

# Psychological mechanisms of intuition and its gnoseological status

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**Abstract:** Intuition is one of the most mysterious and, at the same time, everyday phenomena of human cognition. It manifests as a sudden enlightenment, "inner voice," or anticipation, allowing for decision-making without explicit logical analysis. In psychology, intuition is often described as a rapid, unconscious process of processing information, while in epistemology (knowledge theory), it occupies an ambivalent position: from a reliable source of knowledge to an illusory phenomenon. This article analyzes the psychological mechanisms of intuition based on contemporary research and its epistemological status, drawing on philosophical and scientific approaches.

**Keywords:** intuition, epistemology, unconscious, insight, epistemology

Intuition is one of the most interesting aspects of human thinking, usually manifested as instantaneous insight or conviction without visible logical chain. In modern psychology, it is considered not as a supernatural phenomenon, but as the result of hidden cognitive operations occurring outside of conscious control. The question of its epistemological status remains open: can intuition be considered a complete and reliable way of acquiring knowledge, or is it merely a useful but vulnerable to errors heuristic? ..."The term intuition comes from the Latin word *intueri*, which translates into Russian as contemplation, seeing, seeing. It is customary to call intuition the moment when a person's consciousness unexpectedly appears without requiring proof, a ready-made result of a previously unsolvable problem" [1].

The nature of intuition and its cognitive functions from a logical point of view are significantly similar to scientific hypothesis, guesswork, fantasy, and other forms of creative imagination. To identify their identity and difference, it is necessary to reveal the dialectical nature of scientific development, and at the same time, to analyze the process of the birth of scientific discoveries [2].

The psychological mechanisms of intuition are rooted in the work of two main thinking systems, highlighted by Daniel Kahneman in his dual model of cognitive processes. According to Kahneman, System 1 operates automatically, quickly, and without conscious control, based on associations, emotions, and accumulated experience. It is precisely this that underlies intuitive judgments. When a person instantly assesses a situation - for example, sensing danger in an unfamiliar

environment or guessing a conversation partner's intentions - this occurs through pattern recognition: the brain compares current stimuli with a vast repository of past experiences stored in long-term memory.

One of the key mechanisms is the unconscious processing of information. Neuroscientific research, including work using functional magnetic resonance imaging, shows that intuitive decisions activate areas of the brain related to emotions and memory, such as the tonsils and hippocampus, long before the prefrontal cortex responsible for rational analysis is involved in the process. For example, in uncertainty-based decision-making experiments, participants often choose the right option intuitively, even without knowing how to explain their choice, because the subconscious integrates many weak signals - facial expressions, tone of voice, contextual cues - which the consciousness ignores due to cognitive overload.

Another mechanism is heuristics - simplified rules that have evolved to respond quickly in conditions of limited time and resources. Psychologists note that intuition is effective in environmentally valid environments - where experience corresponds to reality - but fails in artificial or manipulated contexts, such as gambling.

The study of the phenomenon of heuristic intuition involves turning to the analysis of the concepts of "knowledge," "scientific research," "intuition," "intuitive-heuristic knowledge," and their interrelationships. The broadest of the indicated concepts is the concept of "cognition," the content of which we will consider, orienting ourselves towards the highest form of cognitive activity - scientific cognition. For a general characterization of scientific knowledge, A. Einstein and L. Infeld used the image of a labyrinth. In the course of scientific cognition, the researcher tries to find a way out in the labyrinth of observed facts, to organize the world of sensory perceptions, freely inventing concepts and theories for these purposes. [3]

Moving on to the epistemological status, intuition can be viewed through the lens of cognitive theory as a form of non-discursive knowledge. In classical epistemology, from Plato to Descartes, intuition was often equated with the direct grasp of truths – "intellectual intuition," which guarantees clarity. Modern epistemology, however, is more critical. In empiricism, intuition is an inductive generalization from experience that has no prior status. Kant's tradition distinguishes between sensory and intellectual intuition, but emphasizes its role in the synthesis of experience.

From the standpoint of reliability, intuition is not a valid true belief in the Platonic sense, since justification is often retrospective. The naturalistic epistemology presented by Goldman interprets intuition as a reliable process if it is evolutionarily adapted and leads to true conclusions in typical conditions.

The acuteness of the problem of heuristic intuition is also observed in the socio-practical aspect, since there are spheres of professional practical activity, including the sphere of education, in which intuition plays a primary role, and for representatives of

which orientation in the mechanisms of intuition is a condition for effective practical activity. [4]

In conclusion, we can say that understanding the mechanisms of intuition allows not only to minimize cognitive errors but also to consciously develop this skill through purposeful practice, diverse experiences, and metacognitive control. Ultimately, intuition remains an integral part of human cognition - a bridge between subconscious and consciousness, between speed and accuracy, between discovery and justification.

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