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## MIYA FAOLIYATIDA INTUITSIYANING RIVOJLANISHI

Annotasiya

Bilish jarayonida sezgi faolligi, miya va uning tuzilishi, tarkibi ishlash jarayoni xususida soʻz yuritilgan. Shuningdek, miyaning oʻzn va chap yarim sharlari, ularda intuisiyaning sinergetik tahlili aks etgan.

Kalit soʻzlar: Sezgi, miya, bilish, ilmiy bilish, intuitiv bilish, sinergetika, ilmiy tafakkur, xotira, diqqat, tasavvur.

## DEVELOPMENT OF INTUITION IN BRAIN ACTIVITY

Annotation

In the process of cognition, sensory activity, the brain and its structure and composition are discussed. Also, the right and left hemispheres of the brain reflect the synergetic analysis of intuition.

**Key words:** Intuition, brain, cerebral cortices, cognition, scientific cognition, intuitive cognition, synergetic, scientific thinking, memory, attention, imagination.

## РАЗВИТИЕ ИНТУИЦИИ В МОЗГОВОЙ ДЕЯТЕЛЬНОСТИ

Аннотация

В процессе познания рассматривается сенсорная деятельность, мозг, его структура и состав. Также правое и левое полушария головного мозга отражают синергетический анализ интуиции.

Ключевые слова: Интуиция, мозг, кора головного мозга, познание, научное познание, интуитивное познание, синергетика, научное мышление, память, внимание, воображение.

**Introduction**. Sensualism is a direction in the theory of knowledge that recognizes sensations as the main source of knowledge. He explains the nature of knowledge by linking it to the activity of the senses. In the sources, sensualism is contrasted with rationalism. But in our research, sensualism and rationalism are intertwined. Representatives of sensualism believe that knowledge is not given to a person by birth, it is formed and developed during life experience. Sensualism has a basic principle that "what is not in the senses is not in the mind."

Things and events in the world are the perception of certain properties in the brain. A means of connecting a person with the outside world, the initial stage of knowing the world, is a direct subjective reflection of the objective world. Forms of emotional cognition such as perception and thinking arise on the basis of sensations. Depending on the specific characteristics of external stimuli, all senses are divided into visual sense, body sense, hearing sense, taste sense, smell sense and other types. Sensation appears in physical, physiological, psychological processes. Sensory organs are related to the activity of the large hemispheres of the brain. Each group of sensations has its own set of modalities - qualities, and these qualities cannot be equated with the qualities of other groups of sensations. For example, colors are not like sounds or smells. The sense of sight is the most developed type of sense. It is followed by the sense of body, the sense of taste, and the sense of smell.

In sensualism, the basic principle that "what is not in the senses is not in the mind" believes that emotional cognitions are related to the objective world. Thomas

The central part of the nervous system of humans and animals, the brain provides control of the most complex vital functions of the organism and interactions with the environment. The brain is located inside the cranium, and as it grows, it takes its shape. The human brain consists of an average of 100 billion neurons, and it "consumes" 50% of the blood glucose produced in the liver. The neurons that make up the brain transmit nerve impulses to each other at a speed of 270 km/h. We have all read that the number of neurons does not increase, but neurons grow throughout a person's life. A single neuron can remember five times more information than any encyclopedia.

Brain cells are oxyline cells, they use 20% of the oxygen that enters the circulatory system. At the same time, 80% of the brain is water, so a person needs to constantly drink enough water. The brain makes up an average of 2% of the human body mass. On average, it can be in the range of 1000-2000 g. Although it is written in our textbooks that a person's mental activity does not depend on his brain mass, in many studies it has been found that there is a positive correlation between brain mass and mental ability and mastery.

**Materials and methods**. Major representatives of empiricism are F. Bacon and J. Locke. Francis Bacon (1561-1626) is the first great researcher of modern cognitive theory. He took an experimental route in his research and emphasized the importance of observation and experimentation in getting to the bottom of reality.

Thomas Hobbes (1588-1679), an English philosopher, believed that no idea can be innate in the theory of knowledge, that external sensations are the source of all our knowledge, not just ideas. [theories of human nature, Hackett publishing company. 2022. Page 45.]

Paul Henri Holbach (1723-1789) French philosopher, a materialist sensualist view in the theory of knowledge, "everything that affects our sense organs in any way is matter [Гольбах Поль Анри. Избранные произведения в двух томах. М., «Мысль» 1963 С. 512-513.]

John Locke (1632-1704), an English philosopher, believed that the source of external experience is the objective reality that affects our senses, and the source of internal experience is one's inner feelings and experiences. [Джон Локк Опыт о человеческом разумении. Аз., 2022. -С.55.]

**Main part.** Bacon had put forward the idea that philosophy should first of all acquire a practical character. He considered the domination of man over nature as the highest goal of science, which could be achieved only by obeying the laws of nature. Bacon put forward the famous slogan "Power is in knowledge". Man, who is the servant and interpreter of nature, understands

and understands only to the extent that he is able to encompass nature in his work or thought: beyond this he does not know and cannot know anything.

No power can break the chain of causes: nature can only be overcome by obeying it. Sciences that study the process of cognition and thought serve as the key to all other sciences, because they have "weapons of the mind" that instruct the mind or protect it from errors (idols). Observation, analysis, comparison and experimentation are the paths to knowledge. In his research, the scientist should move from the observation of some evidence to broad generalizations, that is, he should use the inductive method of knowledge. He founded the methodology of experimental natural science. Using this methodology, new scientific discoveries can be made. But experience can only give reliable knowledge if the mind is free from the ghosts of falsehood. "Seed ghosts" are errors related to human inferences about nature by analogy with human life. "Ghosts of the cave" consists of mistakes that acquire an individual character related to the upbringing, tastes and habits of some people. F. Bacon says that all these idols "must be rejected and thrown away, the mind must be completely freed from them, purified." But how to achieve this? For this, each science, each theory, each theoretical conclusion should be based on empirical data, and the induction method should become the only correct method of research. Induction (lat. inductio - from the word to avoid) method requires that any theoretical conclusion should be based on experimental data. Bacon opposes induction as a method to deduction (from the Latin deductio - conclusion). In deduction, reasoning moves from top to bottom, from general considerations to specific evidence. The method of deduction is the source of many errors. The most reliable method is the movement of thought from the bottom up - the induction method. At the same time, F. Bacon is not a supporter of one-sidedness in evaluating different methods of research. He notes that the most effective scientific knowledge can only be the product of experience and reasoning, analysis and synthesis, induction and deduction. [Бэкон Ф. Сочинения в двух томах. М., «Мысль» 1978. С.112-113.]

Thomas Hobbes's theory of knowledge is based on the principles of sensualism. Hobbes believed that even if spiritual substances existed, they would be unknowable. He did not believe that disembodied souls could exist. Hobbes strongly condemned bigotry and superstition, but believed in the existence of God. He saw God as the source of the primordial energy of the universe, the first cause of all existence. According to Hobbes, God does not interfere in worldly processes. Hobbes notes that the ability to reason is not an innate ability, like the senses and memory, and is not only acquired through experience, but is first formed as a result of the appropriate use of the names of things, and the acquisition of a good and correct method. Intuition and memory only give us knowledge about the evidence that happened, and science means knowing the connections and connections of evidence events. Hobbes makes similar comments about the signs of scientific knowledge. He believes that some signs of scientific knowledge are reliable and infallible, while others are unreliable. Evidence of such knowledge is reliable if the person who claims to possess knowledge about something is able to teach it, that is, to prove the correctness of his claim to another person in a reasonable way. Such evidence of knowledge is unreliable, as only certain private events are consistent with his claim, and many occur as a result of coincidences. Reasonable signs are always reliable, because it is impossible to see and remember in the experience all the circumstances that can change the obtained result. Thus, the light of the human mind is words that are in accordance with the mind, but cleared beforehand of any ambiguity with clear concepts. Reflections are a step, growth of knowledge is a path, welfare of human race is a goal. No idea can be innate to the theory of knowledge, external sensations are the source not only of ideas, but of all our knowledge in general. The cerebrum, or telencephalon, is the largest part of the brain and includes the cerebral cortex (of the cerebral hemispheres) and several subcortical structures such as the hippocampus, basal ganglia, and olfactory bulb. In the human brain, the cerebrum is the highest region of the central nervous system. The prosencephalon, or forebrain, is the embryonic structure from which the brain develops prenatally. In mammals, the dorsal telencephalon, or pallium, develops into the cerebral cortex, and the ventral telencephalon, or sub pallium, develops into the basal ganglia. The brain is also roughly divided into symmetrical left and right cerebral hemispheres.

Raised by John Locke in his doctrine of "primary" and "secondary" properties. The modern interpretation of the nature of sensations is based on three positions: 1) the objectivity of all properties, the quality of things: primary and secondary; 2) absolute identification, not allowing simultaneous feelings and characteristics of external things; 3) to avoid only a symbolic, subjectivist approach to emotional reflection.

The brain is the largest part of the brain. Depending on the position of the animal's body, it lies in front of or above the brain stem. In humans, the cerebrum is the largest and most well-developed of the five main brain divisions.

The brain consists of two cerebral hemispheres and their cortices (outer gray matter layer) and underlying white matter areas. Its subcortical structures include the hippocampus, basal ganglia, and cilia. The brain consists of two C-shaped hemispheres, which are separated from each other by a deep longitudinal fissure of the brain.

Cerebral cortex. Our cerebral cortex is the outermost layer of our brain. Its surface has many folds, giving it a wrinkled appearance. The folds consist of many deep grooves called sulci and raised areas called gyri. These folds add to the surface area of our cerebral cortex, allowing large amounts of information to be processed by more nerve cells. Our cerebral cortex makes up about half of our brain's total mass.

Cerebral cortex consists of six layers of nerve cells that contain between 14 billion and 16 billion nerve cells. It's two millimeters (mm) to four mm (0.08 inches to 0.16 inches) thick.

Cortex is divided into four lobes: frontal, parietal, temporal and occipital. Each of these lobes is responsible for processing different types of information. Collectively, your cerebral cortex is responsible for the higher-level processes of the human brain, including language, memory, reasoning, thought, learning, decision-making, emotion, intelligence and personality.

Frontal lobe is at the front of our brain behind our forehead. Functions of frontal lobe include: Decision-making, problem-solving; Conscious thought; Attention; Emotional and behavioral control; Speech production; Personality; Intelligence; Body movement. Special areas of note within this lobe are the motor cortex, the prefrontal cortex and Broca's area. Your motor cortex is responsible for body movement. Your prefrontal cortex is in charge of "executive functions," such as thinking and problem-solving. It also supervises and directs other areas of your brain. Broca's area is a part of your frontal lobe that's involved with speech production.

Occipital lobe is at the back of our brain. Functions of occipital lobe include: Visual processing and interpretation; Visual data collection regarding color, motion and orientation; object and facial recognition; Depth and distance perception; visual world mapping.

The surface of the brain. The cerebral cortex, the outer gray matter layer of the brain, is found only in mammals. In large mammals, as well as in humans, the surface of the cerebral cortex folds to form folds and folds and expand the surface area. The brain controls all voluntary movements in the human body with the help of the cerebellum.

Left and right. The left part is mainly for logic, the right part for emotions answers.

The left part is a text memory: various words, texts, numbers, facts, analysis, etc. The right part is emotional memory: the five senses –sight, hearing, smell, taste and tactile memory.

The left part has a 10% recall potential. Right part 90% has the potential to save information. Because, think about it, do you think through imagination or not Do you have texts in your mind? Imagination of course. Imagination is 80% of the power of recall. Remaining feelings the remaining 10% will be shared.

A person with RHD may have trouble with:

Attention. They may not be able to focus on a task or what they see or hear.

Perception. They may have left-side neglect. This means that they will not see objects or people on their left side. For example, they may have trouble reading words on the left side of a page. They may ignore food on the left side of their plate.

Reasoning and problem solving. They may not know that there is a problem, like running out of medicine. Or, they may not know how to solve the problem, like calling for a refill.

Memory. They may not remember information they learned before. They may have trouble learning new information.

Social communication. They may not be able to understand jokes or nonverbal cues. For example, they may not understand what someone means when they shrug their shoulders. They may say the wrong thing at the wrong time or interrupt others.

Organization. They may have trouble putting information together logically. This can cause problems when telling stories or giving directions. They may also have trouble planning. So, they might forget to respond to your calls or e-mails or lose information.

Insight. They may not recognize that they have any problems. Or, they may not realize that their problems cause trouble at home, school, or work.

Orientation. They may have problems knowing the date, time, or where they are. They may not remember information like their birthday, age, or family names.

The person may also have problems using their arms or legs. The right side of the brain controls the left side of the body. This means that their movement will be worse on the left side.

According to Sperry's dated research, the left brain helps you with: logic; sequencing; linear thinking; mathematics; facts; thinking in words.

The right brain is more visual and intuitive. People sometimes refer to it as the analog brain. It has a more creative and less organized way of thinking.

Sperry's dated research suggests the right brain helps people with: imagination; holistic thinking; intuition; arts; rhythm; nonverbal cues; feelings visualization; daydreaming.

**Conclusion.** To conclude, that the brain can work 30, trillion function in one second. It is the faster and more than modern computers and new technologies. We have to use it not only our retune, but in scientific knowledge too. Intuitive knowing is an ability that can easily rise from one level to another. This ability allows a person to perceive reality not only in a general way, but in its entirety. Intuition does not overlook anything, and nothing is secondary to it. Intuition, which is historically considered a unique phenomenon, and the reasons for its occurrence, as well as its characteristics, a well-known psychologist shows its factors: (1) clarity of mind perception, (2) the ability to see the essence of complex problems, (3) in the process of solving a problem general features such as being able to penetrate not only within one field, but also into other fields, (4) being able to predict the future development of one's field of activity.

## REFERENCE

- 1. Nadirova, Z. P. (2021). Intuition and synergetics in the world of mathematics. Scientific reports of Bukhara state university, 5(4), 18-28.
- 2. Надирова, Зоира Паяновна Интуиция и синергетика в научных исследованиях // ORIENSS. 2023. №1. URL: https://cyberleninka.ru/article/n/intuition-and-synergetic-in-scientific-research (дата обращения: 13.02.2023).
- 3. Надирова Зойира Паяновна. (2022). Интуиция и синергетика. Евразийский научный вестник. 7.243–246. Получено с https://www.geniusjournals.org/index.php/esh/article/view/1198.
- 4. Nadirova, Z. P. (2022). Memory in the process of scientific research and the role of breaks in it. Scientific reports of Bukhara State University, 2022(1), 93-103.
- 5. Паяновна Н.3. кандидат философских наук, доцент Каршинского филиала ТУИТ, независимый научный сотрудник. Научные отчеты бухарского государственного университета 93