

Available online at www.sciencedirect.com





Procedia - Social and Behavioral Sciences 200 (2015) 185 - 191

THE XXVI ANNUAL INTERNATIONAL ACADEMIC CONFERENCE, LANGUAGE AND CULTURE, 27–30 October 2015

The Cognitive-Discursive Model of Evidentiality (Authorization)

Tatiana A. Demeshkina^a, Sergei V. Grichin^{b,*}, Natalia N. Sergeeva^c

^aTomsk State University, 36, Lenin Ave., Tomsk, 634060, Russia ^bTomsk Polytechnic University, 30, Lenin Ave., Tomsk, 634050, Russia ^cUral State Pedagogical University, 26, Cosmonavtov Prospekt, Yekaterinburg, 620017, Russia

Abstract

The paper discusses some functional aspects of evidentiality in scientific discourse and dialect speech in Russian. The aim is to show how evidentiality, traditionally called authorization in Russian, can be studied from functional and cognitive-discursive points of view. The authors propose a methodology of revealing additive meanings of evidential (authorizational) structures based on interpretation of subjective components of speech. The interpretation is based on the authorization model proposed by the authors.

@ 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Peer-review under responsibility of National Research Tomsk State University.

Keywords: Evidentiality; authorization; scientific discourse; dialect speech; interpretation; subjective components

1. Introduction

The present paper can be considered as an attempt to interpret evidential structures in scientific discourse and dialect speech in Russian as the ones that express some additive communicative and pragmatic meanings from cognitive and discursive stance. First, we will provide an overview of the works on evidentiality, and explain why we use the term *authorization* to speak about evidentiality in Russian and clarify how the term `authorization' is used in the present work.

It was Roman Jakobson who first used the term 'evidential' it its current linguistic sense. He defined evidentiality as a verbal category, which takes into account three events — a narrated event, a speech event, and a narrated

^{*} Corresponding author. Tel.: +7-923-504-1039; fax: +7-38451-62-792. *E-mail address:* grichinsergei@mail.ru

speech event. Reporting an event, the speaker does so based on someone else's report, a dream, guess or on his or her own previous experience. Thus, evidentiality may be quotative, revelative, presumptive, and memory one. (Jakobson, 1990). Generally, evidentiality can be defined as expressing the 'source of information' for a proposition (Aikhenvald, 2003a; De Haan, 1999). In recent years, the category of 'evidentiality' has come to include a broad set of phenomena, thus making some linguists call for distinguishing the category notionally from other categories (Plungian, 2001, p. 350). Evidentiality is often conflated with epistemic modality, which is "an evaluation of the chances that a certain hypothetical state of affairs under consideration (or some aspect of it) will occur, is occurring, or has occurred in a possible world which serves as the universe of interpretation for the evaluation process, and which, in the default case, is the real world" (Nuyts, 2001, p.21).

The discoursive and pragmatic aspects of evidentiality also attracted the attention of some linguists (Atkinson, 1999; Hill and Irvine, 1993b; Fox, 2001; Mushin, 2001). From pragmatic and discoursive stance, evidentiality is not just the category that possesses a set of morphemes and some lexical means of expressing the source of information, but also a strategy embodied in a statement or text. Moreover, the Russian language, unlike some other languages, does not possess any morphemes that express evidentiality, which means the category is not grammatical here.

In the Russian linguistics, G. Zolotova introduced the term of 'authorization' (avtorizatsiya) to express the meaning of the source of information. She defined it as a means of interrelationship of sentence models, when "another structural and semantic aspect, indicating the subject, the author of perception, statement or evaluation of phenomena, and sometimes the nature of perception, enters a sentence, providing information on reality" (Zolotova, 1973, p. 263). Since then, the Russian linguists have generally accepted authorization as domain encoding 'source of information' not only of a given statement, but on the textual level as well (Vsevolodova, 2000; Shmeleva, 1988).

It has already been demonstrated (Grichin, 2010) that authorization is a characteristic feature of scientific style, as it reflects the specificity of compositional, semantic, and pragmatic structure of scientific text; and in some respects authorization differentiates scientific style and the language of belles-lettres. Within the scientific style it differentiates both structural and quantitative levels (due to quantitative prevalence of prepositional structures among the forms of its expression), and the functional-semantic level (a higher frequency of authorization structures with qualification and detection meanings). It also manifests itself differently in different functional-semantic types of speech within the scientific style and reveals the nature of scientific knowledge by naming sources of information in a specific way. A comparative study of authorization in Russian and English has demonstrated both its common and different features (Grichin, 2010).

As a category, authorization is distinguished by a core, representing its structural and semantic aspect, and denoting the subject of perception, detection or evaluation of the phenomena, and the periphery, describing the nature of perception, detection or evaluation. The category is also dichotomous and can oppose information as ones' own or somebody else's, and present it explicitly or implicitly. Its means of expression belong to different language levels (Grichin, 2010).

Authorization structures can interact with each other within a text, thus being involved in the process of text formation. Upon interaction, they can form "authorization frames". These frames are capable of reflecting the course of the author reasoning and the peculiarities of his/her cognitive process. The frames can form various patterns, their left side introducing information correlating with the right part in terms of contrast, width and narrowness, the whole and its parts, inside and outside. An epistemic key may accompany the change of the authorization key. Being represented in the models described above, the authorization structures can not only build a specific structural and semantic pattern of a text, but also have some pragmatic effect and control the readers' attention (Grichin, 2011).

Some other observations of authorization functioning in the scientific discourse have made it possible to conclude that the meaning of qualification is the dominant one among its other meanings. The volume of the authorized information is limited by some laws of cognition, which leads to the limited amount of objects that can be observed and described by a writer (speaker) simultaneously. Within the evidential structures, objects with less features are described more in detail (Grichin, 2012).

We have also observed that the content structure of scientific works in the aspect of authorization is characterized by the presence of authorization blocks, which correlate with typical situations described in such texts. The authorization blocks are generally marked out in the content structure of a text on a formal basis, by an authorization structure or an authorization frame. The semantic basis of marking them is the thematic homogeneity of a scientific text, while the communicative basis is the expressed pragmatic goal. Authorization blocks are regularly reproducible and structurally unmotivated by their semantic content. We found the following authorization blocks within the content stricture of the scientific text: *term definition*; *forecasting, imperative, appeal to the fact; theory description, information processing* (Grichin, 2012).

The functional study of the language and knowledge presentation in discourse is associated with the cognitive branch of contemporary linguistics. A complete description of the language (speech) phenomena, which manifest themselves on a discursive level, is only possible if the cognitive science is involved, on the one hand, and if these phenomena are included in the scope of communicative branch of linguistics – on the other. The concepts of selective information processing, general fund of knowledge, concept, frame, etc., developed within the cognitive theory of language and relating to the interpretation of the language meaning, have a large enough explanatory power because they relate to human experience based upon knowledge.

We also consider authorization one of the concepts of the cognitive science and describe it as authorization model. We think this model should be based upon isolation from the meaning of the source of information and those various meanings of particular authorization structures, which make up the category. We attempt at building a cognitive model of authorization based on interpretation of authorization meanings, which manifest themselves in texts of research works. We make this attempt within the framework of a cognitive-discourse approach based on interpretation, on the one hand, and information theory, aimed at understanding the laws of acquiring, transforming, representation, storing and reproducing knowledge, on the other.

The proposed authorization model relies on the so-called subjective speech components described by N. Ryabtzeva (Ryabtseva 2005). A complex of the following features characterizes these components: metalevel character, syncretism, situation awareness, intentionality, and suprasegmental nature. The metalevel character is the opposition of subjective components to objective ones and opposition of factual knowledge to its interpretation. Syncretism is the ability of a speech component to be present in a statement in an explicit form, while situation awareness is an obligatory awareness of the current communicative situation manifesting itself in the ability to switch the reader's focus of attention from one object to another, to introduce and change the communicative situation. Intentionality is determined by the norm and ethics of scientific communication, which imply mentioning the sources of information used, and dialogic character of data presentation. Suprasegmental nature of a speech component is the ability of a speech element to create additive meaning and "semantic aura" around the presented information by segmental means (Ryabtseva, 2005).

2. Research and methodology

Revealing most of the described above meanings in an authorization block and interpreting them make a good foundation for a methodology of describing authorization in terms of a cognitive-discoursive approach and formulate the concept of the cognitive-discoursive model of authorization as follows. For the scientific discourse, the cognitive-discoursive model of authorization is a syncretic, multilevel unity of meanings expressed by authorization, based on the communicative intent of the author, and reflecting mental operations associated with processing and presenting of information in scientific text and discourse. The cognitive core of this model is determined by the receptive expectations of the text addressee, which are a focus in a number of research works dedicated to the issues of normative and variable components of the scientific discourse. The model is also a referential one, because reference is one of the cognitive operations associated with text production (Grichin S. V., Demeshkina T. A., 2012).

What is more important, the authorization model introduced for the scientific discourse, can be used to describe other types of discourse if adapted in a certain way. We proceed from the assumption that the authorization structures in scientific discourse, mass media discourse and the dialect speech should demonstrate all the complex of implications subjective components of speech have. The mental processes of the subject associated with information processing become dominant in the scientific discourse, the evaluating activity of the subject prevails in mass media discourse, and direct communication is determinant for the dialect speech.

Thus interpretation of the meanings expressed within the authorized structures (by an authorized structure we consider a single component of a text body explicating the components of its communicative, informational and pragmatic/intentional content) attempts to reveal the complex of meanings of the above described subjective

components of speech. These meanings are interrelated, interdependent, and syncretic. This method is based on the principle of discourse contextual analyses, which includes considering extra linguistic factors such as time, locus, field of activity of the discourse participants and their social roles, behavior, and cognitive characteristics.

To interpret the authorization meanings in the scientific discourse, we will consider an authorization block that we tag as "term definition". This block is an element of the content structure of the scientific text aimed at providing the existing definitions of a scientific term or notion.

Lets us enumerate the most common and interesting definition of 'concept'.

According to R. M. Frumkina, the most successful definition is given by A. Vezhbitska, who thinks the concept to be an object from the ideal world, to have a name and to reflect man's culturally determined notion about the reality.

D. S. Likhachev understood concept as "a sort of algebraic expression of a value a human being operates with in written language'.

R. M. Frumkina determines concept as a verbalized notion, reflected in terms of culture.

From V. N. Teliya's point of vew, concept is a product of human thought and an ideal phenomenon, thus it belongs not only to the linguistic consciousness, but to the human consciousness in the whole. A concept is a construct, and it is not reconstructed, but "constructed" through the linguistic expression and extralinguistic consciousness.

Here are some more definitions:

a concept is a term aimed at explaining the units of mental and psychic resources of our consciousness and of the informational structure that reflects a man's knowledge.

a concept is an on-line unit of memory, mental vocabulary, conceptual system and the language of the brain, of the whole world outlook reflected in the state of mind.

The metalevel character of the authorization indicators in the given example is determined by extralinguistic reasons (the absence of a common opinion among the scholars on the term 'concept', which results in the fact that the factual information does not lead to determining the notion of concept, but rather demonstrates the opinions of some authorities on the content of the term). On the textual level it leads to predominance of authorization structures with qualification meaning (*According to R. M. Frumkina, D. S. Likhachev understood, R. M. Frumkina determines, From V. N. Teliya's point of vew*).

The sycretism of the authorization indicators in this block is in its general intent, which is to determine the term 'concept'. This intent is made up of a complex of various cognitive operations, which produce the corresponding effect. The content of the term is inferred form the accumulated opinions of different authors, these opinions having been compared, contrapositioned, evaluated (*most successful definition*). The syncretism also becomes apparent at the expense of the variety of the authorized structures expressing the quialitative meaning.

The situation awareness of this text segment can be observed both on macro and micro levels. On the macro leve, it is a definition of the term 'concept' (as opposed to other segments of the text with other pragmatic and communicative content), which is marked by the initial (*According to R. M. Frumkina*) and the final (*Here are some more definitions*) authorization structures, thus forming an authorization frame. On the micro level, within the given text segment, the reader's focus of attention is switched from one point of view to another (*A. Vezhbitska - D. S. Likhachev - R. M. Frumkina - V. N. Teliya*). According to N. K. Ryabtseva, "when a new object is introduced, the subjective components of speech insert it in the current communication act, then set and develop this act, which brings about situation awareness" (Ryabtseva N. K., 2005. P. 385). The components of the content structure introduced by each of the authorization structures describe, per se, the new features of the phenomenon (object), i.e. *R. M. Frumkina and A. Vezhbitska - notion about the reality; D. S. Likhachev - algebraic expression; Teliya - concept is a product of human thought and an ideal phenomenon.*

The intentionality of the authorization in this segment can also be described on macro and micro levels. On the macro level, it is determined by reflecting the regularities of scientific research, that is movement from the old to the new knowledge. Citing the known definitions of the 'concept', the author foregrounds the old knowledge and sets it as a methodological basis and guideline for a new conception, which is one's own understanding of the term 'concept'. The implementation of the intentionality corresponds to one of the basic principles of scientific communication, which is intertextuality, determined by the dialogic character of the scientific discourse. On the micro level that is in the surface structure of the text, the intentionality shows itself both in the author's selection of

the information sources, and the authorization structures to introduce them.

The suprasegmental nature, which is adducing new meanings and creation of a semantic aura around the presented information, is in the synergetic effect made by the set of authorization structures with a qualitative meaning. Interpreting the complex of the authorized utterances, we can make the following conclusion. The author intended to illustrate the views of different researchers, whose opinions on the 'concept' are also different. Thus, the analyzed textual segment is the extension of the utterance '*Here are some more definitions*' with the following composite elementary meanings: a) there are many definitions of the term 'concept''; b) these definitions differentiate in popularity; c) some of these definitions are of interest to the author. Each of these meaning (the multiplicity of definitions) is expressed by indicating the number of included sources of information (six), the second meaning (which is evaluative by itself) is expressed by opposing the competent sources of information to the less competent ones (*A. Vezhbitska, D. S. Likhachev, R. M. Frumkina, V. N. Teliya* on the one hand and 'some more definitions' on the other); the third meaning shows itself in the linguistic means of expressing evaluation (*the most successful definition*), and by repetition (*concept is a product, a concept is an on-line unit*).

Let us further illustrate the application of this method on the dialect material.

 govorû, čtob â ŝas ozdorovela, mne toë vse dali v ruki, â b eŝe lučše svoih detej kormila. Kak â togda, â togda ne umela sovsem, teper' naučilas' â. Eŝe žaleû, čto malo u menâ detej, nado bylo bol'še, teper' žaleû, nado bylo mne bol'še rodit', a â malo, čto četvero? U moëj zolovki vosem', ona vyrastila, i mne nado bylo hot' by sem', hot' by šest', moža b drugaâ dočen'ka byla, a to vot odna dočen'ka, tri synočka, a dočen'ka odna (Voloshina Svetlana V., Demeshkina Tatyana A., 2012, p. 19). So I am saying, if I were well now, and if I had all that, I would feed my children better. At that time I couldn't do it, but now I can. I wish I had more children, I should have had more of them. Now I feel sorry. I should have given birth to more, because four is not enough. My sister-in-law has got eight of them, she has brought them up, and I should have brought up at least seven of them. At least six, then I might have had one more doughter, because now I only have one doughter, three little sons, but only one little doughter.

The metalevel character of the authorization block is determined by extraliguistic reasons because it conveys culturally significant information implemented by reminiscences /autobiographic story, which is one of the complex informative genres of the dialect speech (Voloshina Svetlana V., Demeshkina Tatyana A., 2012, p. 15). At a lower level of generalization, the metameaning of "regret" forms the basis of this story, which lays the foundation for the traits of "regret" genre, when *so I am saying* means "I regret having few children".

The sycretism is closely connected with the metalevel character of this authorization block, because 'regret' is one of the informative and evaluating genres, and factual information accompanied by emotional and evaluating components is included here. The 'regret' metacomponent with implications of "grieving, being distressed, being sorry" is repeated sevelal times in the forms of *I wish I had, I should have given birth.* The intentionality of this authorization block depends on some constituent characteristics of the 'regret' speech genre, such as the speaker's awareness of the motive of her intent (including her illness, age, behaviour, and situation). In the case under review, the most preeminant component is probably the situation, which the speakers thinks could have been better under certain conditions. This situation triggers the speaker to inform the adressee about it, to seek the adressee's sympathy and empathy. At the same time, we should mention an existential attitude of the dialect culture-bearer to life. She does not see the situation she lives in as definitely bad. She is only saying that the situation could have been better.

The situation awarenes expressed in this block is caused by a complex nature of regret, but this complexity is of a special type. On the macro level it is manifested by singling out the regret about the insufficient number of children from other components (for which involvement of larger segments of discourse is required, and which is out of scope of the present paper). On the microlevel, it is associated with the breakdown of the described situation into smaller components, that is the ability to support more children (*I would feed my children better*), aquiring the skills of communicating with children (*but now I can*), comparing with the number of children other people have (*My sister-in-law has got eight of them*), thoughts about the desired number of children (*I should have brought up at least seven of them*).

The suprasegmental nature of the block is connected with the special melodicism of the dialectic speech, a semantic aura of the factual content of the statement, the impression of the speaker on the addressee based on her

social, age-related, and gender identity. Considered as a whole, the speech genres form the subjective component of syncretism, because they are characterized by the common subject, method of description, and goal (function). The described above interpretation, based upon revealing the meanings of subjective components of speech within the communicative and pragmatic structure of authorization blocks in the autobiographic story (which includes the genre of 'regret') leads to a deeper understanding of the whole text, on the one hand, and sheds light upon the properties of dialectic form of communication, on the other.

4. Conclusion

The analysis has shown, that interpretation of the authorization meanings through subjective components of speech makes it possible to conclude that the authorization blocks contain multivariate information, and are used as a means of producing and transferring metalevel, situational, suprasegmental, and intentional subjective meanings, which are expressed simultaneously and in a syncretic way. These meanings are introduced by the same linguistic means (authorization structures), which are functionally interdependent. The informational content of an authorization block places it among the cognitive phenomena, which is the phenomena associated with the human cognitive activity and its reflection in the text. The type of the information delivered is also taken into account. The scientific discourse tends to reveal the cognitive operations within the authorization blocks, while the dialect speech is characteristic of cognitive and pragmatic purposed expressed in the texts.

The opportunity to apply the proposed methodology to texts belonging to both scientific discourse and dialect speech indicates its considerable heuristic potential for different types of discourse and imply that the mechanisms of understanding of the situations described in propositions are quite similar. It may also indicate the universal character of thesaurus authors and readers have and the common patterns and stereotypes underlying interpretation, because people can comprehend what we say if their linguistic repertoire activates similar patterns in their minds. We can conclude that the described cognitive-discoursive model of authorization unites the facts of grammar, discourse and cognitive psychology. The grammar facts is the ability of the same type of syntactic structures (namely, authorization structures) to convey the whole complex of meanings of the subjective components of speech. The discursive aspect of the model is in fact that these meanings are determined by the communicative, pragmatic and cognitive sets of the author, while the interpreted meanings of authorization are the focus of the cognitive psychology.

References

- Aikhenvald, A. (2003). Evidentiality in typological perspective. In A. Aikhenvald & R. Dixon (Eds.), *Studies in evidentiality* (pp. 1-31). John Benjamins Publishing Company.
- Atkinson, P. (1999). Medical discourse, evidentiality and the construction of professional responsibility. In S. Sarangi & C. Roberts (Eds.), Talk, Work, and Institutional Order (pp. 75–107). Mouton de Gruyter.
- De Haan, F. (1999). Evidentiality and epistemic modality: Setting boundaries. Southwest Journal of Linguistics, 18 (1), 83 -101.
- Fox, B. (2001). Evidentiality: Authority, responsibility, and entitlement in English conversation. Journal of Linguistic Anthropology, 11 (2), 167– 192).
- Grichin, S. V. (2010). Text building function of authorization. Tomsk State University Journal of Philology, 4 (12), 5-14.
- Grichin, S. V. (2012). Authorization blocks as elements of the semantic structure of a scientific text. *Mir nauki, kulturi i obrazovaniya, 2 (33),* 257-259.
- Grichin, S. V. (2012). Authorization in the semantic structure of a scientific text. V mire nauchnikh otkririy, 5.1 (29), 265-276.
- Grichin, S. V., & Demeshkina, T. A. (2012). The applicative potential of a cognitive-discursive authorization model. *Tomsk State University Journal of Philology, 6 (32),* 5-15.
- Grichin, S. V. (2011). Perceptual authorization in scientific discourse. Tomsk State University Journal, 351, 14.
- Hill, J., & Irvine, J. T. (1993). Responsibility and evidence in oral discourse (pp. 1-23). Cambridge University Press.

Jakobson, R. (1990). Shifters and verbal categories. On language (pp. 386-392). Cambridge, MA: Harvard University Press.

- Mushin, I. (2001). Evidentiality and epistemological stance. John Benjamins Publishing Company.
- Nuyts, J. (2001). Epistemic modality, language, and conceptualization: A cognitive-pragmatic perspective. Amsterdam: John Benjamins Publishing Company.
- Plungian, V. (2001). The place of evidentiality within the universal grammatical space. Journal of Pragmatics, 33, 349-357.
- Ryabtseva, N. K. (2005). Language and artificial intelligence. The Institute of Linguistics, Russian Academy of Sciences. Moscow: Academia.
- Shmeleva, T. V. (1988). Semanticheskiy sintaksis: text lektsiy iz kursa "Sovremenniy russkiy yazik". Krasnoyarsk.

Vsevolodova, M. V. (2000). Teoriya funktsionalno-kommunikativnogo sintaksisa: Fragment prikladnoy (pedagogicheskoy) modeli yazika. Moscow: Moscow State University.

Zolotova, G. (1973). Ocherk funktsionalnogo syntaksisa. Moscow: Nauka.