

Ontological Information

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- A Question – What is Information?
- What is ontological information?
- Ontological information – intuitions and conceptualizations
- Ontological Information- what we have learned?
- A Critique of the concept of Ontological Information
 - Objection One –General Information Model of Information (GDI) will suffice.
 - Objection two- ontological information is reducible to structure
 - Objection three - ontological information is too esoteric to be considered as real
 - Objection four – ontological information is a rework of Form and Eidos
 - Objection five- matter-energy-information is a muddled concept
 - Objection six- ontological information leads to pancomputationalism
- Applications of Ontological information
 - Ontological information and epistemic information
 - Ontological information and concept of computing
 - Ontological Information and quantified models of information
 - Ontological Information and structural realism
 - Ontological Information and Hylemorphism
 - Ontological Information and infons
 - Ontological Information and pan-informationalism and pancomputationalism
- Ontological information - Conjectures
- Conclusions
 - What the study was able to establish
 - Main characteristics of ontological information – summary

This study is about the nature of information. We investigate the concept of information that may be characterized as an objective (mind-independent), physical phenomena, that does not have an inherent meaning or value, that is perceived as a structure, organization or form of natural objects and artifacts, but itself, is not a visible structure of these objects. Information having these characteristics or some of them, we denote as ontological information. The concepts similar to ontological information have been explored or proposed in the past sixty or so years. But the comprehensive analysis of this concept, and this is what this study intended to do, has not been attempted before nor the impact of having such a concept on ontology, computing, communication, information sciences, philosophy, epistemology, and cosmology have not been evaluated.

The concept of ontological information apprehends information on a more fundamental level than do most of the (at the time of this writing) concepts of information formulated in communication theory, computing, information sciences, cognitive sciences, AI, biology, popular works on information, or library sciences, as well as in different strands of pancomputationalism, natural computing, or digital physics. The deep roots of the notion of ontological information are in a modern combinatorial ontology, the concept of natural computing, the medieval concept of *informare*, and in some (maybe more metaphorical) sense in ancient concepts of *eidōs*, *morphe*, form and Tao, but this last claim may be disputed and is not firmly established (is anything in philosophy ever “firmly established”?).

We claim that ontological information is a metaphysical concept such as time, substance, causation, or space. We claim this because ontological information is conceived as a fundamental component/constituent of reality, as, substance, time, and space are, i.e. if one asks what is out there, suggested in this study answer would include information in some form. But we do not think, even if it has been suggested by some, that information is everything that is, i.e. we do not claim paninformationalism. Thus, as ontological information is a metaphysical concept, it is in metaphysics

that the nature of information (and ontological information in particular) should be, most probably sought. But information is also a physical phenomena. It means that information exists in the physical world and constitutes an aspect/ part/component of the reality, not something added to it by interpretation. The study of information is therefore the study “what there really is”.

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