atomistic doctrine and its essence, as well as the presence of central (core) and lower (periphery), peripheral parts (areas) in language units and levels of linguistics, substantiates information about the role of atomistic doctrine in the field of linguistics.

Key words: atom, electron, neutron, proton, nucleus, periphery, language units, language level.

Аннотация

В данной статье дается понятие атомистического учения и его сущности, а также о наличии центральной (ядра) и низших (периферии), периферийных частей (областей) в языковых единицах и уровнях языкознания, обосновываются сведения о роли атомистического учения в области языкознания.

Ключевые слова: атом, электрон, нейтрон, протон, ядро, периферия, языковые единицы, языковой уровень.

It is known that all objects, concepts and ideas in the material and ideal world consist of "core" (center) and "periphery" (periphery) parts, and there are constant and multifaceted connections between the core and periphery parts of any substance.

In linguistics, the formation of views about the existence of central and lower, peripheral parts (fields) in language units and levels was motivated by the existing atomistic doctrine in natural sciences, including chemistry and physics. Although the roots of the atomistic doctrine go back to the ancient Greek civilization, great thinkers from Turkestan, Farabi, Ibn Sina, and Beruniy contributed greatly to the development of these views [Nurmonov, Yoldashev. 2001, 108].

It is known that the atomistic doctrine was formed as a philosophical problem in Ancient Greece and Rome in connection with the problem of explaining the structure and properties of things in existence, and was later introduced into the natural sciences. Atomists claimed that matter is composed of particles and particles and has a stepwise form. For example, Democritus came to the conclusion that only atomism



can fully express the properties of matter. The following principles represent the essence of atomistic doctrine:

- Nothing can come from nothing. Nothing that exists is lost, their constant change consists of the processes of division and union;
- Everything consists of atoms and space; other than atoms and space, things are empty talk, not existence at all;
- Atoms are infinite in number and form, and by their movement and collision form the visible world;
- The difference between things comes from the number, shape and arrangement of the atoms they are made of.
- Spirit is made up of small, round, smooth and somewhat light and ubiquitous atoms, the motion of which constitutes life;
- All the differences between life and death are related to the amount of circular atoms in the body [Zakhidov, 2007, 15].

Discovery of the atomic nucleus and its fission in the late 19th and early 20th centuries; the nucleus of atoms and its peripheral parts - consisting of particles such as electrons, neutrons, protons, that these elements are in a dialectical unity due to the positive charge of the nucleus and the negative charge of the particles, nuclear fission is the release of a large amount of energy in its associated elements and after the discovery that it leads to cataclysms, in other sciences, including linguistics, an "atomistic doctrine" was formed, comparable to the natural sciences, that is, the tradition of searching for basic (core) and peripheral elements in different linguistic units and levels, analyzing linguistic units according to other principles of atomistic doctrine began to emerge.

In particular, in 1911, the famous British physicist Ernest Resenford (1871-1937) proposed the planetary model of the atomic nucleus. According to the scientist, in the center of the atom, which is the smallest particle of the universe, there is a positively charged nucleus, which is much smaller than the atom in terms of volume, but in terms of weight, the nucleus represents the majority of the mass of the atom. In this respect, the atom and its nucleus are similar to the solar system, that is, the sun, which represents the majority of the mass of this system, is in the core, and electrons (planets) rotate around it (see picture).





In short, through the experiments and hypotheses of the scientist, scientific ideas about the structure of the atom were formed and they were expressed as follows:

1. Any substance is made up of some small particles;
2. The difference between substances depends on the difference between the particles that make them up;
3. The particles of the same substance are the same, and the particles of different substances are different;
4. Under all conditions the particles of matter are in motion;
5. The higher the temperature, the faster their (particles) movement;
6. For most substances, the role of a particle is played by an atom and its nucleus [Khramov, 1983, 230].

So, core and periphery are two interrelated concepts, they differ in terms of expression of qualities specific to the essence, that is, the core represents the main characteristics of the essence and it is plural, while the periphery represents the few characteristics of the essence. This situation is in fact the dialectic of the existence of matter, because matter (essence) exists only when it consists of parts that do not have the same properties and are closely related to each other.

The system that represents the core and periphery in the solar system is also repeated in the internal structure of the Earth: it is known that the Earth consists of such parts as the atmosphere, hydrosphere, biosphere, lithosphere, mantle, and core (see picture):

THE STRUCTURE OF THE EARTH

- EARTH'S CRUST
- MANTLE
- CORE



ЕРНИНГ ТУЗИЛИШИ

- ЕР ПУСТЛОГИ
- МАНТИЯ
- ЯДРО



Today, in all fields and areas of science, the identification of core and peripheral parts of their objects of study and their comparison with each other is gaining momentum. This approach, which took its origin from the natural sciences, gradually spread to the field of social sciences and humanities in the following decades. In particular, in the science of sociology (core and peripheral parts of society or strata), economic theory (core and peripheral parts of the economic sphere), geo economics (states that are the center of the world economy and peripheral states) and geopolitics (developed states that are superpowers of the world (core) and developing the concepts of countries (periphery)) are being put into the basis of research [Zaryski, Thomas, 2007, 95].

Of course, linguistics is not left out of this flow. If you take a look at the history of linguistics of the 20th century, world linguistics may have had time to apply core-periphery principles to language research [Eltazarov, 2006. 98].

It is known that the views on core-periphery relations in linguistics were formed in comparison with the "atomistic doctrine" in natural sciences, that is, the tradition of searching for basic (core) and peripheral elements in different language units and levels, analyzing language units according to other principles of atomistic doctrine began to emerge.

It is clear that in the manifesto of the proponents of atomism, atoms are placed at the basis of existence, life and even spirit and soul, and these ideas were expressed two thousand years ago. Nevertheless, discoveries in physics, chemistry, and other sciences in the late 19th and 20th centuries and today have proven that atomists are as close to scientific truth as all materialist doctrines. Currently, the smallest units of matter smaller than an atom (neutron, neutrino, quantum...) have been discovered and it has been proven that they are the basis of the material world.



According to Russian researcher V. G. Lysenko, the atomistic doctrine was formed as a key to explain the following oppositional (against each other) categorical concepts that exist in the world: discreteness and regularity; integrity and divisibility; whole and part; cause and effect, unity and plurality; finitude and infinity; eternity and transience; emptiness and fullness, existence and nonexistence, emergence and extinction. At the same time, the explanation of the substance (essence), its qualities and actions is also based on the atomistic doctrine [Lysenko, 2016,5]. So, the atomistic doctrine was formed in philosophy and science, including linguistics, due to the need to shed more light on the essence of the matter, concept or tool (language) that is the object of research. Applying the principles of atomistic theory to linguistics is not a mechanical "transfer" of the principles of natural sciences or philosophy to linguistics, but rather an attempt to examine the structural-semantic construction of the language using this approach and describe its new aspects.

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