

The Concept and Structure of Matter

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Abstract

This paper explores the fundamental philosophical category of matter as an objective reality that exists independently of human consciousness. The author proposes an original three-level classification of the material world, encompassing inanimate, living, and intelligent forms of existence. Particular attention is paid to the demystification of consciousness, which is treated as a material process, and the introduction of the concept of "distributed mind" as the highest form of organization of matter. The article formulates an expanded list of universal properties of matter, including its substantial self-sufficiency, qualitative inexhaustibility, and systemic hierarchy.

Keywords: matter, mind, consciousness, distributed mind, determinism, ontology, philosophical materialism.

1. Definition and boundaries of the concept of "matter"

Matter is a fundamental philosophical category used to denote **objective reality** that exists independently of human consciousness. This concept encompasses the totality of objects and phenomena accessible to empirical knowledge through the sensory organs and technical devices, as well as the field of theoretical thinking. The scope of the concept includes both currently known aspects of being and those that may be discovered in the future or will remain inaccessible due to the fundamental impossibility of fully exhausting the infinite material world.

The concept of matter is inclusive: it covers all spheres, including the spiritual as a specific manifestation of the human psyche. **Consciousness** is determined as a material process conditioned by the functioning of a biological substrate — the brain. The images generated by consciousness are not transcendent entities but an objective reflection of neurophysiological activity, which is verified by the possibility of changing them through external material influence on the brain.

2. Criticism of dualism and virtual reality

The division of the world into material and ideal (spiritual) components is recognized as artificial and devoid of scientific basis. Historically, the emergence of idealism is explained by the limitations of scientific knowledge in past eras. At the current stage of knowledge development, there is no evidence for the existence of a separate "ideal world" existing outside of matter.

The argument regarding the "immateriality" of mental images due to the impossibility of their tactile perception is refuted by an analogy with digital environments. Objects in the virtual world have a distinct material nature, being a collection of discrete elements (pixels). Consequently, it is logical to classify the products of brain activity as material phenomena rather than beyond-matter entities.

3. Level classification of matter

The material world is in a state of permanent dynamics and development. Based on the complexity of organization, three hierarchical levels are distinguished:

- **Inanimate matter:** physical objects (substance) and fields.
- **Living matter:** biological organisms (plants, animals).
- **Intelligent matter:** systems possessing cognitive functions (humans, artificial intelligence, state structures).

The transition between levels occurs through the process of complication or simplification (decay) of material systems.

4. Differentiation of the concepts of "mind" and "consciousness"

To eliminate terminological ambiguity, a distinction between these categories is introduced:

- **Mind** — is a material, highly organized self-learning system capable of self-identification and conscious processing of external and internal information.
- **Consciousness** — is an attributive property (capacity) of the mind to perform the processes of distinguishing itself from the surrounding world and processing information.

Intelligent matter is subdivided into **individual mind** (a separate subject) and **distributed mind** (social systems, such as a collective or a state). Distributed mind represents the highest form of organization of intelligent matter.

5. Expanded list of universal properties of matter

The attributes of matter are space and motion, which do not exist outside its framework. Universal properties include:

1. **Substantial self-sufficiency (Uncreatability and indestructibility).** Matter is the sole cause of itself (*causa sui*). This means that the objective world does not need additional external forces for its existence. Any changes represent merely the transition of matter from one state to another, which excludes the possibility of its emergence from "nothing" or total disappearance.
2. **Attributive infinity and qualitative inexhaustibility.** Matter is not only eternal in time and infinite in space, having no beginning or end, but is also inexhaustible in its properties and forms of organization. Each level of matter (from elementary particles to distributed mind) possesses infinite depth for knowledge, making the process of scientific inquiry endless.
3. **Permanent dynamic activity (Self-development).** Motion is not merely external displacement but a mode of existence of matter. It includes all forms of transformations: physical, chemical, biological, and social. Matter possesses an internal capacity for complication and simplification, ensuring the cycle of forms in the universe.
4. **Universal structural determinism.** In the material world, a universal connection of phenomena and causal conditioning prevails. No event is accidental in an absolute sense; "randomness" merely reflects the inability of the human mind to account for an infinite number of determining factors at a given moment.
5. **Ontological singularity (Uniqueness).** Matter exists in the form of an infinite set of unique, individualized objects. Any material system — from an atom to the Universe — is unique in the space-time continuum. This excludes the existence of two identical objects in different points of the universe, emphasizing the individuality of each unit of matter.
6. **Systemic hierarchy (Matter as a "System of Systems").** This property postulates that matter is a collection of interconnected levels. Each object is simultaneously an independent system and

an element of a higher-order system (for example, an individual mind as part of a distributed mind).

6. Ontological conclusions

The fundamental question of philosophy regarding the primacy of matter or consciousness is resolved in favor of matter as the objective basis of being. Idealistic concepts, including theological ones, are interpreted as a consequence of terminological confusion. The category of "God" can be viewed not as a transcendent entity but as a Supermind — a **distributed mind** of a higher order, which remains material and limited by the framework of the space-time continuum. Due to the infinity of matter, no intelligent system is capable of encompassing it in its entirety.