

There is a long logical tradition considering formal constructions (logics, logical systems) dealing with various aspects of propositional content. Unfortunately none of these constructions is successfully protected against antinominality generated by some well-known self-referential expressions like: Liar sentence, Curry's sentence, Yablo's set of sentences, performative counter-tautologies. From the point of view of all known logics and logical systems all these expressions – despite of their intuitivity – lead to still unsolvable antinomies. However, in 1997 I defined new intensional connective of content implication as well as extension of the classical logic by this implication. Among various features of this logic there is one of special importance: on the ground of this logic all the mentioned expressions lose their antinominality. The planned research is to widely consider the phenomenon of the content implication.

Up to now, the antinominality of such expressions like the liar sentence and other relative constructions have successfully blocked a definition of truth on the ground of the popular, well known formal languages. Because of this fact the specific – proposed by Tarski – paradigm of understanding of truth has emerged. According to it the liar antinomy is an unsolvable problem in any language universal in Tarski's sense, i.e. in a language containing names for its sentences. The content implication connective creates a new situation, in which the liar, and all liar-like sentences do not generate antinominality any longer. It is interesting that the language with the content implication connective reveals a universal character -In this language it is possible to express the fact that some sentence predicates on other sentence. Thus, thanks to this new connective the language is universal, although it does not possess names for sentences. Thus, Tarski's dream of defining the truth in the formal universal language finally comes true.

The planned research is based, primarily, on the methods of formal logic and philosophy of language. The research will be conducted in four stages. The first stage of the project is devoted to the issue of self-reference in such areas as the philosophy of language, linguistics, formal logic, logic of natural language and the philosophy of science. Therefore, this research requires the use of methods typical to the logic as well as philosophy. The second stage of the research consists in the comparative analysis of content implication, put together with other connectives sensitive to the content of propositions. The methodology of the research at this stage is characteristic for the formal research on propositional logic. The third stage of research is devoted to the formal analysis of the language with content implication. Consequently, the methods used in this stage are typical to the formal research on algebras, lattices and propositional logics. At the last stage of the planned research the definition of content identity as well as dualizations of some logics will be provided. The methodology of research at this stage is that of the formal-logical analyses of propositional systems.