

PLAN

1. The essence, structure and principles of dialectics.
2. Laws of dialectics: The law of transition of quantitative changes to quality changes and vice versa. The law of unity and struggle of opposites. The law of denial of denial
3. General information about categories
4. Categories reflecting the structure and organization of existence
5. Categories expressing deterministic relationships

1 . Dialectic is a Greek word that means the ability to argue. In ancient Greece, dialectic meant the art of revealing the contradiction in the interlocutor's judgments and proving the truth through an interview. Such public polemic practice was widely applied in the activity of Socrates, the great master of dialogue. He saw dialectics as the art of discovering truth through the collision and reconciliation of different, even opposing. Viewing dialectics as an art of debate and dialogue continued in the Middle Ages and later. Having passed a long and complex path of development and becoming the only true philosophical method of understanding and changing the world, dialectics, which views the world as a unified, interconnected whole, taking it in eternal movement, change and development, **has become a teaching about the most general connection and development of nature, society, thinking and cognition.** Relation is any event or process depends on others in a certain respect. Certain relationships are established between objects. **Development** is forward-looking, irreversible quality changes that occur in any object. Development is a complex and multifaceted process. The principles of interaction and development of dialectics are inseparable from each other. Their unity is genetic. This means that the interaction and influence of subjects creates **development.**

Dialectic is divided into objective and subjective dialectics. Objective dialectic covers inanimate nature, living world, including society. Subjective dialectics manifests itself in the thinking activity of people. In general, **dialectics** is understood as a way of thinking and a theory that considers objects in the world in relation, contradiction and development.

Being a philosophical science, dialectics is a system of knowledge that is developing and becoming increasingly complete. This system is based on certain principles, laws and categories. The principles of dialectics are the starting propositions that form its basis. The main principles of dialectics are: the principle of **the common connection of events, the principle of objectivity, the principle of development, the principle of determinism, the principle of historicity, the principle of concreteness of truth, the**

principle of the unity of theory and practice, etc.

General reciprocal relationship - according to this principle, any subject and event can be studied only in connection with other subjects and events.

Contradiction principle - this principle requires the detection of opposing tendencies characterizing the subject or process.

The principle of historicity - this principle requires understanding the subject and event in action and development, analyzing the reasons for its creation, development stages and tendencies.

2. Law is a form of connection between events. But not all relationships are laws. Legal relations have a number of specific characteristics. **Law is an objective, important, necessary, repeated and general form of connection between events.** Laws are classified according to various signs. For example, according to their scope, laws are divided into **special, general and most general types**. Special laws operate between phenomena within a form of movement (for example, heredity and variation in biology, periodic system of elements in chemistry are such laws). General laws cover a relatively wide area, apply to several forms of motion (for example, the law of non-loss and conservation of energy in physics). That law affects all material systems. The most general laws have universal scope. They operate in nature, society and thought. The laws of dialectics are one of them. Laws are divided into the following two types according to another sign - direction : **laws of action and laws of development**. Laws of the first type express static (fixed) relationships between phenomena (for example, the law of universal gravitation). The laws of development, as the name suggests, characterize the trends of change between subjects, its different perspective stages (for example, the law of complexity and diversification of matter in the process of natural historical development). Finally, laws are **divided into two types (dynamic and statistical) according to their mechanism of action**. Dynamic laws express relationships between phenomena, all of which are known from the beginning and therefore the future state can be predicted in advance (for example, the laws of celestial mechanics are of this type). Based on their quality, they could calculate the dates of solar and lunar eclipses in advance from ancient times. Statistical laws operate among large numbers of homogeneous objects. They characterize the set of events as a whole, not every event included in the set. These laws act as statistical averages in a large number of events. An example is the law of value studied in economic theory.

Dialectics **has three main laws: the law of transition of quantitative changes to qualitative changes, the law of unity and struggle of opposites, the law of negation of negation.**

1. The law of transition of quantitative changes to qualitative changes can be expressed as follows. **This law expresses such an interdependence of material systems** that quantitative changes lead to qualitative changes at a certain stage, and new quality

creates new opportunities and intervals for the next quantitative changes. The mechanism of the transition of quantitative changes to a new quality can be clearly seen in the example of heating water. When we heat water to 99 degrees, quantitative changes occur in it and accumulate. However, these changes do not affect water quality. When the temperature is increased by one degree to 100 degrees, the quantitative changes change to a new quality (that is, water goes from liquid to vapor quality).

2. The law of the unity and struggle of opposites reveals the inner source and driving force of the development process. Therefore, it plays a very important role in the dialectic system. Dialectical opposites have the **following quality**: they mutually exclude each other and also determine each other. If opposites were only mutually exclusive, then they could not serve as a source of development. Or, if opposites were only in unity, then there would be no incentive for change and development. Opposites mutually complement each other. On the other hand, there is an equilibrium between them, albeit temporarily. Then the opposites are mutually transferred to each other, that is, they can change their places within the system. Finally, opposites allow their temporary union. It should be noted that the unity of opposites is temporary and transitory. And their struggle is absolute and eternal. This is explained by the fact that the balance between opposites is always relative.

3. The law of negation of negation reveals the direction of development, where the old and the new are connected. **Denial has a metaphysical and dialectical meaning.** The first takes negation as the result of the influence of an external force. He explains it as the one - time destruction of a certain object or event. Of course, there are such cases of denial in nature. But dialectical negation takes the main place in the world. Dialectical negation is internal negation. Therefore, it does not stop the development of the event. On the contrary, it creates favorable conditions for its further development. This denial only destroys the part of the old that hinders development. The positive side of that old one is preserved.

Such a question arises when explaining the law of negation. Why is the word negative repeated twice? The point is that the first denial does not complete the development yet. A second level of negation, that is, negation of negation, is necessary to complete the cycle of development. In order to clearly imagine this, let's pay attention to the example given by Hegel. However, this denial does not throw the grain aside completely, it preserves and develops some aspects of it. It is clear from this that the negation operation needs to be repeated twice to complete the development cycle. This means that the number of denials can be more than two. Thus, the law of the negation of the negation expresses the following important feature of development: the result of the second negation does not mean a return to the beginning. It expresses the new in itself - the moment of development. What has been said shows that the development process does not take place in a circle, nor does development take place along a straight line. Development is a spiral process.

Hegel, who discovered this law, called it the law of the triad. The scheme of the three-part triad is as follows: **thesis-antithesis-synthesis**. This means that the thesis (that is, the object taken at the beginning of the development cycle) is negated by its opposite, the antithesis. As a result of the second negation, the dialectical synthesis of thesis and antithesis takes place. The law of negation of negation shows the direction and result of development. That law teaches that development is a process involving several cycles. This law also reveals the role of every negation in development. It shows that double negation expresses the main trend and direction of development. Thus, the law of the negation of the negation shows the connection between the new and the old, proves succession, repetition, irreversibility, the forward-directed nature of development.

3. Categories in reality are objective, universal, most general, deterministic, structural, systematic etc. "**Category**" in Greek means "to opine," "to reason," "to judge," "to testify," etc. In the philosophical sense, categories are the most general and fundamental concepts that reflect the objective, legitimate and essential relationships and exist in reality (in nature, society and thinking).

Without **concepts**, no ideas would be possible. The main feature of understanding is its ability to generalize. The concept reflects not every thing or event, but by generalizing many and different things and events of the same kind: for example, "river", "land", "homeland", etc. Apart from these general concepts used in our conversation, there are also concepts used in separate fields of science: "electricity", "comedy", "politics", "base" and so on. The most general, fundamental concepts can be called categories. For example, "being", "thought", "cognition", "law", "action", "development", "relation", "cause" etc. philosophical concepts are categories.

Categories can be given the following definition: being a **special level and form of cognition, categories are the most general and reflect the objective, legitimate and essential relationships that determine the change and development of objects, events and processes in reality - in nature, society and thinking.**

The first ideas about categories appeared in very ancient times - in order to define the basic principles of existence. The first comprehensive philosophical view of categories is given in Aristotle's treatise "**Categories**". When Aristotle talks about the world and categories reflect the main, important properties of objects, events and processes that exist objectively in reality. Aristotle has even provided a special breakdown of the category classification system. According to Aristotle, the categories are: **substance, quantity, quality, relationship, place (space), time, state, condition, action, and suffering**. This division has remained unchanged in philosophy for a long time, until the new era, but in the XVII-XVIII centuries, based on the development and achievements of philosophy and natural scientific knowledge, various changes were made. It is also necessary to pay attention to one aspect that there were certain philosophical views about categories even before Aristotle. These views were mainly

idealistic, the objective content of the categories was not accepted, they were analyzed as a subjective, "thinking event"; categories were viewed as "primordial": fire, water, air, atom, etc. On this basis, **Plato** mentioned five types of categories: **essence, action, stillness, sameness, difference**. Although Aristotle also sees the categories as the general forms of the world and its understanding, he uses "primary cause", "primary form", "form of forms" etc. names return to the idea of "first cause", often they were equated with the concept of "God" (later theologians used those ideas as proof of God's existence). Aristotle also consistently explained the deep internal relations between the categories, their interdependence, and their dynamism.

In human activity, categories also have serious worldview significance. So, it is precisely with the help of categories that a person determines what is true and what is false, what is essential and what is non-essential, discovers the internal and necessary relationships that determine the development of events, understands the regularities, and turns them into his convictions and finally, into a motive for action. All these help to form a firm belief and scientific outlook in a person. Categories are a phenomenon of important methodological importance that directs human activity and determines the choice of a purposeful position. Without knowing the essence of the categories, a person thinks on the basis of them and approaches the events of reality. It is on the basis of deep assimilation of categories that a person acquires the ability to refine events, to choose methods of approaching reality, to analyze and differentiate them; can take a correct methodological position. In this way, it becomes easier to choose and distinguish the necessary, legal, determining, important relationships between events, it becomes possible to save scientific-cognitive and social-practical activity from errors, to take a useful methodological position, and correctly direct human activity as a whole.

The categories of dialectic have a very wide content. In this regard, they can be divided into the following groups:

1) **Theories reflecting the structure and organization of existence**; singular, particular and general; essence and manifestation; system, structure and element; content and form.

2) **Categories expressing determinism or causal relationships** : cause and effect; necessity and chance; possibility and reality etc.

4. Theories reflecting the structure and organization of existence;

a) **Singular, particular and general** : A single object is event or process that differs from others by its unique quality and properties. It expresses individuality, quality and quantity determination of objects. **The general category** shows similarities that apply to all events and processes. Singles with similar characteristics combine to form a set - a common. The relation of the singular to the general is ensured through **the category of "special"**. The particular is general in relation to the particular and it is only in relation to the general. That is, it has an intermediate position between special and general. The unity of these three categories is also reflected in the language. For example, consider the

sentence "A rose flower is a plant." Here, the rose means the only, the flower means the particular, and the plant means the general.

b) **The essence and manifestation** - occupies an important place in the group of categories covering the structure and organization of existence. These categories indicate two closely related aspects of a certain object in reality: the external side and the internal side. The **essence is understood** as the main and determining aspect of the object. It also shows the development trends of the facility. The essence has a hidden, deep nature. Therefore, it is not always easy to define it correctly. **The event (manifestation)** is the visible, observed aspect of the subject. The event is the manifestation of the essence, the form of its expression. It should be noted that the word "event" is often used to indicate the reality and existence of any object. Here, that concept is taken only in the sense of the manifestation of the essence. The essence and the event are inseparably united. Event does not exist outside of essence. On the other hand, every essence is manifested in an event. With this in mind, Hegel wrote: "the essence is the event, and the event is the essence." But **the event with the essence it also knows how to match each other**. This situation is expressed through the concept of **appearance**. An example is, when we stand in one place and look into the distance, it seems to us that the earth and the sky are united on the horizon. In fact, this is the appearance.

c) **System, structure, element**. The word system in **Greek** means a whole made up of parts. The system concept is complex. That's why he gets a lot of definitions. Currently, there are more than 40. Despite this diversity, it is accepted that the system is based on the interaction of elements. **A system is understood** as a set of interrelated elements with organization and structure. It is inseparable from the concepts of system, structure and element. **Structure** is the method of relatively stable connection of elements within any system. An integral property of any system is its structure. **Element** is the primary component. The most important property of an element is its necessary presence in the system. Even without an element, such a system is impossible. For example, when a person is taken as a system, the nervous system, blood vessels, and digestive organs are its elements. The main role of the elements is that they are the material carrier of the connections and relationships that make up the structure of the system.

The quality of systematicity is closely related to the self-organization of material objects. The idea of self-organization was formed on the basis of a systematic and informatic approach. But unlike the latter, self-organization is also applied to phenomena in inanimate nature. The laws and stages of the self-organization process are studied by the **science of synergetics (which means joint cooperation)**. The synergetic approach analyzes non-equilibrium, non-linear, unstable and irregular processes in open systems.

The concepts of system and element are very close to **whole and part**. However, it is not correct to equate them. So it is completely limited by its volume systems. Because, as mentioned above, there are summative systems as well as systems that have the quality

of completeness. On the other hand, the concept of "complete" refers to the unity of more objects. The concept of the system, along with the unity, also focuses on the colorful relations of the object. In turn, the concept of part is different from element. First, it has a limited volume relative to the element. Because, as mentioned above, the element itself can act as a system from a lower level. On the other hand, in addition to material elements, parts can also include fragments of certain structures. In philosophical thought, the question of the ratio of the whole and the part is not unambiguously explained. There are two opposing positions in this regard. The first view, **called merism**, exaggerates the role of parts. According to the second view, it occupies the main place. This **position is called holism**. Both of them are one-sided. In fact, the whole and the part are inseparable. A part refers to aspects that, taken together, form new, more complex objects. The whole is created by connecting the parts. According to mechanical conceptions, the whole is simply the sum of its parts. In fact, the properties of the whole cannot be divided into separate parts. Because when the parts are connected as a whole, a new quality - the quality of wholeness - appears.

d) Content and form. Content means the totality and interaction of elements that determine its nature and character in this or that object. For example, the content of production is to create a certain product. The content of the book is the plot of the writings in it, the importance of the scientific provisions here. **Form** is the principle of smooth arrangement of this or that content, the method of existence. For example, the form of an artistic work is its composition, used artistic principles. Form is as important as content. It is not accidental that even Aristotle and many later thinkers called form the organizing factor of existence. Content and form work together in a dialectical unity. Hegel expressed their inseparability as follows: content is formal, and form is content.

5. Categories expressing determinism relationships;

Determinism is the oldest principle and concept of philosophy (Latin "determino" means "I determine"). **This is the most general principle about the objective regularity, mutual connection, mutual causality and mutual conditioning of material and spiritual world phenomena**. Determinism is also a method of explaining the causes of change and development in reality, a philosophical teaching about the internal cause and conditioning of actions. The core of the concept of determinism is the idea of causation, the premise that one event is a cause, another is a result, and that they are interconnected. Even in ancient philosophy, there were views that asserted that causality is the basis of determinism, the necessity of causality is the same, and chance has nothing to do with reason, or there is no chance at all (Democritus and later Spinoza). Mechanical determinism accepted that the event is connected only with an external cause (condition). The view that denies the principle of determinism is called indeterminism in philosophy. Indeterminism denies the regularity and causality of the development of events. However,

reality does not support the view of indeterminism. The relationship of determinism manifests its main expression more prominently in the interaction of cause and result.

a) In dialectics, along with the principles of communication and development, the principle of **determinism (means to determine)** also occupies a very important place. This principle shows that all events and processes in the world are conditioned by certain reasons. They arise, develop and perish in a regular manner. A number of dialectical categories express the principle of determinism. The first place among them **is cause-and-effect relationships**. An event that comes before a certain event and **causes** it is called a cause. The **result is the conclusion of the cause**. Cause-and-effect relationships are the most general in scope. They have a time sequence. In other words, the cause comes first, and then the result. Then these signs are necessary and unambiguous. This means that where there is a cause, there is necessarily an result. Causal relations are unidirectional, that is, they are asymmetric in terms of time. In other words, first the cause appears, and then the result. However, the previous event cannot be considered as the reason for the next one. For example, even though lightning appears before thunder, it is not its cause. Cause-effect relations are **universal, objective and necessary**. They are infinite in space and time. A complex form of cause-and-effect relationships is interaction. In this form, cause and effect influence each other. In other words, both of them play the role of cause and effect. There are **different types of reason**: the first of them is called **complete reason**. It is the totality of all the events that give rise to the result. Then comes the **specific reason**. It is a set of conditions, the interaction of which produces the result. One of the types of reason is the **main reason**. It plays a decisive role among other reasons. Reasons can be **objective and subjective**. Objective reason manifests itself independently of people's consciousness and will. The subjective reason expresses the purposeful actions of people, their determination and organization, experience and knowledge. Certain **conditions are** necessary for the cause to manifest itself. **Conditions** are a set of conditions necessary for the occurrence of a certain event. It covers both specific events and the environment. It is true that circumstances do not produce results by themselves. But if there are no conditions, the cause that creates the result does not materialize. For example, when germs enter a person's body, they may or may not get sick. It depends on the specific circumstances. The excuse also plays a certain role in the realization of the cause. But the excuse does not create the result. It accelerates its occurrence.

b) **The categories of necessity and chance** mean the level of determination in the interaction of events. **Necessity** is a consequence of the essence, internal relations and contradictions of events. It shows that this event must happen in this way. An example of necessity is metabolism in living organisms. It comes from the essence of life. **Coincidence**, as a rule, is the result of external, auxiliary, unimportant relations for those subjects. Therefore, it may or may not happen. It can happen not only in this way, but

also in another way. In the history of philosophy, there have been two conflicting views on the explanation of necessity and chance. The first point of view denies the objectivity of necessity (Kant, subjective idealist Max and others). Another approach accepts necessity and completely denies chance. For example, according to Democritus, Spinoza, Holbach and others, people invented the concept of chance to express an event for which they did not know the cause. Both views are limited and one-sided. Thus, necessity and chance are closely related. There is no coincidence without necessity, just as there is no necessity without coincidence. They mutually penetrate each other.

The interaction of necessity and chance is characterized **by several moments**. **The first point** is related to the understanding of necessity and chance as a pair of categories. The relationship between these categories is dialectically contradictory: they condition each other, one does not exist outside of the other; and one negates the other. Neither chance nor necessity exists purely. **The second point** is related to the characterization of chance as a form of necessity. Necessity always makes its way through the mass of coincidences. **The third moment** is expressed in the idea that coincidences complement necessity. Finally, **the fourth point** is that in the course of the development and evolution of material systems, necessity and chance can become one another. The following is an example of this conversion. The evolution of species in the organic world is carried out on the basis of changes in the genetic structure of individual organisms. These changes are random because they are determined by external conditions that are negligible for those organisms.

c) **Possibility and reality.** In the limited sense of the word, the **concept of reality means** an existence that exists directly. Approached in this way, it is taken in proportion to opportunity. **Reality means** the concrete existence of this or that object at a certain time and under certain conditions. The actual existence of any material object expresses its reality. The concept of reality is compared to the concept of possibility in terms of its content and essence. **An opportunity is a situation or condition** in which some of the determining factors are present. The other part is absent or the determining factors are not mature enough for the emergence of a new phenomenon. **Opportunity** means having a future in the present. It means that which does not exist in the current qualitative definition, but which is formed and can exist under certain conditions, can become a reality. **Two conditions** are required for the possibility to become a reality. **The first of them is the operation of a certain law, and the second is the development of appropriate conditions.**

There are **different types of opportunities**: significant and non-significant, reversible and non-reversible, formal and real. **Returning** (returning) possibility is called such that when it becomes reality, the original reality falls into the form of possibility. An example of this is the transition of water from a liquid state to a gaseous state. Opportunities that are the opposite of this, i.e. opportunities that cannot be returned to

their previous state after becoming reality, are called **irreversible opportunities** . An example of this is the possibility of human death. After passing through this life, that is, when a person dies, he completely loses the ability to return to the previous state. The **real and formal types of possibility** show how it relates to necessity and chance. Thus, the possibility related to coincidences is considered a formal possibility. For example, it is possible to win a lottery ticket. Because the realization of such an opportunity means the intersection of a large amount of necessity at one point. Therefore, the degree of probability of such possibilities is slightly higher than zero. Real opportunities are related to necessary properties and relationships. For example, a high school graduate entering a university is an example of such an opportunity. If the applicant has submitted documents and has a high level of preparation, this opportunity is almost a hundred percent real.

Abstract and concrete capabilities are related to the stages of development of material systems. An abstract opportunity is an opportunity that does not have the conditions for its realization at the current stage of development. Conditions for its implementation may arise in the future. For example, the possibility of a Turkish sultan becoming the Pope of Rome is an abstract possibility for today. Unlike this, a concrete opportunity is an opportunity that, in the current situation, can create appropriate conditions for its realization. For example, the fact that an English-speaking Azerbaijani youth can become a representative of the US Senate is an example of a concrete possibility.