

## HUMAN: PHILOSOPHY OF NATURAL AND ARTIFICIAL INTELLIGENCE

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### Abstract

This article analyzes the relationship between natural human intelligence and artificial intelligence from both natural and technological perspectives. It highlights how artificial intelligence is increasingly becoming a powerful technical tool in the modern world, while also pointing out the absence of ethical and moral standards within such systems. Despite sharing common features like algorithmic thinking, learning, and adaptability, the article offers a philosophical perspective on the fundamental differences between artificial and natural intelligence, particularly in terms of their technological and human aspects.

**Keywords:** Natural intelligence, artificial intelligence, nature of mind, evolution, consciousness, element, structure, modern science, synergistic laws, science, technology, information security, artificial intelligence.

### Introduction

Artificial intelligence refers to an intelligent artificial system designed to perform human-like logical and creative functions. The term is also broadly applied to any technology that demonstrates traits commonly associated with the human mind, such as learning and problem-solving. One of the defining characteristics of artificial intelligence is its ability to evaluate and execute actions that are most likely to achieve a specific goal.

Today, AI consists of algorithms and software systems capable of performing a range of tasks traditionally carried out by the human mind. While scientists are eager to experiment with and explore the potential of AI, many people remain cautious about its implications. Even Elon Musk, CEO of Tesla, has described AI as a major threat to humanity, potentially leading to conflict and widespread unemployment.

The word intelligence comes from the Latin term *intellectus*, which means to know, understand, or perceive—essentially, the capacity for thought and comprehension.

Intellect refers to the capacity for thinking, rational cognition, and related mental functions. More broadly, it is considered a synonym for thinking ability and the cognitive development of an individual. Intellect (or reason) is the ability to adequately assess various situations—especially unfamiliar ones—by regulating one's behavior accordingly. It involves the capacity to understand the relationships between facts and events in life, which is essential for developing actions aimed at achieving specific goals.

From the definitions above, it can be concluded that intellect is a unique characteristic specific to human beings and serves as a key indicator of a person's cognitive capabilities. Psychologists have developed specialized methods that allow for the assessment of an individual's intellectual level through experimentation. These studies have revealed that variations in intellectual capacity



among individuals resemble variations in physical abilities—both show measurable degrees of divergence.

The synergetic analysis of the relationship between human natural intelligence and artificial intelligence is primarily grounded in reason and cognition. The term synergetics, derived from the Greek word meaning “acting together,” refers to a modern interdisciplinary scientific-philosophical methodology that explores all forms and laws of human thought in a continuous, multifunctional, and multidimensional framework without strict boundaries.

In the scientific community, one of the most complex and crucial issues is the interrelation between natural and artificial intelligence. Applying the principles and laws of synergetics to this relationship has the potential to bring about unprecedented innovations and revolutionary developments in science and technology. The concept of "social time" has intensified interpersonal interactions, sharpening them from both spatial and temporal perspectives.

Throughout history, human intellect has driven adaptation and progress, transforming natural resources into technological processes and unlocking vast potential. However, at the current stage of advancement, humanity faces a new and uncertain trend: the growing integration of artificial intelligence into nearly all areas of daily life.

Today, many researchers are conducting studies to better understand the synergetic connections, similarities, and core differences between natural intelligence (the innate cognitive, creative, and adaptive abilities of living beings) and artificial intelligence. Creative thinking, in particular, remains a uniquely human trait. It stems from a deeply complex and nonlinear interaction of cognitive, physiological, social, and spiritual elements—a reality far beyond what current technological processes can replicate.

The definition of intellect and cognition has long been a subject of extensive debate and interpretation. Researchers generally define intelligence as a living being’s capacity to adapt to changes in the environment, solve complex problems, and learn from experience. Addressing such complex phenomena through a synergetic methodology is seen as a justifiable approach to achieving meaningful goals, regardless of the means involved.

In his article "The Nature of Intelligence", Professor Barco Ji Yu of Heidelberg University in Germany describes intellect as a set of cognitive functions that enables humans and animals to understand, model, and predict phenomena in the surrounding world. Artificial intelligence, in contrast, attempts to replicate these cognitive processes through computer algorithms and machine learning techniques. As Lev Craig, editor of Enterprise AI at TechTarget, explains, AI refers to a system’s ability to perceive external data, learn from that data, and perform tasks that typically require human intelligence.

Natural intelligence is more closely aligned with the gradual evolutionary development of humanity, having emerged over centuries as a result of adaptation to the environment, existence, and the universe as a whole. This process led to the evolution of unique cognitive forms specifically suited for survival. In synergetics, this is viewed as a nonlinear and often non-rational cognitive process that occurs in the human mind when faced with complex social phenomena. For example, the irreversibility and uniqueness of both natural and societal laws illustrate how living organisms developed specific cognitive abilities that enabled them to build complex structures, organize communities, and adopt social strategies to preserve their values and protect future generations.



A person's natural intellect is also deeply characterized by the interaction between the body and the mind. Human motor functions and emotional capabilities are closely linked to cognitive processes, governed through what is known as "embodied cognition." This concept highlights how interaction with the physical and material world directly influences perception and creative thinking.

Such embodied and emotionally grounded processes do not exist in artificial intelligence. Although AI systems can analyze data and perform tasks through algorithmic logic, they lack the physical experience and intuitive understanding that comes from direct engagement with the real world. As a result, AI operates within pre-programmed boundaries and cannot go beyond the limits set by its design.

Artificial intelligence is rapidly evolving into a powerful and sophisticated tool, enriched in various aspects. However, due to its inherently non-natural nature, it faces limitations that prevent it from delivering truly comprehensive or flawless operational models. In his article "The Nature of Intelligence", Barco Ji Yu analyzes the methodologies applied in AI and points out that although AI algorithms are based on vast datasets, their capacity to "understand" is restricted to mathematical formulas and statistical patterns. This enables AI to perform well in specialized tasks such as image recognition, natural language processing, data comparison, and analyzing linguistic features. However, it remains distant from engaging in philosophical reasoning or creatively processing synergetic complexities.

It is worth noting that AI operates on artificial neural networks modeled after the human brain. Nevertheless, these networks represent only a simplified version of biological cognition. AI lacks the capacity to process transitions from chaos to order, or from linearity to non-linearity—key features of systems capable of self-organization. This highlights a fundamental mismatch between natural and artificial intelligence.

Natural intelligence is far more complex and profound. It encompasses intuitive understanding, emotional responses, and conscious interaction with the environment—all of which are deeply synergetic processes. These qualities enable humans to navigate and adapt to the world in ways that artificial systems, no matter how advanced, are still unable to replicate.

The distinction between the human mind and artificial intelligence also touches on deeply philosophical and synergetic issues, such as consciousness, thought, and self-awareness. Natural intelligence—particularly the human intellect—encompasses elements that are extremely difficult to replicate through artificial means. As highlighted in several online articles and discussions across various social media platforms addressing the philosophy of AI, philosophers remain divided on a fundamental question: Can artificial intelligence truly possess consciousness? To date, there is no consensus on this matter.

In the past five years, Uzbekistan has implemented a wide range of reforms aimed at introducing and expanding the application of artificial intelligence technologies. These reforms have focused on promoting the use of digital data and advancing the AI sector to meet global standards. Efforts to develop this field are accelerating rapidly. Notable initiatives include the expansion of IT Parks, the "One Million Coders" program, and the creation of Youth Technoparks—all of which inspire great hope for the sustainable development of AI in the country.

Globally, more than 30 countries—including the United States, Germany, Japan, France, South Korea, and Canada—have adopted national strategies for the development of artificial



intelligence.

Today, developments in the field of artificial intelligence are producing astonishing results. However, they also bring to the forefront ethical and trust-related issues. As noted by Indian researcher Mohana Das in his article "Artificial Intelligence Will Never Be Truly Intelligent", AI is still prone to errors, and in some cases, its algorithms may make incorrect decisions that could cause harm. This is particularly critical in fields like medicine, security, and the judiciary, where decision-making requires a high degree of responsibility and awareness.

In conclusion, while there are some common characteristics between artificial and natural intelligence—such as the ability to learn, understand, and adapt—there are also significant differences between the two. Natural intelligence is the result of long-term evolutionary processes, closely linked to physical experience and social interactions, while artificial intelligence is limited by predefined norms in its understanding of the world.

Each type of intelligence possesses its own unique characteristics, which cannot be easily interchanged in specific domains. At present, artificial intelligence cannot fully replicate the consciousness and knowledge inherent in natural intelligence, and it may never overcome this barrier.

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