

A Survey of Tripartite Modern Paradigms in Informatology

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Abstract

The focal question in the field of informatology is the nature of information. Modern informatological theories can be grouped in three paradigms, i.e. mathematical-natural paradigm, semantic paradigm and cognitive paradigm. The difference between these paradigms depends on the factors of subjectivity and objectivity. Under the mathematical-natural paradigm, information is studied as a physical-natural entity and semantical aspects are disregarded in this paradigm. In contrary, under the semantic paradigm, information is studied in the realm of statements and propositions. Under the cognitive paradigm, information is studied as a mind-dependent entity. From this perspective, the most important problem is the role of information in transformation of knowledge structure of human mind. All these three paradigms have their ground in Cartesian subject-object dichotomy.

Keywords

Informatology, Theory of Information, Mathematical Theory of Communication, Entropy, Cybernetics, Theory of Semantic Information, Cognitivism.