

**LATIP 2021****International conference «Language and technology in an interdisciplinary paradigm»****TEXT AND DISCOURSE MODELING AS CONTEMPORARY  
RESEARCH TECHNOLOGY**Elena Ogneva (a)\*, Natalia Gusakova (b), Iliia Danilenko (c), Elena Mariasova (d),  
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**Abstract**

The article deals with a text as with a storing, accumulating and transferring knowledge format. A text being "immersed" in a communicative situation is interpreted in a discourse format. It has been determined before that the modeling two formats of knowledge: the text format and the discourse format, reveals the peculiarities of the textual and discourse worlds construction. The study of the textual model structure reveals the presence of two types of nominees, namely neutral vocabulary and culturally-marked vocabulary. It was revealed that a text model is being built on the basis of the correlation of its constituent three types of constructs: lexical units, grammatical constructions and syntactic constructions. It is significant that the three named types of text constructs are synergistic, due to which a single plot-thematic model of the text is formed. We found out that among the culturally-marked lexics, the proxemes and chronemes are highly frequented. The nonlinear discourse model differs from the linear textual model by the presence of extralinguistic parameters which correlate with the linguistic parameters of the model. It is revealed that within the process of transferring the text model format to the discourse model format, the content plan of the text model can be partially transcoded, while the text model plan expression can be transcoded to a greater extent which is due to the parameters of linguistic personalities forming a discourse model based on the text model.

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## **1. Introduction**

One of the topical areas of modern linguistics is the modeling of textual and discourse constructs, which are understood as the various components making up a text and acting as constructs only through the prism of research goals and objectives. In this case modeling should be understood as:

A solid action program that includes a consistently applied set of methods and techniques aimed at systematic representation of any subject area of an object (or objects of an object) to obtain information about this subject which cannot be identified in the case of a descriptive approach. (Belousov, 2010, p. 95)

Text and discourse modeling, aimed at revealing the nature of their construction and functioning, is perceived as a significant stage in the interpretative process that reveals the parameters of the author's world representation in the form of a projection of the author's text world. This projection of the author's textual world, being immersed into a communicative situation, appears before a researcher not in the format of a text, but in the format of discourse, in the format of a discourse model.

### **1.1. Text model**

For a considerable time, text appears as a research object. There are several dozens of definitions of this knowledge format. Alefirenko (2005) views a text as “a solid communicative formation, which components are combined into a single hierarchically organized semantic structure by the communicative intention of its author” (p. 303). There are other approaches to define a text (Aumüller, 2014; Cramer, 2001; Currie, 2007; Ogneva et al., 2014; Tincheva, 2014). When modeling a text, a range of interpretative techniques is used that create a complex interpretative picture of the construction and functioning of a particular textual format of knowledge. The result of penetration into the matter of the text in both cases depends on the description of the text from traditional or synergetic point, provided that the synergy of the text brings “the understanding of complexity to the level of an independent science, this description retains its relevance due to the multiplicity and variety of text dimensions, called features, aspects, layers” (Shchirova, 2014, p. 188).

The variety of textual dimensions is made by the intention of a writer, by his idiostyle and by the plot-thematic parameters, regardless of the world being depicted in the text, real or fictional. Nevertheless, in the case of depicting the real world, “the space of a work or of literature in general or of art needs to be distanced from the world” (McLaughlin, 2016, p. 123). This distancing is achieved by the fact that the parameters of the text model differ from the model of the world itself.

### **1.2. Discourse model**

Modern discourse research is a multi-vector complex system of goals and objectives, the solution of which is based on the synergy of classical and innovative methods and techniques of scientific knowledge, since “the long-term availability of knowledge structures depends on the coherence of knowledge structures” (Beker et al., 2017). The discourse is multifaceted by its nature and can be

interpreted as “a speech-and-thinking formation of an eventful nature” (Alefirenko, 2009, p. 248), which has a thematically given development vector. The development vector in this case is a set of thematic insights, through which the discourse has a “thought-communicative nature <...> refers to the type of objects that can be adequately interpreted only within a nonlinear paradigm” (Shevchenko & Morozova, 2003, p. 33).

The nonlinearity of the discourse paradigm provides the communicative balance of this dynamic system as a cognitive format of knowledge, the evolution of which is due to the evolution of society that implements the communicative function within this dynamic system (Ogneva, 2014).

The study of discourse to interpret and model is based on the study of different segments of the conceptual basis of a language, which is considered as “some kind of a prism based on the cultural and genetic foundations of individual consciousness, which has signs of collective (socio-cultural) consciousness” (Sulimov, 2006, pp. 41-42). Discourse modeling is a complex process of interpreting all the components that make up the model of this exploratory nonlinear construct.

## **2. Problem Statement**

Text and discourse modeling reveals the internal structure of these research constructs, provided that the construct is understood as a content-formal unit of the investigated two-type knowledge format: the linear format of knowledge, i.e. textual knowledge, and non-linear knowledge format, i.e. discourse knowledge.

### **2.1. Transfer mechanism of a textual model to a discourse model**

Due to the text and discourse construction dual nature, their semantic component, which predetermines the parameters of the content component, modeling is based on the synergy of two levels: the semantic level and the formal level. Due to the fact that discourse is a text immersed in a communicative component, two research problems arise:

- identifying of the transfer mechanism of the text semantic component into the semantic component of the discourse;
- identifying of the transfer mechanism of the text formal component into the semantic component of the discourse.

### **2.2. Transfer mechanism as a type of modern research technologies**

The study of the mechanism of text “immersion” into a communicative situation, that is, the study of text model into a discourse model by transfer mechanism, reveals the features of the transfer as one of the types of modern research technologies for the transition of the text model into the discourse model. The transfer of the textual model to the discourse model is considered as an interpretive cross-cultural mechanism.

### **3. Research Questions**

Text modeling reveals the peculiarities of this knowledge format construction. Interpretation of the textual model of knowledge operates with mechanisms of emerging into the semantic level and the formal level of the knowledge format, which is relevant in the study of the discourse levels model associated with these levels. The study of interpretive mechanisms regarding the two specified types of knowledge formats models helps to identify the features of the textual model interpretation and the associated discourse model.

#### **3.1. Interpreting a text model**

Interpreting a text model shows that the textual model is built on the basis of the correlation of its three types of constructs, namely lexical units, grammatical constructions and syntactic constructions. It is significant that the three above listed types of textual constructs are synergistic, due to which a single plot-thematic model of a text is formed.

The study of lexical units reveals the peculiarities of the use of neutral units and stylistically colored units, as well as culturally-marked units in the text model, that is, the features of use of temporal markers, proxemic markers, linguistic and cultural markers, coloratives, food names are revealed. The study of grammatical options of text constructing determines the temporal forms involved in the construction of the text, both as a grammatical type of constructions and as a lexical type of constructions, since species-temporal forms are interpreted as one of the types of markers and at the same time are interpreted as grammatical constructions. The study of the syntactic options of the text mostly reveals the features of the formal construction of the text model.

#### **3.2. Interpreting a discourse model**

Interpreting a discourse model shows that it is built as a correlation of linguistic and extralinguistic parameters, where the linguistic parameters include the features of the discourse information component, and the non-linguistic parameters include the conditions in which the discourse and communicants realizing this discourse are realized.

The linguistic parameters of a discourse model represent the synergy of three types of constructs of the textual model, namely the synergy of lexical units, grammatical constructions and syntactic constructions. Extra-linguistic parameters characterize the linguistic personality of the communicants and the conditions in which the discourse is realized.

### **4. Purpose of the Study**

The study is aimed at identifying the features of the textual models transfer mechanism, consisting of its three types of constructs, namely lexical units, grammatical structures and syntactic structures, into discourse models, which are built as a correlation of linguistic and extralinguistic parameters. The algorithm for identifying the features of the mechanism for transferring a text model to a discourse model is thought of as follows.

#### **4.1. Implementation of the text model interpretation**

Interpretation of the textual model is aimed at reasoning the three types of textual constructs, namely lexical units, grammatical and syntactic constructions.

#### **4.2. Implementation of the discourse model interpretation**

Interpretation of the discourse model is aimed at reasoning the correlation of linguistic and extralinguistic parameters of the discourse model. As a result, it is planned to identify two types of parameters for transferring the textual model to a discourse:

- parameters of the transfer of the semantic level of the text model to the semantic level of the discourse model;
- he parameters of the transfer of the formal level of the text model to the formal level of the discourse model.

In general, the study is aimed at identifying the conditions for correlation and parameters of the semantic level of the text model in the semantic level of the discourse model and the parameters of the transfer of the formal level of the text model to the formal level of the discourse model.

### **5. Research Methods**

The complex nature of the aim of the study predetermines the use of a set of methods, including the method of interpretive analysis of the text model, the method of discourse analysis of the discourse model, the method of interpretive analysis of the mechanism of transfer of the text model into the discourse model.

#### **5.1. Interpretive analysis of the text model**

Interpretive analysis of the text model reveals the features of the construction of the three types of text constructs, namely lexical units, grammatical and syntactic constructions forming text under the study.

#### **5.2. Discourse analysis of the discourse model**

Discourse analysis of the discourse model reveals the features of the construction and functioning of linguistic parameters of discourse and extralinguistic parameters of discourse.

As a result, the application of the method of interpretive analysis of the mechanism of transfer of the text model to the discourse model reveals:

- specifics of the transfer of the semantic level of the text model to the discourse model;
- specifics of the transfer of the formal level of the text model to the discourse model.

The presented correlation of the three methods, namely the method of interpretive analysis of the text model, the method of discourse analysis of the discourse model, the method of interpretive analysis of the mechanism of transfer of the text model into the discourse model, is considered to be the appropriate research resource for text and discourse modeling as a modern research technology.

## 6. Findings

The study of the text models demonstrates that the text world of a writer as a projection of his worldview can be presented in the form of a monomodel and a polymodel. The study of the two types of text models reflected the following specificity of the construction of the text world, the transfer of which converts it into the discourse world.

### 6.1. The monomodel and the polymodel of the text world

In the case of *the monomodality of the author's text world* the implementation of one or more of the same dominant concepts for all conceptual domain makes it possible to trace the plot and thematic unity of conceptual domain in all works of the author.

In the case of *the polymodality of the author's textual world* in the conceptual domain of each individual work, there can be from one to several different dominant concepts. There are three types of the polymodel: a) the plot-thematic synergy, b) the plot-thematic conjugation, c) the contrast of the conceptual domains of all the works of the author with the polymodel of the author's text world:

If several dominant concepts are identical in the conceptual domain of the polymodel text world of the writer, then they provide the synergy of polymodality.

If several dominant concepts are identical, but at the same time in two or more conceptual domain some of the dominant concepts vary by subject matter, then such text models are considered conjugated.

If the conceptualists contain polar dominant concepts, then they provide the polarity of the polymodality of the author's text world.

The studies have shown that both in the monomodel and the polymodel of the text world, in the text projection of the writer's worldview, neutral units prevail. The frequency of stylistically colored units and culturally marked units, such as temporal markers, proxemic markers, linguoculturemes, coloratives, and food names are determined by the cognitive-plot matrix of the text. It was revealed that the specificity of the grammatical options for constructing the text and the specificity of the syntactic options of the text is determined to a greater extent by the formal features of the language. Subsequently, it is not determined by the semantic parameters of the text, that is, its cognitive-plot matrix.

### 6.2. The monomodality and polymodality of the discourse world

Based on the fact that the interpretation of the discourse model is aimed at realization the correlation of linguistic and extralinguistic parameters of the model, the following features were revealed:

- parameters of the transfer of the semantic level of the text model to the semantic level of the discourse model are associated, firstly, with the parameters of the text as a projection of the writer's worldview, constructing a model of the real or fictional world, and secondly, with the parameters of linguistic personalities, constructing a discourse based on the textual model and following conditions for constructing a discourse;
- parameters of the transfer of the formal level of the textual model to the formal level of the discourse model are associated with the formal features of the linguistic personalities that form the discourse. It was found that the transfer of the formal level of the textual model to the

formal level of the discourse model does not depend on extralinguistic factors and is conditioned only by linguistic factors.

In general, it was revealed that the parameters of the transfer of the semantic level of the text model, including its formal level, into the format of the discourse model are determined by the parameters of linguistic personalities forming a discourse model based on the text model.

## 7. Conclusion

Text and discourse models are conjugated by the semantic and formal levels. We implement the transfer of models when the text model is “immersed” in a discourse environment that is characterized by the correlation of linguistic and extralinguistic factors of construction and functioning. Modeling of text and discourse models as a modern research technology elicits the reasons and conditions for transferring the textual world into the format of the discourse world, regardless of its monomodality or polymodality.

### 7.1. Specifics of constructing the text model and text world

The studies have shown the correlation between the textual model and the textual world, both monomodel and polymodel, formed in the minds of the writer and the reader, provided that the textual world of the writer is a projection of his worldview, the parameters of which are determined by the cognitive-plot matrix of the work. It was revealed that the parameters of the text world of the writer and the text world of the reader, formed on the basis of the same art work, can differ, transforming into the category of a discourse model.

### 7.2. Specifics of constructing the discourse model and the discourse world

The discourse model has been shown to represent a correlation of linguistic and extralinguistic parameters. The projection of the discourse model in the aspect of the worldview of the linguistic personalities of the participants in the discourse leads to the formation of the discourse world as a set of discourse models. The number of discourse models in the discourse world is not limited, since it is determined by the amount of transfer of the text model to the discourse model, depending on the number of linguistic personalities that form the discourse model as a part of the discourse world.

Thus, modeling the text world and the discourse world, modeling the transfer of the text world into the discourse world and modeling the process of forming the text world as a set of text models and the discourse world as a set of discourse models clearly reveals the interpretive advantages of modeling as a modern research technology.

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