A Theory of Semantic Information

Yixin Zhong

Abstract: The information really useful to humans must be the trinity of its three components, the form termed syntactic information, the meaning termed semantic information, and the utility termed pragmatic information. But the theory of information set up by Shannon in 1948 is a statistical theory of syntactic information. Thus, the trinity of information theories needs to be established as urgently as possible. Such a theory of semantic information will be presented and it will also be proved that it is the semantic information that is the unique representative of the trinity. This is why the title of the paper is set to "a theory of semantic information" without mentioning the pragmatic information.