Summary

This monograph is the result of ten years research devoted to the problems of scientific discourse analysis. It discusses theoretical and methodological problems of text grammar, outlines the conception of scientific discourse structure, describes methods of its analysis.

The development of text grammar as a separate linguistic discipline comprises two main periods. The first one, which in T.Kuhn's terminology may be described as a normal period, had lasted from the end of 60s till the end 80s. This period is characterized by predominance of the ideas of communicative syntax, working out the notion of supra-phrasal unity, studying lexical and grammatical manifestations of connections between sentences. The second period began in the 90s. Its main specific feature is integral approach based on studying not only the communicative but also the other aspects of the text such as nominative, modal, relational. The integral approach to scientific discourse /text/ analysis was suggested in our previous work [306] and is further developed in the present monograph. Within the integral approach the emphasis is made on studying logical relations between judgments expressed by sentences. Three types of such relations have been described in our works: diachronic relation characterizing temporal succession of actions or states of the object, synchronic relation characterizing simultaneous features of the object, causative-consecutive relation based on syllogism. These relations form deep structure /relational aspect/ of the text and correspond to three types of speech: narration, description, reasoning. Logical relations between judgments may be manifested or not manifested in the surface structure of the text /in its communicative aspect/. Sometimes the meaning of lexical and grammatical unites in the surface structure contradicts the nature of logical relations in textual deep structure. E.g. lexical and grammatical unites with causative-consecutive meaning may be used in narration, not in reasoning /see analysis in Ch. 2, § 4/. That is why to reveal logical relations between judgments in textual deep structure a special method is needed. Such method, developed in our works, is called the method of compositional modeling. It includes four procedures: interpretation of nominative, modal, communicative aspects; reduction; normalization; canonization of the text. Application of these procedures makes it possible 1/ to reveal logical relations between judgments in textual deep structure, 2/ to make up a compositional model of the text. The compositional model of the text may perform the function of information retrieval, thus being a kind of a secondary source like the other secondary sources, such as abstracts. So, the study of text's compositional structure may be of importance not only for linguistics but for information science as well.